

PACIFIC groundwater GROUP

**6317 CALIFORNIA AVENUE
PHASE II ENVIRONMENTAL INVESTIGATION
SEATTLE, WASHINGTON**

November 2012

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PHASE II ENVIRONMENTAL INVESTIGATION
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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	WARRANTY	1
2.0	PREVIOUS INVESTIGATIONS.....	1
2.1	SOIL	1
2.1.1	<i>Petroleum Compounds</i>	2
2.1.2	<i>Chlorinated Ethenes</i>	2
2.2	GROUNDWATER.....	2
3.0	PHASE II FIELD INVESTIGATION.....	3
3.1	SOIL	4
3.1.1	<i>Sampling</i>	4
3.1.2	<i>Results</i>	4
3.2	GROUNDWATER.....	4
3.2.1	<i>Sampling</i>	4
3.2.2	<i>Results</i>	5
3.3	DISCUSSION	5
3.4	DATA GAPS	6
3.4.1	<i>Drain Line Behind Building</i>	6
3.4.2	<i>Leaks in Sewer Pipe East to California Avenue SW</i>	6
3.4.3	<i>Potential Upgradient Sources</i>	7
3.5	VAPOR.....	7
4.0	REMEDIAL ALTERNATIVES.....	7
4.1	VAPOR MITIGATION	7
4.2	EXCAVATION	7
4.2.1	<i>Excavation Scenarios</i>	8
4.3	GROUNDWATER CIRCULATION WELLS	9
4.4	ESTIMATED PROJECT COSTS	9
4.4.1	<i>Environmental Delta</i>	9
4.5	SUMMARY	10
5.0	REFERENCES.....	10

TABLES

Table 1:	Summary of Stemen 2001 Investigation Results
Table 2:	Summary of Coles 2011 Investigation Results
Table 3:	Phase II Sample Location and Analyte Summary
Table 4:	Soil Result Summary
Table 5:	Groundwater Result Summary
Table 6:	Excavation and Remediation Cost Summary

FIGURES

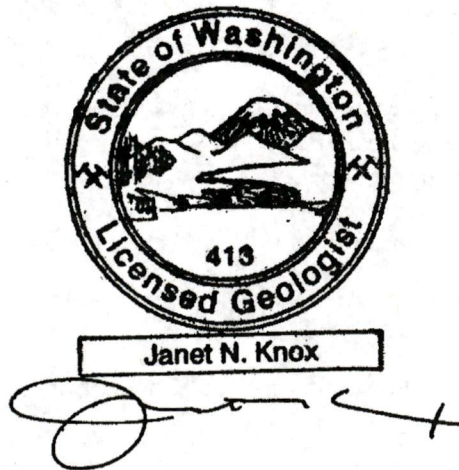
Figure 1:	Site Location Map
Figure 2:	Soil PCE Results
Figure 3:	Groundwater PCE Results
Figure 4a:	Concept 1 Excavation Areas
Figure 4b:	Concept A Excavation Areas
Figure 4c:	Concept B Excavation Areas
Figure 5:	Groundwater Remediation Layout

APPENDICES

Appendix A:	Remediation Cost Estimate Details
Appendix B:	Laboratory Data Reports

SIGNATURE

This report, and Pacific Groundwater Group's work contributing to this report, were reviewed by the undersigned and approved for release.



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1.0 INTRODUCTION

This report summarizes the past findings and current conditions of a property located at 6317 California Avenue SW (the site). The site is located at the corner of California Avenue SW and SW Eddy Street (Figure 1). Based on the soil and groundwater contamination identified in the existing studies, this report assesses remedial alternatives that are typical of similar sites under the Model Toxics Control Act (MTCA) and provides estimated costs

Previous investigations conducted between 2001 and 2012 identified soil and groundwater concentrations above MTCA Method A levels (Stemen, 2002; Coles, 2011). These investigations found two site activities that likely led to the observed contamination:

- Gas station fueling (underground storage tanks (USTs) removed in 1991) resulted in releases of petroleum to soil and groundwater.
- Dry cleaning resulted in releases of tetrachloroethene (PCE) to soil and groundwater.

The Phase I investigation (Sound Earth, 2012) also identified past site use such as a commercial car wash and a coal and heating oil storage area.

The objective of this Phase II Environmental Site Assessment (ESA) is to fill data gaps regarding the extent of contamination at the site, and estimate the cost to remediate impacted soil and groundwater to MTCA Method A cleanup levels.

1.1 WARRANTY

PGG's work was performed, and this report prepared, using generally accepted hydrogeologic practices used at this time and in this vicinity, for exclusive application to the 6317 California Avenue SW Site and for the exclusive use by the City of Seattle. This is in lieu of other warranties, express or implied.

2.0 PREVIOUS INVESTIGATIONS

Previous environmental investigations were conducted at the site by Stemen Environmental Inc. (Stemen) from 2000 through 2003 and Coles Environmental Consulting, Inc. (Coles) from 2007 through 2012 (present). No reports were available for the time period between 2003 and 2007. Soil and groundwater data from previous studies are summarized in Tables 1 and 2 and with locations shown on Figure 2.

2.1 SOIL

Previous soil investigations identified chlorinated ethenes and petroleum compounds in soil above MTCA Method A cleanup levels (Stemen, 2002; Coles 2012) (Tables 2 and 3; Figures 2 and 3). The distribution of these compounds suggests separate release histories, and are discussed separately below.

2.1.1 Petroleum Compounds

Petroleum compounds detected in soil at the site include gasoline range hydrocarbons (TPH-G), and gasoline components benzene, toluene, ethylbenzene, xylenes (BTEX), and others (Tables 1 and 2). Petroleum compounds in soil appear to have the highest concentrations near the water table in the former UST area and immediately downgradient to the southwest along the groundwater flow path.

2.1.2 Chlorinated Ethenes

Chlorinated ethenes detected in soil include tetrachloroethene (PCE) and its degradation products trichloroethene (TCE), cis-1,2 dichloroethene (DCE), and vinyl chloride (Tables 1 and 2). All soil samples with other chlorinated ethenes above cleanup levels also included exceedances of PCE above cleanup levels (50 micrograms per kilogram, ug/kg). PCE concentration ranges in the two previous investigations included:

- Soil PCE concentrations in the 2001 investigations ranged from non-detect to 4,900 ug/kg.
- Soil PCE concentrations in the 2011 investigations ranged from non-detect to 18,300 ug/kg.

The highest soil PCE concentrations were located beneath and immediately around the dry cleaners, including areas east, west, and south of the building; PCE was not detected in samples collected north of the building. The pattern of detections suggests that PCE was released at the dry cleaners and may have spread by surface runoff to areas around the periphery of the building. Stressed vegetation and corroded asphalt was noted behind the dry cleaners consistent with releases of solvent to the ground surface in this area and elevated soil concentrations (Stemen, 2001 and 2002; Coles, 2011).

Earlier reports suggested that releases of PCE into the building's drains and sewer line leaks may explain soil and groundwater concentrations east of the building (Figures 2 and 3). The pattern of soil and groundwater detections is consistent with this hypothesis. According to side sewer cards, the original sewer line may have been installed as early as 1939 (SES, 2012); it is not known if the sewer line was unearthed during UST removal.

2.2 GROUNDWATER

Previous investigations collected groundwater samples from both direct push temporary screens in 2001 and monitoring wells beginning in 2003. Monitoring wells MW-1 through MW-5 were installed in March 2003 with 20-foot screens between 12 and 32 feet below ground surface (bgs) (Stemen, 2003). MW-6 was installed in 2011 with a 10-foot screen between 10 and 20 feet bgs (Coles, 2007).

Petroleum compounds were detected in samples collected beneath and down gradient of the former UST location, consistent with soil sampling results. TPH-G concentrations ranged from non-detect to 1,300 micrograms per liter (ug/L), above the MTCA Method A cleanup level (1,000 ug/L).

PCE and chlorinated ethenes were detected throughout the site including beneath, east, west and south of the dry cleaners. PCE concentrations ranged from non-detect to 4,800 ug/L above the MTCA Method A cleanup level (5 ug/L). Groundwater concentrations were highest beneath the building. Boring S-13 was extended to 35 feet bgs with PCE detected in water samples collected at 20 feet bgs (36 ug/L), 28 feet bgs (4 ug/L), and 35 feet bgs (180 ug/L). The deepest sample had the highest concentration and was located 5 feet below the bottom of the screened interval at adjacent monitoring well MW-4.

Groundwater samples collected at monitoring wells on the site produce consistently lower concentrations than samples from direct push samples. This difference likely reflects a combination of sample location and differences in well construction, which may bias results. Monitoring wells MW-1 through MW-5 are constructed with 20 foot screens. The current standard of practice is to use shorter screens near a contaminant source. Long well screens average groundwater concentrations over a greater aquifer thickness, and may also be biased to narrow intervals with higher hydraulic conductivity¹. These effects may result in less informative data than would be obtained from shorter, targeted screen intervals.

Sampling method may also bias results. Stemen collected groundwater samples from monitoring wells by purging three casing volumes with a disposable bailer, allowing the well to re-equilibrate to previous water level, and then using the disposable bailer to collect samples (Stemen, 2003). This groundwater sampling method is discouraged by the EPA because it has been shown to bias groundwater results low (EPA, 2002). Coles collected groundwater samples by purging three casing volumes with a peristaltic pump with verification of field parameter stabilization (Coles 2007, 2011). This is a better sampling method than used by Stemen, but does not compensate for the long screen intervals at MW-1 through MW-5. Also, it is not clear whether Coles used low flow sampling, as EPA recommends.

3.0 PHASE II FIELD INVESTIGATION

The Phase II investigation was intended to fill data gaps in previous investigations. Samples were collected using a direct push drill rig operated by ESN Northwest. Soil and groundwater sampling locations and depths are shown on Figure 2 and Table 3. These samples and data supplement findings from previous investigations (Section 2). Data gaps included:

- Groundwater samples were collected using shorter screens around the perimeter of the building at the water table.
- Monitoring well screen intervals do not extend to the maximum depth of contamination observed in previous studies. Groundwater samples were collected deeper than 35 feet bgs to better constrain the vertical extent of groundwater contamination.
- Soil samples were collected in the soil stockpile area to assess if elevated metals (lead [gasoline additive]; arsenic, copper, chromium [wood preservatives]), semi-volatile compounds (SVOCS)(former coal storage area) were present and to investigate current petroleum and VOC concentrations in that area.

¹ Zones of higher hydraulic conductivity will produce more water and bias the result towards the concentration in that zone, which may be higher or lower than the aquifer average.

- Soil samples were collected northwest and northeast of the building to confirm earlier findings that soils were below cleanup levels for VOCs and petroleum compounds.

3.1 SOIL

Soil data indicate PCE and TPH contamination in the central and southeast portions of the parcel in addition to soil contamination described in previous reports (Coles, 2011).

3.1.1 Sampling

Soil samples were collected from direct-push continuous cores collected in 4-foot intervals between 0 and 8 feet bgs (Table 3). Samples were placed directly into laboratory-supplied bottles, then into coolers with ice. Samples were delivered to OnSite Environmental Inc. in Redmond, Washington with chain of custody maintained.

3.1.2 Results

Petroleum Compounds

TPH-Dx (lube oil) exceeded MTCA Method A (2000 mg/kg) in sample B5-1-S (2,500 mg/kg) (Table 4). All other petroleum compounds were below cleanup levels.

Volatile Organic Compounds

Tetrachloroethene (PCE) exceeded MTCA Method A cleanup levels (50 ug/L) in two of eight samples (Table 4). PCE concentrations ranged from non-detect to 670 ug/L. All other analyzed VOCs were below cleanup levels.

Metals

All samples analyzed for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, zinc, silver, thallium, and mercury were below MTCA Method A table values.

Semi-Volatile Organic Compounds

All semi-volatile organic compound (SVOC) analytical results were below MTCA Method A (or B) cleanup levels; the analyte list included polynuclear aromatic hydrocarbons (PAHs).

3.2 GROUNDWATER

3.2.1 Sampling

Thirteen groundwater samples were collected at 7 locations (Table 3). All groundwater samples were collected using 3 foot-temporary screens by direct-push drilling rig. Temporary screens were purged with a peristaltic pump until turbidity decreased and stabilized prior to sampling.

Using low-flow sampling, bottles were only filled when sample tubing was full without bubbles in the line; the presence of bubbles may bias samples to lower concentrations. Samples were collected into laboratory-supplied bottles, and placed into coolers with ice. Samples were delivered to OnSite Environmental Inc. in Redmond, Washington with chain of custody maintained.

Hydraulic conductivity is inferred to increase with depth below 25 feet bgs based on flow rates observed during direct push sampling. Only very low flow rates (< 100 mL/min) were sustained in the 17 to 20 ft bgs samples, while higher flow rates (300-400 mL/min) were sustained in the deeper intervals. Depth to water at MW-4 was 11.2 feet bgs on October 17, 2012. Based on this water level measurement the temporary sampling screen was set between 12 and 15 feet bgs to sample at the water table for sample B2-15-W. Drilling rods in this depth interval were pulled from the hole dry and the screen interval did not produce water. The screen was then set between 17 and 20 feet bgs and successfully sampled. The 12 to 15 feet bgs screen interval was attempted at B1-15-W and was also dry. All subsequent water table samples were screened between 17 and 20 feet bgs.

3.2.2 Results

TPH-G and PCE exceeded cleanup levels in the following groundwater samples (Table 5):

- TPH-G was above the Method A cleanup level (1,000 ug/L) in sample B9-20-W (3,500 ug/L).
- PCE was above the Method A cleanup level (5 ug/L) at B2-25-W (7 ug/l), B2-45-W (13 ug/L), B4-45-W (9.6 ug/L), B5-15-W), and B9-20-W (16 ug/L).

3.3 DISCUSSION

TPH-G exceedances generally confirm the findings of earlier studies: the majority of petroleum-impacted groundwater is located beneath and down gradient from the former UST location (immediately east of the building)(Coles, 2012).

Groundwater PCE concentrations include a diffuse zone around the building with PCE concentrations near to three times the cleanup level. PCE exceedances are found as deep as 45 feet bgs. Low level petroleum compounds are also detected in the deeper groundwater samples with PCE detections (Table 3).

The difference between water levels in monitoring wells and water production in immediately adjacent direct push sampling locations suggest that the soils in the formation is tighter and produces less water in the 12 to 15 foot depth interval; an attempt to screen in this interval during the October 2012 sampling event produced no water and drilling rods were dry when they were pulled from boring B2. Previous consultants report similar success attempting to sample at the 15 foot depth interval. However, Stemen reports collecting a water sample at 12 feet bgs (sample STDR), which was located approximately 10 to 15 feet west of boring B2. This could indicate either that the formation happens to be more permeable at that location (unlikely) or that some sort of water leak is increasing saturation there. The second possibility is consistent with the hypothesis that leaks from the sewer line were a potential release pathway for PCE east of the building.

PCE detections in deeper groundwater samples at borings S-13 (2001), B2 (2012) and B4 (2012) are associated with elevated BTEX concentrations (Tables 1 and 5). Because petroleum compounds are lighter than water, they are less likely to be detected well below the water table unless there is a vertical gradient, they were transported there along a preferential flow path (utility, dry well), downward migration of PCE dense non-aqueous fluid (DNAPL) with co-solvation of the petroleum compounds, or the detection is down gradient from the source area and groundwater flow has resulted in dispersion and spreading of the plume boundaries. The observed PCE concentrations are not high enough to indicate the presence of DNAPL (Cohen and Mercer, 1993). If a leak was present beneath the building, as is indicated by the sampling depth for sample STDR and the hypothesized leaky sewer line, the mounded groundwater could induce a downward hydraulic gradient allowing contaminants to migrate downward. The deep concentrations may also indicate some contribution from an upgradient source, however shallow contamination is likely due to site releases. There is not enough data at present to discriminate between these potential transport pathways.

3.4 DATA GAPS

The following data gaps do not need to be filled to move forward with cleanup, but represent uncertainty. Data gaps include:

- Possible drain line behind building
- Leaks in sewer pipe that may extend contamination to the east California Ave SW
- Possible upgradient sources
- Vapor intrusion

3.4.1 Drain Line Behind Building

A saw cut and asphalt patch approximately 6 inches wide was noted running between the rear storage room door of the dry cleaners and the edge of pavement near MW-5. This was noted in the field in October 2012 and in previous reports (Coles, 2011). The cut asphalt is typically associated with buried utilities, but it was not marked during the utility locate. The possible presence of buried utilities in this location should be determined prior to excavation with heavy equipment. If it is a buried drain line, then the relation to site operations including dry cleaning should be documented.

3.4.2 Leaks in Sewer Pipe East to California Avenue SW

Previous reports suggested that leaks from the sewer line between the building and main line beneath California Avenue SW were a release mechanism for PCE detected in soil and groundwater east of the building (Stemen, 2002; Coles, 2012). This mechanism is consistent with elevated PCE in soil and groundwater data near the sewer line. Additional leaks may have resulted in releases to soil and groundwater beneath California Avenue SW. PCE detections at MW-1 have been sparse, and all concentrations have been below 1 ug/L suggesting that if leaks are/were present, they did not result in significant groundwater contamination (Coles, 2011).

3.4.3 Potential Upgradient Sources

The vertical stratification data could indicate contribution from or commingling with a deeper solvent plume with an upgradient source. Multiple dry cleaner and automotive repair facilities were identified less than one-eighth of a mile upgradient from the subject property in the 2012 Phase I ESA (SES, 2012). These sites include:

- Totem Coin Op is listed at 6058 California Avenue from 1966 through 1980.
- Hi-Grade Cleaners is listed at 6047 California Avenue from 1955 to 1986.
- Planque Automotive Service and Repair is listed at 6058 California Avenue from 1940 to 1984.
- Wilson H B is listed at 6056 California Avenue in 1925.

The sites are not listed in the Ecology Confirmed and Suspected Cleanup Sites (CSCSL) database, and no analytical data specific to those properties was available in documents reviewed by PGG. There is not enough information currently available to assess these properties as potential upgradient sources.

3.5 VAPOR

Vapor samples were not collected as part of this investigation. However, investigation of the vapor pathway would be required under MTCA based on volatile concentrations in soil and groundwater (Coles, 2011; Ecology, 2009).

4.0 REMEDIAL ALTERNATIVES

Remedial alternatives to address contamination at the site and rough cost estimates are included below. Because contamination is found in soil, groundwater, and likely vapor, a combination of remedial technologies is recommended. Redevelopment of the property may include continued use of the existing building or removal and construction of a different type of facility.

4.1 VAPOR MITIGATION

This alternative includes installation of sub slab depressurization (SSD) vent fans to mitigate potential vapor intrusion from beneath the building. These vent fans would operate while the building is occupied. This option does not reduce soil or groundwater concentrations and is instead intended to reduce exposure for building occupants. Installation of an SSD system is estimated at \$15,000. SSD costs are not included in the excavation and groundwater options described below.

4.2 EXCAVATION

Excavation permanently removes contaminated soil using heavy machinery to load soil into trucks for offsite disposal. Samples are collected from excavated soils to determine the correct level of disposal. Confirmation samples are collected from the sides and bottom of the excavation.

tion to confirm removal; additional excavation may be implemented based on confirmation sample results.

Excavation removes the majority of soil contamination; however it may not be feasible to excavate impacted soils beyond the property boundary. The eastern bound of contaminated soil may extend beneath California Avenue where excavation may not be feasible or cost effective. The southern bound of contaminated soil may extend south of a sewer line beneath SW Eddy Street where excavation may not be feasible or cost effective.

4.2.1 Excavation Scenarios

Costs are estimated for three excavation concepts:

- Concept 1: Excavation of contaminated soils to meet MTCA Method A cleanup levels in preparation for park redevelopment
- Concept 2A: Excavation of an underground parking garage based on the underground parking design Concept A (GGLO, 2012) assuming the current estimated extent of contamination
- Concept 2B: Excavation of an underground parking garage based on the underground parking design Concept B (GGLO, 2012) assuming the current estimated extent of contamination

Excavation cost estimates range from approximately \$812,000 to approximately \$1,064,000. Costs are summarized in Table 6 with additional detail included in Appendix A. Cost estimates are preliminary and are not quotes for services. All options are estimated assuming contaminated soils are disposed of at a Subtitle D landfill. Because spent chlorinated solvents are a listed waste, Ecology may require that they be disposed of at a Subtitle C landfill, significantly increasing disposal costs. Disposal costs assume that either Ecology will not assume the soil is a listed waste or Ecology will allow the cleanup to apply for a contained-out designation for Subtitle D disposal. However, if PCE soil disposal require disposal at a hazardous waste landfill, those soils would have a higher disposal cost.

Concept 1: Excavation of Contaminated Soils

Excavation volumes and tonnage are estimated based on the extent of soils above MTCA Method A cleanup levels in depth intervals shallower than 5 feet and shallower than 17 feet bgs (Figure 4). Excavation in this option may not remove all contaminated soil if contamination is found to extend beneath California Ave SW to the east or beyond a sewer line at SW Eddy Street to the south. This option includes costs to decommission and replace four monitoring wells, collect confirmation samples, collect soil disposal characterization samples, and replace excavated soil with clean backfill². The estimated excavation costs for this scenario is \$811,945, not including contingency.

² Backfill is assumed to be either clean recycled concrete or pit-run sand and gravel below 5 feet bgs, and clean sand and gravel for the remainder to the ground surface.

Concepts 2A and B: Excavation of Contaminated Soils for Parking Garage and Building Foundation

Excavation volumes are taken from outlines of parking garages shown in conceptual architectural plans for the site (GGLO, 2012). Outlines of Concepts 2A and 2B are assumed to have a 12 foot excavation depth below the current grade level, and include both clean and contaminated soil. Clean and contaminated volumes were estimated using the soil excavation extents used in Concept 1, and shown in Figure 4. Foundation plans were not available for the conceptual building layouts and a uniform 2-foot excavation depth was assumed under the entire building foot print, including beneath parking areas (i.e., excavation to 14 feet). In practice the foundation excavation depth would be variable, deeper under load-bearing areas and shallower elsewhere. Estimated excavation costs for Concepts 2A and 2B range from \$730,642 to \$1,063,546, not including contingency.

4.3 GROUNDWATER CIRCULATION WELLS

For groundwater, the most cost-effective option at this site is likely circulation wells with air stripping to reduce groundwater concentrations and increase dissolved oxygen concentrations to expedite petroleum degradation. Groundwater circulation wells (GCWs) use an air bubbler at the base of the remediation well to induce upward water flow and removal of volatiles from the water. Volatilized contaminants are vented to the atmosphere through a vapor extraction system. The remediation wells are constructed with lower inlet and upper outlet screen intervals. Wells are connected by buried air-supply and venting PVC piping to an equipment shed. The equipment shed includes an air compressor, air distribution manifold, and vent stack for return air flows from GCWs.

Installation and operation of the groundwater circulation well remediation system is estimated at \$145,530, not including contingency (Tables 6 and A1).

4.4 ESTIMATED PROJECT COSTS

The cost to implement cleanup and excavation at the site for development includes excavation, groundwater treatment, confirmation sampling, and reporting to regulatory agencies. A 30% contingency is applied to the project cost to account for uncertainties in soil excavation volume and other potential cost overruns (EPA, 2000). Total costs, including contingency for the three concepts, are (Table 6):

- Concept 1: \$1,299,318
- Concept 2A: \$1,191,998
- Concept 2B: \$1,624,774

4.4.1 Environmental Delta

The environmental delta is the difference in cost between completion of the project under existing site conditions and completing the project at a site without contaminated soil or groundwater

(Table 6). For comparison only, costs are estimated to excavate an underground parking garage based on Concept 2A and Concept 2B, assuming clean soil with no restrictions on disposal. Confirmation and disposal characterization samples are included in these costs as documentation that soils meet the unrestricted disposal criteria. Estimated excavation costs for this scenario range from \$269,707 to \$729,500.

The environmental delta calculated from “clean” site excavation costs are (Table 6):

- Concept 1 has an environmental delta equal to the estimated project cost (\$1,299,318) because no action would be taken in the absence of contamination.
- Concept 2A has an environmental delta of \$937,891.
- Concept 2B has an environmental delta of \$912,374.

4.5 SUMMARY

Remediation of contaminated soil and groundwater at the site will likely include a combination of excavation and groundwater-specific methods. Excavation for underground parking with future redevelopment is unlikely to address contamination, which extends beyond the property boundary and groundwater exceeds cleanup levels at least 30 feet below the water table.

Restoration of the site to soil and groundwater meeting MTCA Method A cleanup levels is estimated to cost approximately \$1,299,318, not including any other redevelopment work.

Redevelopment costs for building construction are impacted by the presence of contamination at the site. For example, excavation for underground parking and foundations for Concepts 2A and 2B at a clean site are estimated to cost between \$269,707 and \$729,500. Estimated project costs under existing site conditions are \$1,191,998 and \$1,624,774 including underground parking, foundation, and contaminated soil excavation, groundwater treatment, and supporting sampling and reporting. This increase in costs represents an environmental delta of \$937,891 and \$912,374.

Third party liability is not reflected in these cost estimates. Impacts on offsite soil, groundwater or vapor intrusion could lead to future costs if third parties attempt to recover expenses related to contamination originating from the 6317 California Ave property. More aggressive remedial options reduce third party liability by reducing the likelihood of future offsite impacts. Development options 2A and 2B reduce the volume of contaminated soil, but leave contaminated soil in place and do not address groundwater.

5.0 REFERENCES

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Table 1. Summary of Stemen 2001 Investigation Results

6317 California Ave SW, Seattle, Washington

Stemen Soil Results (2001)

Sample	Depth (ft bgs)	TPH-G (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenz ene (ug/kg)	Xylenes (ug/kg)	PCE (ug/kg)	TCE (ug/kg)	Vinyl Chloride (ug/kg)
MTCA	Method A	100	30	7,000	6,000	9,000	50	30	--
S-1-12	12	U 10	U 50	U 50	U 50	U 50	U 50	U 50	U 250
RCS-1	*	U 10	U 50	U 50	U 50	U 50	U 50	U 50	U 250
RCS-2	*	U 10	U 50	U 50	U 50	U 50	U 50	U 50	U 250
RLS-1	0.5	U 10	--	--	--	--	--	--	--
RLS-2	2	U 10	--	--	--	--	--	--	--
RSS-1	0.3	U 10	U 50	90	70	320	1,100	U 50	U 250
RSS-2	2	U 10	U 50	U 50	U 50	50	U 50	U 50	U 250
S-10-16	16	U 10	U 50	U 50	U 50	50	U 50	U 50	U 250
S-11-8	8	U 10	U 50	U 50	U 50	50	U 50	U 50	U 250
S-12-10	10	U 10	U 50	U 50	U 50	50	U 50	U 50	U 250
S-2-6	6	U 10	U 50	U 50	U 50	130	30	U 50	U 250
S-3-10	10	U 10	U 50	U 50	U 50	U 50	U 50	U 50	U 250
S-4-13	13	U 10	U 50	U 50	U 50	U 50	U 50	U 50	U 250
S-5-15	15	8,000	3,600	148,000	140,000	520,000	118,000	U 50	U 250
S-5-16	16	U 10	U 50	U 50	U 50	50	U 50	U 50	U 250
S-6-14	14	3,400	2,600	6,200	16,000	50,000	730	U 50	U 250
S-7-15	15	U 10	U 50	U 50	U 50	50	U 50	U 50	U 250
S-8-17	17	2,500	U 50	U 50	U 50	50	U 50	U 50	U 250
S-8-4	4	U 10	U 50	U 50	U 50	50	U 50	U 50	U 250
S-9-18	18	1,300	U 50	U 50	U 50	50	U 50	U 50	U 250
S-14	14-17	U	U	330	1,100	6,500	440	U	U 250
IS-1-2/14	14	U	U	U	U	120	400	U	U 250
S-13-14/17	17	240	U	11,000	29,000	180,000	5,100	U	U 250
IS-1-0/2	2	--	U	U	U	U	4,900	40	U 250
IS-1-14/16	16	--	60	U	U	U	140	U	60
IS-1-6/8	8	--	U	U	U	U	1,170	U	U 250
IS-1-8/10	10	--	170	U	U	U	580	50	170

Stemen Groundwater Results (2001)

Sample	Depth (ft bgs)	TPH-G (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenz ene (ug/L)	Xylenes (ug/L)	PCE (ug/L)	TCE (ug/L)	cis-1,2 DCE (ug/L)	Vinyl Chloride (ug/L)
	Method A	1000	5	1000	700	1600	5	5	--	0.2
DW-1	drain	--	U	4	U	6	6	U	2,900	2,800
STDR	12	--	U	U	U	U	4,800	180	33	U
BRDR	tank	--	U	U	U	U	U	U	U	U
S-1-W	11.5	ND	ND	ND	ND	ND	9	ND	ND	--
S-3-W	13	1,300	3	82	30	130	8	ND	ND	--
S-6-W	13	ND	ND	2	5	20	3	ND	ND	--
S-10-W	13	ND	ND	ND	ND	ND	ND	ND	ND	--
S-12-W	12	ND	ND	ND	ND	12	ND	ND	ND	--
S-13-W-20	20	520	U	37	23	110	36	9	U	U
S-13-W-28	28	--	U	1	2	9	4	U	U	U
S-13-W-35	35	--	U	270	320	2,300	180	9	U	U
S-14-W-20	20	U 100	U	U	U	U	U	U	U	U
S-15-W-20	20	870	U	13	31	190	10	3	U	U

Notes:

* Surface soil composite from west unpaved area

ft bgs: feet below ground surface

Bold indicates detection above reporting limit

Bold and shading indicate exceedance of MTCA Method A table value

Sample STDR was collected at water table at base of boring IS-1

Monitoring well data is not summarized in this report.

Table 2. Summary of Coles 2011 Investigation Results

6317 California Ave SW, Seattle, Washington

Sample	MW-6	PP-1	PP-1	PP-2	PP-2	PP-3	PP-3	PP-3	PP-3	PP-4	PP-4	PP-5	PP-5	PP-6	PP-6	PP-6	MTCA
Sample Depth (ft bgs)	15.5-16.5	10.5-11.5	13-14	14-15	13-14	1.5-2	8.5-9	19-20	15-16	0.5-1.5	12-13	3-4	12-13	17-18	12-13	6-7	Method A
TPH-G	U 6	U 6	158	U 6	1,340	na	na	U 6	4,990	na	U 6	na	na	4,130	U 6	na	100,000
Benzene	U 16	U 31	U 16	U 14	U 31	178	U 14	U 15	U 170	U 13	U 14	U 16	U 16	U 405	U 14	U 14	30
Toluene	U 64	U 62	653	U 57	U 125	U 53	U 54	U 61	U 680	U 51	U 57	U 62	U 65	34,800	U 58	U 58	7,000
Ethylbenzene	U 32	U 31	U 33	U 28	U 62	U 26	U 27	U 30	2,840	U 26	U 28	U 31	U 32	42,200	U 29	U 29	6,000
o-xylene	U 32	334	U 33	U 28	U 62	U 26	U 27	U 30	354	U 26	U 28	U 31	U 32	43,000	U 29	U 29	9,000
m,p xylene	749	786	112	U 56	U 125	U 53	U 54	U 61	3,170	U 51	U 57	U 62	U 65	182,000	U 58	U 58	9,000
n-propylbenzene	U 32	U 31	385	U 28	663	U 26	U 27	U 30	41,600	U 26	U 28	U 31	U 32	35,200	U 29	U 29	nd
n-butylbenzene	U 64	U 62	142	939	4,070	U 53	U 54	U 61	32,500	U 51	U 57	U 62	U 65	11,200	U 58	U 58	--
sec-butylbenzene	U 64	U 62	875	U 57	1,700	U 53	U 54	U 61	7,900	U 51	U 57	U 62	U 65	3,820	U 58	U 58	--
isopropyl-benzene	U 64	U 62	U 65	U 57	U 125	U 53	U 54	U 61	6,420	U 51	U 57	U 62	U 65	8,620	U 58	U 58	--
4-isopropyl-toluene	U 64	U 62	U 65	U 57	1,180	U 53	U 54	U 61	7,360	U 51	U 57	U 62	U 65	6,070	U 58	U 58	--
1,2,4 trimethyl-benzene	100	163	908	U 57	U 125	U 53	U 54	U 61	51,700	U 51	U 57	U 62	U 65	179,000	U 58	U 58	--
1,3,5 trimethyl-benzene	U 64	681	U 65	U 57	U 125	U 53	U 54	U 61	42,600	U 51	U 57	U 62	U 65	58,500	U 58	U 58	--
Naphthalene	U 127	U 124	U 131	U 113	U 250	U 106	U 108	U 121	2,800	U 102	U 114	U 125	U 130	19,100	U 115	U 116	5,000
Tetrachloroethene (PCE)	381	575	U 33	35	499	18,300	484	U 30	U 340	4,440	558	150	482	2,940	274	300	50
Trichloroethene (TCE)	40	U 31	U 33	U 28	U 62	6,750	32	U 30	U 340	31	48	U 31	U 32	U 809	U 29	U 29	30
cis-1,2 dichloroethene	U 32	U 31	U 33	U 28	U 62	693	U 27	U 30	U 340	U 26	U 28	U 31	U 32	U 809	U 29	U 29	--
trans-1,2 dichloroethene	U 64	U 31	U 33	U 28	U 62	47	U 27	U 30	U 340	U 26	U 28	U 62	U 32	U 809	U 58	U 58	--

na: not analyzed

All Results micrograms per kilogram (ug/kg)

ft bgs: feet below ground surface

Bold and shading indicate exceedance of MTCA Method A table value.

Monitoring well data is not summarized in this report.

Table 3. Summary of Phase II Sample Locations and Analytes

6317 California Ave SW, Seattle, Washington

Boring Locations

Boring	Total Depth	Water	Soil	Location Description
B1	15	x	x	Front Fuel Island
B2	45	x	--	E corner of building, near entrance to C-store
B3	15	x	x	Behind Building, NW corner of lot
B4	45	x	--	S corner of building, adjacent to MW-5
B5	15	x	x	W unpaved area, E of 3 locations
B6	5	--	x	W unpaved area, NW of 3 locations
B7	5	--	x	W unpaved area, SW of 3 locations
B8	20	x	--	S Corner of building, W of MW-3
B9	20	x	--	S Corner of building, E of MW-3

Sample Summary

Boring	Sample ID	Matrix	Sample Depth (feet bgs)	VOC	TPH-Dx	TPH-G	Metals	Semi-Volatiles
B1	B1-15-W	W	17-20	x	--	x	--	
B1	B1-5-S	S	5-5.5	x	--	x	--	x
B2	B2-15-W	W	17-20	x	--	x	--	--
B2	B2-25-W	W	24-27	x	--	x	--	--
B2	B2-35-W	W	33-36	x	--	x	--	--
B2	B2-45-W	W	42-45	x	--	x	--	--
B3	B3-15-W	W	17-20	x	--	x	--	--
B3	B3-5-S	S	3-4	x	--	x	--	x
B4	B4-15-W	W	17-20	x	--	x	--	--
B4	B4-25-W	W	23-26	x	--	x	--	--
B4	B4-35-W	W	33-36	x	--	x	--	--
B4	B4-45-W	W	42-45	x	--	x	--	--
B5	B5-15-W	W	17-20	x	--	x	--	--
B5	B5-1-S	S	1-1.5	x	x	x	x	x
B5	B5-5-S	S	7-7.5	x	x	x	x	x
B6	B6-1-S	S	1-1.5	x	x	x	x	x
B6	B6-5-S	S	4.5-5	x	x	x	x	x
B7	B7-1-S	S	1-1.5	x	x	x	x	x
B7	B7-5-S	S	5-5.5	x	x	x	x	x
B8	B8-15-W	W	17-20	x	--	x	--	--
B9	B9-15-W	W	17-20	x	--	x	--	--
Total Soil				8	6	8	6	8
Total GW				13	--	13	--	--
Total				21	6	21	6	8

Notes:

VOC: Volatile Organic Compounds, analyzed by EPA Method 8260.

8260 soil samples collected using EPA Method 5035.

Priority Pollutant Metals: Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Se, Sb, Ti, Zn, Hg.

TPH-G: Total Petroleum Hydrocarbons, Gasoline-Range

TPH-D: Total Petroleum Hydrocarbons, Diesel-Range

Semi-Volatile organic compounds measured by EPA Method 8270.

Table 4. Soil Result Summary
6317 California Ave SW, Seattle, Washington

Constituent	Sample ID	B1-5-S	B3-5-S	B5-1-S	B5-5-S	B6-1-S	B6-5-S	B7-1-S	B7-5-S
	Depth (ft)	5-5.5	3-4	1-1.5	7-7.5	1-1.5	4.5-5	1-1.5	5-5.5
	MTCA CUL'	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Metals									
Antimony, Total	32*	--	--	5.7 U	5.8 U	5.2 U	5.6 U	5.2 U	5.8 U
Arsenic, Total	20	--	--	11 U	12 U	10 U	11 U	10 U	12 U
Beryllium, Total	160*	--	--	0.57 U	0.58 U	0.52 U	0.56 U	0.52 U	0.58 U
Cadmium, Total	2	--	--	0.57 U	0.58 U	0.52 U	0.56 U	0.52 U	0.58 U
Chromium, Total	2,000 / 19**	--	--	16	15	25	22	30	22
Copper, Total	3,200	--	--	51	6.5	12	9.3	14	11
Lead, Total	250	--	--	21	5.8 U	12	7	17	9
Nickel, Total	1,600	--	--	22	12	34	28	41	25
Selenium, Total	400*	--	--	11 U	12 U	10 U	11 U	10 U	12 U
Zinc, Total	24,000*	--	--	40	20	51	29	50	36
Silver, Total	400*	--	--	0.57 U	0.58 U	0.52 U	0.56 U	0.52 U	0.58 U
Thallium, Total	400*	--	--	2.8 U	2.9 U	2.6 U	2.8 U	2.6 U	2.9 U
Mercury, Total	2	--	--	0.28 U	0.29 U	0.26 U	0.28 U	0.26 U	0.29 U
Volatile Organic Compounds									
(cis) 1,2-Dichloroethene	160*	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0084
(cis) 1,3-Dichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
(trans) 1,2-Dichloroethene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
(trans) 1,3-Dichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,1,2-Tetrachloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,1-Trichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,2,2-Tetrachloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,2-Trichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1-Dichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1-Dichloroethene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1-Dichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,3-Trichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,3-Trichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,4-Trichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,4-Trimethylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dibromo-3-chloropropane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
1,2-Dibromoethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dichloropropane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,3,5-Trimethylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,3-Dichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,3-Dichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,4-Dichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
2,2-Dichloropropane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
2-Butanone	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.017
2-Chloroethyl Vinyl Ether	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
2-Chlorotoluene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
2-Hexanone	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
4-Chlorotoluene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Acetone	72,000*	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.031Y	0.1Y
Benzene	0.03	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromochloromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromodichloromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromoform	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromomethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Carbon Disulfide	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Carbon Tetrachloride	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Chlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Chloroethane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Chloroform	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Chloromethane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Dibromochloromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Dibromomethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Dichlorodifluoromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Ethylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Hexachlorobutadiene	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Iodomethane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Isopropylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U

Table 4. Soil Result Summary

6317 California Ave SW, Seattle, Washington

Constituent	Sample ID	B1-5-S	B3-5-S	B5-1-S	B5-5-S	B6-1-S	B6-5-S	B7-1-S	B7-5-S
	Depth (ft)	5-5.5	3-4	1-1.5	7-7.5	1-1.5	4.5-5	1-1.5	5-5.5
	MTCA CUL	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Metals									
Antimony, Total	32*	--	--	5.7 U	5.8 U	5.2 U	5.6 U	5.2 U	5.8 U
Arsenic, Total	20	--	--	11 U	12 U	10 U	11 U	10 U	12 U
Beryllium, Total	160*	--	--	0.57 U	0.58 U	0.52 U	0.56 U	0.52 U	0.58 U
Cadmium, Total	2	--	--	0.57 U	0.58 U	0.52 U	0.56 U	0.52 U	0.58 U
Chromium, Total	2,000 / 19**	--	--	16	15	25	22	30	22
Copper, Total	3,200	--	--	51	6.5	12	9.3	14	11
Lead, Total	250	--	--	21	5.8 U	12	7	17	9
Nickel, Total	1,600	--	--	22	12	34	28	41	25
Selenium, Total	400*	--	--	11 U	12 U	10 U	11 U	10 U	12 U
Zinc, Total	24,000*	--	--	40	20	51	29	50	36
Silver, Total	400*	--	--	0.57 U	0.58 U	0.52 U	0.56 U	0.52 U	0.58 U
Thallium, Total	400*	--	--	2.8 U	2.9 U	2.6 U	2.8 U	2.6 U	2.9 U
Mercury, Total	2	--	--	0.28 U	0.29 U	0.26 U	0.28 U	0.26 U	0.29 U
Volatile Organic Compounds									
(cis) 1,2-Dichloroethene	160*	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0084
(cis) 1,3-Dichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
(trans) 1,2-Dichloroethene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
(trans) 1,3-Dichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,1,2-Tetrachloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,1-Trichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,2,2-Tetrachloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1,2-Trichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1-Dichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1-Dichloroethene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,1-Dichloropropene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,3-Trichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,3-Trichloropropane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,4-Trichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2,4-Trimethylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dibromo-3-chloropropane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
1,2-Dibromoethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dichloroethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,2-Dichloropropane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,3,5-Trimethylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,3-Dichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,3-Dichloropropane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
1,4-Dichlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
2,2-Dichloropropane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
2-Butanone	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.017
2-Chloroethyl Vinyl Ether	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
2-Chlorotoluene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
2-Hexanone	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
4-Chlorotoluene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Acetone	72,000*	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.031Y	0.1Y
Benzene	0.03	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromochloromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromodichloromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromoform	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Bromomethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Carbon Disulfide	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Carbon Tetrachloride	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Chlorobenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Chloroethane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Chloroform	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Chloromethane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Dibromochloromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Dibromomethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Dichlorodifluoromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Ethylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Hexachlorobutadiene	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Iodomethane	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Isopropylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U

Table 4. Soil Result Summary

6317 California Ave SW, Seattle, Washington

Constituent	Sample ID Depth (ft) MTCA CUL'	B1-5-S 5-5.5 mg/kg	B3-5-S 3-4 mg/kg	B5-1-S 1-1.5 mg/kg	B5-5-S 7-7.5 mg/kg	B6-1-S 1-1.5 mg/kg	B6-5-S 4.5-5 mg/kg	B7-1-S 1-1.5 mg/kg	B7-5-S 5-5.5 mg/kg
m,p-Xylene	--	0.0024 U	0.0025 U	0.003 U	0.0023 U	0.002 U	0.0022 U	0.002 U	0.0021 U
Methyl Isobutyl Ketone	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Methyl t-Butyl Ether	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Methylene Chloride	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Naphthalene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
n-Butylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
n-Propylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
o-Xylene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
p-Isopropyltoluene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
sec-Butylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Styrene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
tert-Butylbenzene	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Tetrachloroethene	0.05	0.021	0.0013 U	0.0015 U	0.67	0.00099 U	0.0011 U	0.053	0.0011 U
Toluene	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Trichloroethene	0.03	0.0012 U	0.0013 U	0.0015 U	0.0047	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Trichlorofluoromethane	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Vinyl Acetate	--	0.006 U	0.0063 U	0.0075 U	0.0057 U	0.0049 U	0.0055 U	0.0049 U	0.0053 U
Vinyl Chloride	--	0.0012 U	0.0013 U	0.0015 U	0.0011 U	0.00099 U	0.0011 U	0.00099 U	0.0011 U
Semi-Volatile Organic Compounds									
1-Methylnaphthalene	34.5*	0.0074 U	--	0.075 U	0.0078 U	0.037	0.0075 U	0.0097	0.0077 U
2-Methylnaphthalene	320*	0.0074 U	--	0.075 U	0.0078 U	0.067	0.0075 U	0.016	0.009
Acenaphthene	4,800*	0.0074 U	--	0.075 U	0.0078 U	0.007 U	0.0075 U	0.0069 U	0.0077 U
Acenaphthylene	nr	0.0074 U	--	0.075 U	0.0078 U	0.007 U	0.0075 U	0.0069 U	0.0077 U
Anthracene	24,000*	0.0074 U	--	0.075 U	0.0078 U	0.008	0.0075 U	0.0069 U	0.0077 U
Benzo(j,k)fluoranthene	13.7	0.0074 U	--	0.075 U	0.0078 U	0.007 U	0.0075 U	0.0069 U	0.0077 U
Benzo(a)anthracene	1.37*	0.0074 U	--	0.075 U	0.0078 U	0.014 E	0.0075 U	0.014	0.01
Benzo(a)pyrene	2	0.0074 U	--	0.075 U	0.0078 U	0.022 E	0.0075 U	0.017	0.012
Benzo(b)fluoranthene	1.37*	0.0074 U	--	0.075 U	0.0078 U	0.02 E	0.0075 U	0.02	0.013
Benzo(g,h,i)perylene	nr	0.0074 U	--	0.075 U	0.0078 U	0.03 E	0.0075 U	0.013	0.01
Chrysene	137*	0.0074 U	--	0.075 U	0.0078 U	0.017 E	0.0075 U	0.016	0.0098
Dibenz(a,h)anthracene	--	0.0074 U	--	0.075 U	0.0078 U	0.007 U	0.0075 U	0.0069 U	0.0077 U
Fluoranthene	3,200*	0.0074 U	--	0.075 U	0.0078 U	0.018	0.0089	0.024	0.016
Fluorene	3,200*	0.0074 U	--	0.075 U	0.0078 U	0.012	0.0075 U	0.0069 U	0.0077 U
Indeno[1,2,3-cd]pyrene	1.37*	0.0074 U	--	0.075 U	0.0078 U	0.017 E	0.0075 U	0.0083	0.008
Naphthalene	5	0.0074 U	--	0.075 U	0.0078 U	0.033	0.0075 U	0.0083	0.0098
Phenanthrene	nr	0.0074 U	--	0.075 U	0.0078 U	0.03	0.0075 U	0.02	0.013
Pyrene	2,400*	0.0074 U	--	0.075 U	0.0078 U	0.018	0.011	0.025	0.018
(3+4)-Methylphenol (m,p-Cresol)	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,2,4-Trichlorobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,2-Dichlorobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,2-Dinitrobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,2-Diphenylhydrazine	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,3-Dichlorobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,3-Dinitrobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,4-Dichlorobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
1,4-Dinitrobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,3,4,6-Tetrachlorophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,3,5,6-Tetrachlorophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,3-Dichloroaniline	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,4,5-Trichlorophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,4,6-Trichlorophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,4-Dichlorophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,4-Dimethylphenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,4-Dinitrophenol	--	0.37 U	--	3.8 U	0.39 U	0.35 U	0.37 U	0.34 U	0.39 U
2,4-Dinitrotoluene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2,6-Dinitrotoluene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2-Chloronaphthalene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2-Chlorophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2-Methylphenol (o-Cresol)	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2-Nitroaniline	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
2-Nitrophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
3,3'-Dichlorobenzidine	--	0.19 U	--	1.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
3-Nitroaniline	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
4,6-Dinitro-2-methylphenol	--	0.19 U	--	1.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
4-Bromophenyl-phenylether	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U

Table 4. Soil Result Summary

6317 California Ave SW, Seattle, Washington

Constituent	Sample ID Depth (ft) MTCA CUL ¹	B1-5-S 5-5.5 mg/kg	B3-5-S 3-4 mg/kg	B5-1-S 1-1.5 mg/kg	B5-5-S 7-7.5 mg/kg	B6-1-S 1-1.5 mg/kg	B6-5-S 4.5-5 mg/kg	B7-1-S 1-1.5 mg/kg	B7-5-S 5-5.5 mg/kg
4-Chloro-3-methylphenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
4-Chloroaniline	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
4-Chlorophenyl-phenylether	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
4-Nitroaniline	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
4-Nitrophenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Aniline	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Benzidine	--	0.37 U	--	3.8 U	0.39 U	0.35 U	0.37 U	0.34 U	0.39 U
Benzyl alcohol	--	0.37 U	--	3.8 U	0.39 U	0.35 U	0.37 U	0.34 U	0.39 U
bis(2-Chloroethoxy)methane	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
bis(2-Chloroethyl)ether	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
bis(2-Chloroisopropyl)ether	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
bis(2-Ethylhexyl)phthalate	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
bis-2-Ethylhexyladipate	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Butylbenzylphthalate	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Carbazole	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Dibenzofuran	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Diethylphthalate	--	0.19 U	--	1.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
Dimethylphthalate	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Di-n-butylphthalate	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Di-n-octylphthalate	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Hexachlorobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Hexachlorobutadiene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Hexachlorocyclopentadiene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Hexachloroethane	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Isophorone	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Nitrobenzene	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
n-Nitrosodimethylamine	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
n-Nitroso-di-n-propylamine	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
n-Nitrosodiphenylamine	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Pentachlorophenol	--	0.19 U	--	1.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
Phenol	--	0.037 U	--	0.38 U	0.039 U	0.035 U	0.037 U	0.034 U	0.039 U
Pyridine	--	0.37 U	--	3.8 U	0.39 U	0.35 U	0.37 U	0.34 U	0.39 U
Petroleum Hydrocarbons									
Diesel Range Organics	2000	--	--	140 U	69	--	--	26 U	29 U
Lube Oil	2000	--	--	2500	65	--	--	83	58 U
Gasoline	30 / 100	5.8 U	5.8 U	5.2 U	6.8 U	5.7 U	5.8 U	5.4 U	6.3 U

 Model Toxics Control Act (MTCA) cleanup levels (CUL) as downloaded Oct-2012 from: <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>
¹ MTCA Method A Cleanup Level.

* MTCA Method B Cleanup Level; Method A not available.

Shaded values indicate exceedance of cleanup level

Bold values indicate detection above the reporting limit.

U indicates non-detect at the indicated reporting level.

nr: value not researched

Table 5. Groundwater Result Summary
6317 California Ave SW, Seattle, Washington

Constituent	Sample ID Depth (ft) MTCA CUL*	B1-15-W 17-20 ug/L	B2-15-W 17-20 ug/L	B2-25-W 24-27 ug/L	B2-35-W 33-36 ug/L	B2-45-W 42-45 ug/L	B3-15-W 17-20 ug/L	B4-15-W 17-20 ug/L	B4-25-W 23-26 ug/L	B4-35-W 33-36 ug/L	B4-45-W 42-45 ug/L	B5-15-W 17-20 ug/L	B8-20-W 17-20 ug/L	B9-20-W 17-20 ug/L
1,1,1,2-Tetrachloroethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane (TCA)	200	0.21	0.22	0.25	0.2 U	0.4 U	0.2 U	0.23	0.2 U	0.2 U	0.2 U	0.22	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichloropropane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trimethylbenzene	--	0.21	0.21	16	3.9	68	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5.5	24
1,2-Dibromo-3-chloropropane (DBCP)	--	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane (EDC)	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	--	0.2 U	0.2 U	4.2	1.4	19	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.6	4.8
1,3-Dichlorobenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichloropropane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,2-Dichloropropane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (MEK)	--	5 U	5 U	5 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	13Y
2-Chloroethyl Vinyl Ether	--	1 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U
2-Chlorotoluene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Hexanone	--	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Chlorotoluene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Acetone	--	5 U	5 U	5 U	5 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	5	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21
Bromobenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	--	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	--	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	--	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21	0.2 U	29
cis-1,3-Dichloropropene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromomethane	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (CFC 12)	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	1 U	1 U
Dichloromethane (Methylene Chloride)	--	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	700	0.2 U	0.2 U	1.4	0.34	1.5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	8.8	3.8
Gasoline	1000	100 U	100 U	320	160	800	100 U	100 U	100 U	100 U	100 U	100 U	240	3500
Hexachlorobutadiene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Iodomethane	--	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene (Cumene)	800	0.2 U	0.2 U	1.1	0.52	2.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1.9	4.4

Table 5. Groundwater Result Summary

6317 California Ave SW, Seattle, Washington

Constituent	Sample ID Depth (ft) MTCA CUL*	B1-15-W 17-20 ug/L	B2-15-W 17-20 ug/L	B2-25-W 24-27 ug/L	B2-35-W 33-36 ug/L	B2-45-W 42-45 ug/L	B3-15-W 17-20 ug/L	B4-15-W 17-20 ug/L	B4-25-W 23-26 ug/L	B4-35-W 33-36 ug/L	B4-45-W 42-45 ug/L	B5-15-W 17-20 ug/L	B8-20-W 17-20 ug/L	B9-20-W 17-20 ug/L
m,p-Xylene	1600	0.4 U	0.4 U	4.8	0.65	6.6	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	17	0.57
Methyl Isobutyl Ketone	--	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl t-Butyl Ether	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Naphthalene	160	1 U	1 U	2.3	1 U	9	1 U	1 U	1 U	1 U	1 U	1 U	2.7	1 U
n-Butylbenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.4	0.2 U
n-Propylbenzene	800	0.2 U	0.34	5	3.7	17	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	8	21
o-Xylene	1600	0.2 U	0.2 U	0.51	0.2 U	0.47	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3.9	0.2 U
p-Isopropyltoluene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.64	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25	3.3
sec-Butylbenzene	--	0.2 U	0.2 U	0.45	0.42	1.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.87	7.5
Styrene	1600	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
tert-Butylbenzene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene (PCE)	5	0.36	4.1	7	1.7	13	0.2 U	2.5	0.43	0.2 U	9.6	5.4	0.39	16
Toluene	1000	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	1 U
trans-1,2-Dichloroethene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (TCE)	5	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.33	0.2 U	0.2 U	0.21	1.1	0.2 U	1.9
Trichlorofluoromethane (CFC 11)	--	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl Acetate	--	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Vinyl Chloride	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

* Model Toxics Control Act Method A Cleanup Level. Method B shown where Method A not available.

Model Toxics Control Act (MTCA) cleanup levels (CUL) as downloaded Oct-2012 from: <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>

Shaded values indicate exceedance of cleanup level

Bold values indicate detection above the reporting limit.

U indicates non-detect at the indicated reporting level.

Table 6. Excavation and Remediation Cost Summary

6317 California Ave SW, Seattle, Washington

Remediation Component	Concept 1	Concept 2A	Concept 2B	Reference	Comment
Excavation & Backfill	\$ 811,945	\$ 730,642	\$ 1,063,546	Figure 4a,b,c	Includes removal of contaminated soil, sampling, placement of clean backfill (Concept 1), and excavation for foundations and underground parking (Concepts 2A and 2B)
Groundwater Treatment	\$ 145,530	\$ 144,280	\$ 144,280	Figure 5	Groundwater treatment with recirculation wells and vapor stripping
Reporting	\$ 16,500	\$ 16,500	\$ 16,500	Table A1	Reporting to regulatory agencies
Miscellaneous Costs	\$ 25,500	\$ 25,500	\$ 25,500	Table A1	Well decommissioning, permitting, etc
Contingency	\$ 299,843	\$ 275,076	\$ 374,948	EPA (2000)	
Total	\$ 1,299,318	\$ 1,191,998	\$ 1,624,774		
<i>Clean Site Building Excavation</i> ¹	\$ -	\$ 269,707	\$ 729,500	Table A1	<i>Cost to excavate for building construction at equivalent site with clean soil and groundwater</i>
<i>Environmental Delta</i>	\$ 1,299,318	\$ 937,891	\$ 912,374	Table A1	<i>Difference in development cost between existing site and clean site</i>

Interim Actions	Cost	Comment
Vapor Intrusion Mitigation		
Sub-Slab Depressurization (SSD)	\$ 15,000	SSD vents installed by Advanced Radon Technologies

Notes:

Additional cost details in Appendix A

Cost estimates are not quotes for services to be performed

Concept 1 returns site to lot ready for future site use

Concept 2A and 2B parking and foundation extent from Site Feasibility Study (GGLO, 2012).

¹ This case assumes no contamination present at the site and is included for comparison to estimated excavation costs only.US Environmental Protection Agency, 2000. *A Guide to Developing and Documenting Cost Estimates During the Feasibility Study*. EPA 540-R-00-002. July 2000.

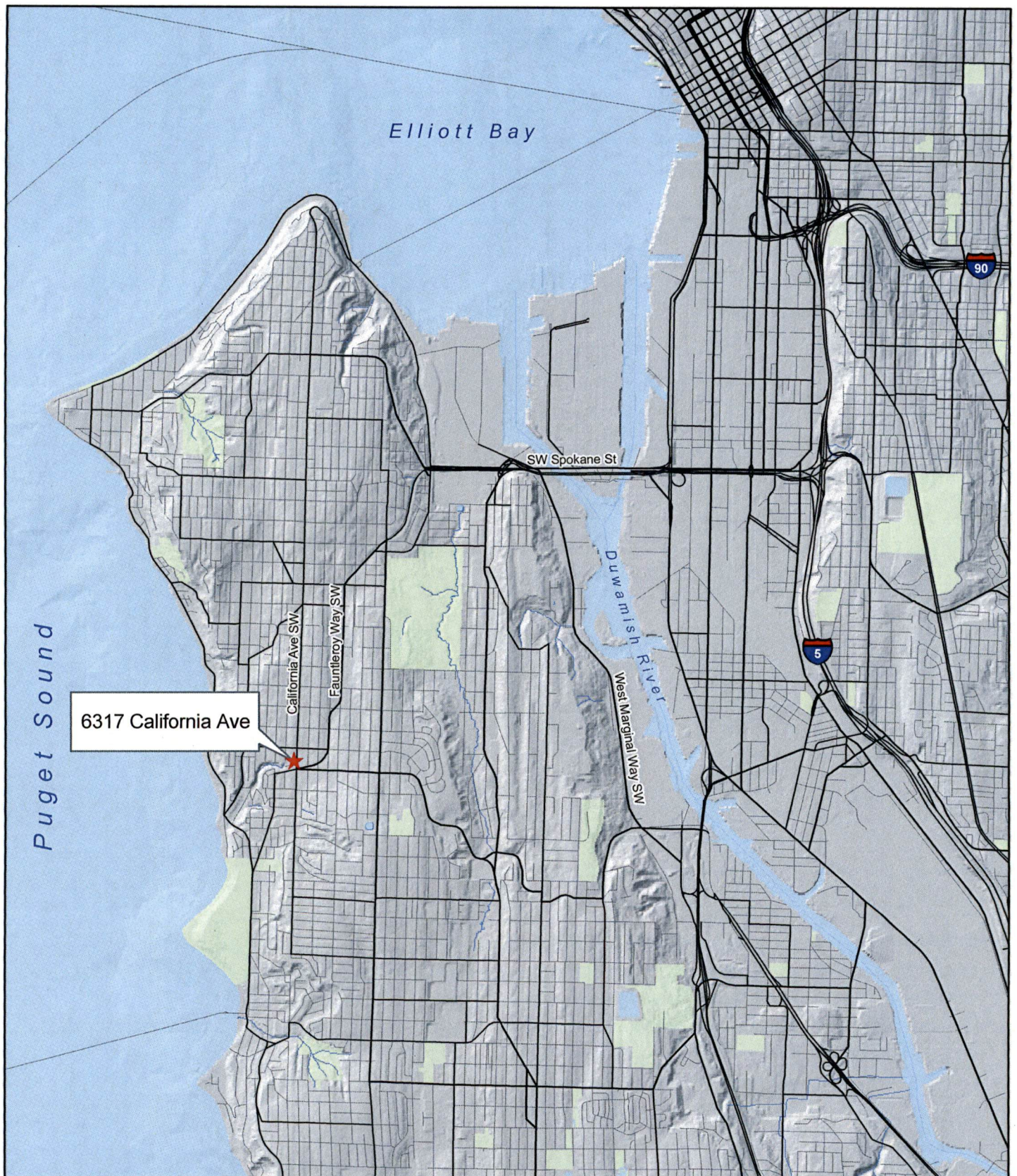
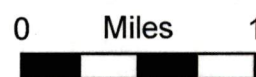
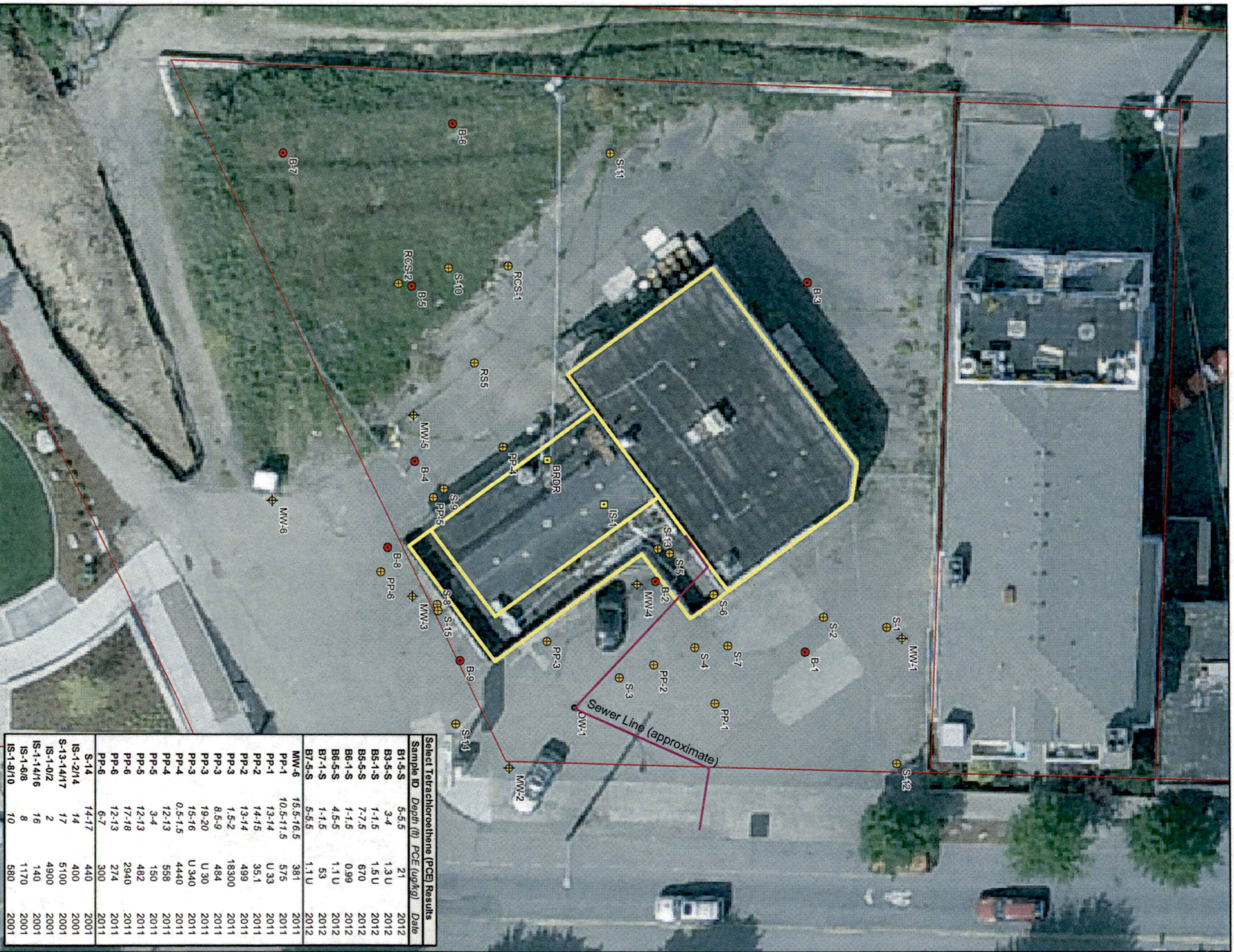


Figure 1.
Site Location Map

6317 California Ave SW
Seattle, WA



PgG



Select Tetrachloroethene (PCE) Results				
Sample ID	Depth (ft)	PCE (ug/kg)	Date	
B1-5-S	5-5.5	21	2012	
B3-5-S	3-4	1.3 U	2012	
B5-1-S	1-1.5	1.5 U	2012	
B5-5-S	7-7.5	670	2012	
B6-1-S	1-1.5	0.99	2012	
B6-5-S	4-5.5	1.1 U	2012	
B7-1-S	1-1.5	53	2012	
B7-5-S	5-5.5	1.1 U	2012	
MM-6	15.5-16.5	381	2011	
PP-1	10.5-11.5	575	2011	
PP-1	13-14	U 33	2011	
PP-2	14-15	35.1	2011	
PP-2	13-14	489	2011	
PP-3	11-12	16300	2011	
PP-3	8.5-9	484	2011	
PP-3	19-20	U 30	2011	
PP-3	15-16	U 340	2011	
PP-4	0.5-1.5	4440	2011	
PP-4	12-13	558	2011	
PP-5	3-4	150	2011	
PP-5	12-13	482	2011	
PP-6	17-18	2940	2011	
PP-6	12-13	274	2011	
PP-6	6-7	300	2011	
S-14	14-17	440	2007	
S-13-12/14	14	400	2007	
S-13-14/17	17	5100	2007	
IS-1-0/2	2	4900	2007	
IS-1-14/16	16	140	2007	
IS-1-6/8	8	1170	2007	
IS-1-8/10	10	580	2007	

Figure 2.
Soil PCE Results

6317 California Ave SW
Seattle, WA

Existing Sample Locations

Structures

Storm Drain

Other Borings

Monitoring well

Test Pit

PGG Boring Locations (10/2012)

Soil Results include data from:

- PGG 2012 Site Investigation
- Coles 2011 Site Investigation
- Stemen 2001 Site Investigation

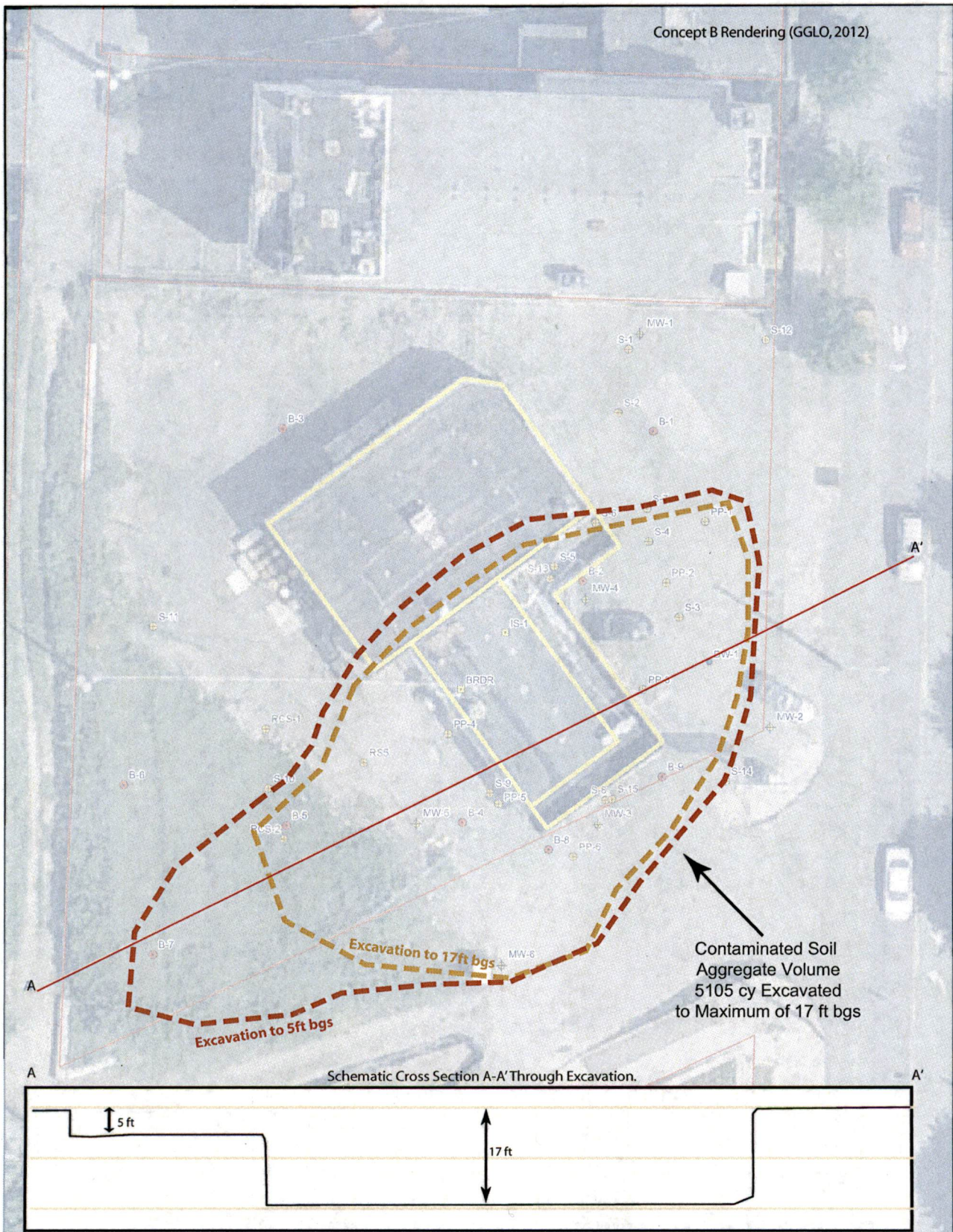
PCE MTCA Method A CUL = 50 ug/L
All results shown as ug/L
Sample details in Table 4.



Note: Sample locations from field sketches, report figures and estimated based on written descriptions of previous consultants.

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Existing Sample Locations

- Storm Drain
- ⊕ Other Borings
- ⊕ Monitoring well
- ⊕ Test Pit
- PGG Boring Locations (10/2012)

Estimated Soil Extents

- ⊕ "Deep" Excavation Extent With Removal to 17 ft bgs
- ⊕ "Shallow" Excavation Extent With Removal to 5 ft bgs

Excavation extends to the deepest criteria in a given area.

Note: Sample locations from field sketches, report figures and estimated based on written descriptions of previous consultants.



0 Feet 30

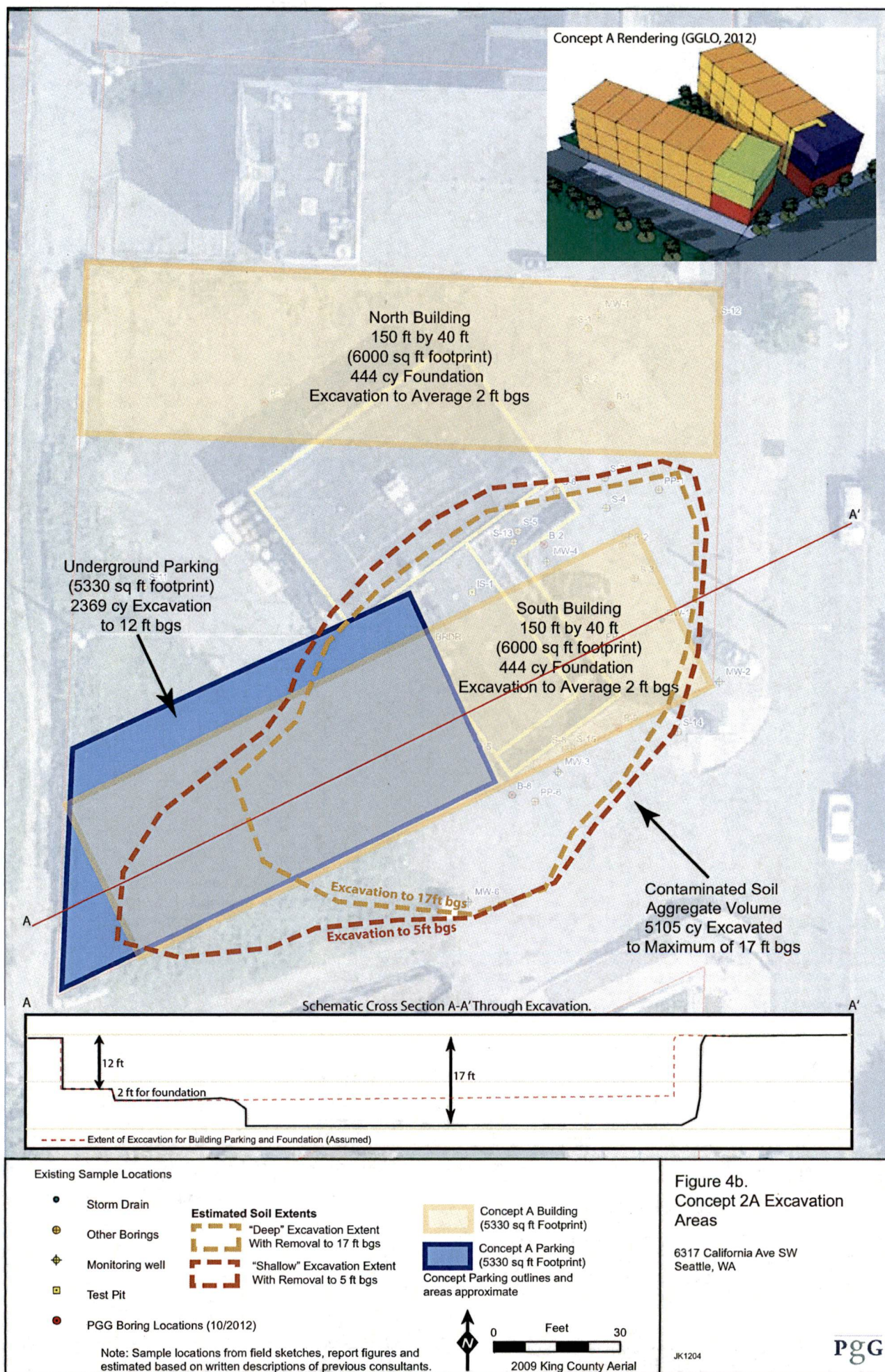
2009 King County Aerial

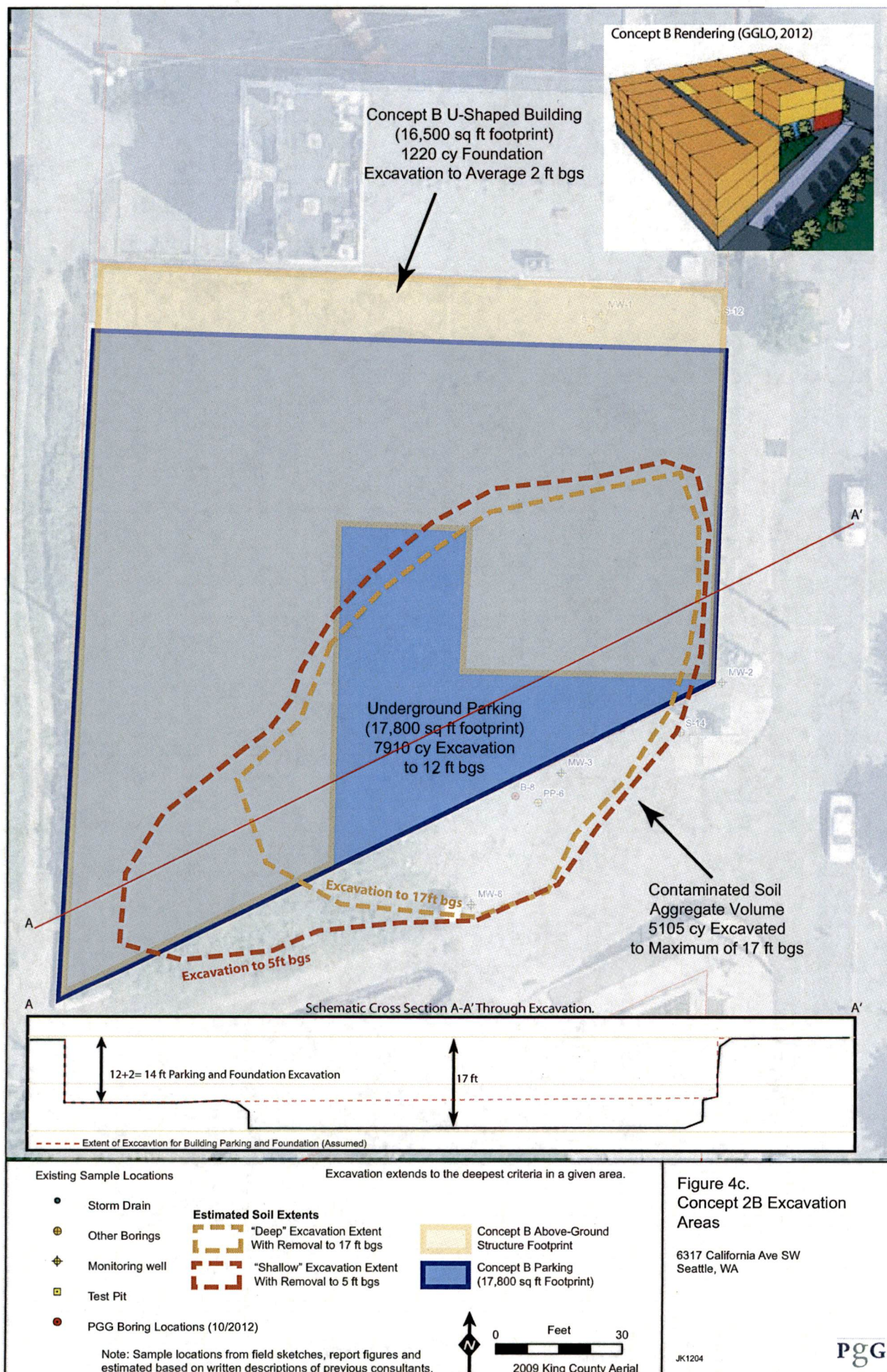
Figure 4a.
Concept 1 Excavation Areas

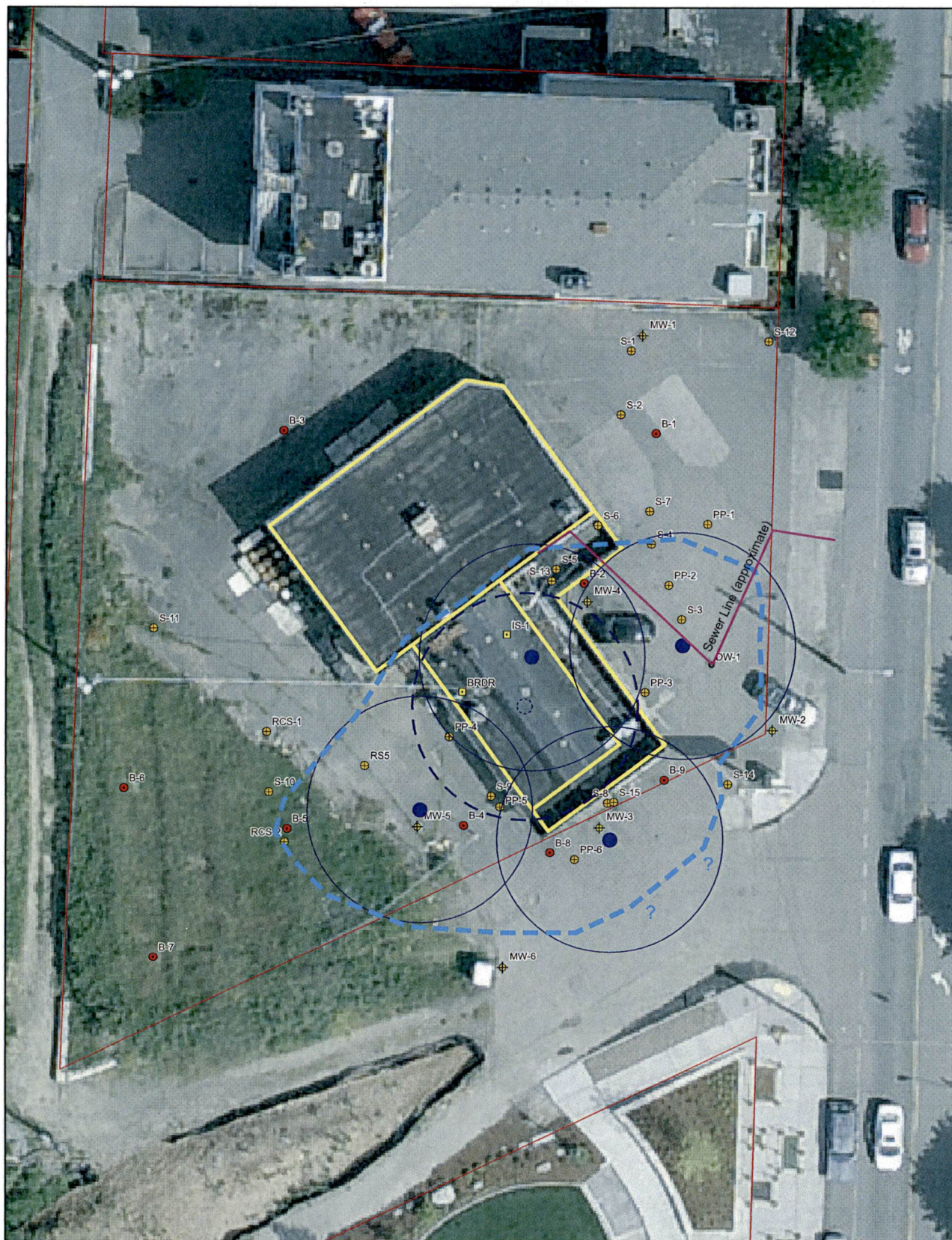
6317 California Ave SW
Seattle, WA

JK1204

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Existing Sample Locations

- Storm Drain
- ⊕ Other Borings
- ⬢ Monitoring well
- Test Pit
- PGG Boring Locations (10/2012)



Structures

Groundwater Extent



Groundwater Circulation Well and
Radius of Influence (assumed)

Note: Sample locations from field sketches, report figures and estimated based on written descriptions of previous consultants.



0 Feet 30

2009 King County Aerial

Figure 5.
Groundwater Remediation
Layout

6317 California Ave SW
Seattle, WA

JK1204

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APPENDIX A
REMEDATION COST ESTIMATE DETAILS

Table A1. Cost Estimate Details

6317 California Ave SW, Seattle, Washington

1.2 Assumed soil density for conversion from cy to tons (tons/cy)				
Description	Concept 1	Concept 2A	Concept 2B	Unit Notes
Parking and Foundation Excavation Quantities				
<i>Underground Parking Excavation Quantity</i>				
Footprint Area	0	5330	17800	sq ft See Figures 4a and 4c.
Average Depth	0	12	12	feet Assumes 12 foot excavation depth for Underground Parking
Volume	0	2369	7911	cy
Tons @ 1.2 tons/cu.yd.	0	2843	9493	tons
<i>Foundation Excavation Quantity</i>				
Average Depth	0	2	2	feet Deeper at footings, shallower at slabs; includes areas below parking for building support
Area	0	12000	16500	sq ft See Figures 4b and 4c
Volume	0	889	1222	cy
Tons @ 1.2 tons/cu.yd.	0	1067	1467	tons
<i>Total Building Excavation Quantity</i>				
Volume	0	3258	9133	cy Does not include contaminated soil beyond foundation/parking extent
Tons	0	3909	10960	tons
Cost Per Ton	\$ 65	\$ 65	\$ 65	\$/ton Clean soil dig and haul rate per ton
Total	\$ -	\$ 254,107	\$ 712,400	Excavation cost for parking and foundation assuming a hypothetical clean site
Contaminated Soil Excavation Quantities				
<i>"Shallow" Area Removal</i>				
Area	9825	9825	9825	sq ft See Figure 4a
Average Depth	5	5	5	feet
Cubic Yards	1819	1819	1819	cy
Tons @ 1.2 tons/cu.yd.	2183	2183	2183	tons
<i>"Deep" Area Removal</i>				
Area	7392	7392	7392	sq ft See Figure 4a
Average Depth	12	12	12	feet 12 ft assumes upper 5 ft already removed for total depth of 17 ft
Cubic Yards	3285	3285	3285	cy 15 ft depth begins at 4 ft bgs
Tons @ 1.2 tons/cu.yd.	3942	3942	3942	tons
<i>Totals</i>				
Total Contaminated Volume	5105	5105	5105	cy
Tons @ 1.2 tons/cu.yd.	6126	6126	6126	tons
Cost Per Ton	\$ 95	\$ 95	\$ 95	\$/ton Contaminated soil excavation and transport to disposal facility
Total	\$ 581,945	\$ 581,945	\$ 581,945	
Contaminated Soil Building Excavation Overlap Volume				
Area (2 ft depth)	0	2290	0	sq ft Overlap areas with contaminated soil and building foundation
Thickness	2	2	2	feet See Figures 4a and 4b for extents
Area 12 ft depth	0	241	2876	sq ft Overlap areas with contaminated soil and parking within the "deep" soil extent
Thickness	12	12	12	feet
Area 14 ft depth	0	2054	3091	sq ft Overlap areas with contaminated soil, parking, and foundation within the "deep" soil extent
Thickness	14	14	14	feet
Area Inside "Shallow" Only	0	1132	1605	sq ft Overlap areas inside "shallow" contaminated soil extent (parking only)
Thickness	5	5	5	feet
Volume	0	1551	3178	cy
Total	0	1862	3814	tons
Clean Soil Excavation Quantities				
Building Excavation Volume	0	3258	9133	cy Calculated above
Contaminated Soil Volume	5105	5105	5105	cy Calculated above
Building/Contaminated Overlap	0	1551	3178	ct Calculated above
Aggregate Volume	5105	6811	11060	cy Total excavation volume including both clean and contaminated soil
Clean Excavation Volume	0	1706	5955	cy Aggregate volume minus contaminated soil volume
Clean Tonnage	0	2048	7146	tons
Cost Per Ton	\$ 65	\$ 65	\$ 65	\$/ton Clean soil excavation rate to dig and haul
Clean Excavation Cost	\$ -	\$ 133,096.89	\$ 464,501.56	
Disposal Soil Characterization				
Excavation Confirmation	30	30	30	# Samples collected to document concentrations in excavation sidewalls and floor
Sample Cost	\$ 200	\$ 200	\$ 200	\$/per TPH, PCE, BTEX normal turnaround time
Soil Disposal Profiling	10	10	15	# Samples collected for soil disposal purposes
Sample Cost	\$ 300	\$ 300	\$ 300	\$/per Assumes 50% surcharge for rapid turnaround
Geologist Hours	60	60	60	# Hours to travel to site, collect soil samples, and coordinate with analytical laboratory
Rate Per Hour	\$ 110	\$ 110	\$ 110	\$/hour
Total	\$ 15,600	\$ 15,600	\$ 17,100	
Clean Backfill Quantities				
Clean Excavation Volume	5105	0	0	cy Clean soil to restore site to normal grade; no backfill for building construction
Clean Tonnage	6126	0	0	tons
Cost Per Ton	\$ 35	\$ 35	\$ 35	\$/ton Clean backfill obtain and place assuming pit-run material
Clean Excavation Total	\$ 214,400.67	\$ -	\$ -	
Excavation Subtotal				
Subtotal	\$ 811,945	\$ 730,642	\$ 1,063,546	Subtotal of excavation costs for reference
Groundwater Remediation Cost				
Dewatering Volume	5000	5000	5000	gallons Single dewatering event from to remove contaminated groundwater from excavation
Volume Charge	\$ 1,250	\$ 1,250	\$ 1,250	Standard rate for liquid disposal; \$0.25/gallon
Vac Truck Cost	\$ 600	\$ 600	\$ 600	MarVac hourly rate to perform pumping; \$100/hr
Install GCW System	\$ 110,000	\$ 110,000	\$ 110,000	Install groundwater circulation wells (GCW), trench in piping, set up equipment shed
1 Year O&M	\$ 20,000	\$ 20,000	\$ 20,000	Electrical costs, compressor maintenance, air filtration
Semi-Annual Monitoring	\$ 4,560	\$ 4,560	\$ 4,560	Tracks progress during remediation
Quarterly Monitoring	\$ 9,120	\$ 9,120	\$ 9,120	1-year quarterly monitoring to meet MTCA site closure requirements
Total	\$ 145,530	\$ 144,280	\$ 144,280	
Miscellaneous Items				
Decommission Wells	\$ 3,000	\$ 3,000	\$ 3,000	Decommission existing monitoring wells prior to excavation (WAC 173-160)
Replace Wells	\$ 17,500	\$ 17,500	\$ 17,500	Install 5 wells after completion of excavation
Permitting	\$ 5,000	\$ 5,000	\$ 5,000	Street use permits, utility, and other permitting
Total	\$ 25,500	\$ 25,500	\$ 25,500	
Reporting				
Hours	150	150	150	# Time to prepare and finalize interim and final reports for regulatory agencies
Rate	\$ 110	\$ 110	\$ 110	\$/hour
Total	\$ 16,500	\$ 16,500	\$ 16,500	
Total Cost Including Contingency				
Total	\$ 999,475	\$ 916,922	\$ 1,249,826	
Contingency Rate	30%	30%	30%	USEPA (2000)
Contingency Amount	\$ 299,843	\$ 275,076	\$ 374,948	
Estimated Project Cost	\$ 1,299,318	\$ 1,191,998	\$ 1,624,774	
Environmental Delta	\$ 1,299,318	\$ 937,891	\$ 912,374	Difference in cost between straight foundation/parking excavation costs at a clean site and Estimated Project Cost including contaminated soil and groundwater

Notes:

Excavation extent is limited to the south by City of Seattle sewer line along SW Eddy St alignment.

Assumes all contaminated soil disposed of in South Seattle drop-off location for delivery to Subtitle D landfill. Hazardous waste designation would incur additional cost per ton for disposal.

cy: cubic yards; sq ft: square feet

Outline of Concept 2A and 2B parking garage extent from 6311 California Avenue Site Feasibility Study, Marketing Package (GGLO, 2012).

US Environmental Protection Agency, 2000. A Guide to Developing and Documenting Cost Estimates During the Feasibility Study. EPA 540-R-00-002. July 2000.

APPENDIX B
LABORATORY DATA REPORTS



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

October 23, 2012

Glen Wallace
Pacific Groundwater Group
2377 Eastlake Avenue E, Suite 200
Seattle, WA 98102

Re: Analytical Data for Project JK1204
Laboratory Reference No. 1210-157

Dear Glen:

Enclosed are the analytical results and associated quality control data for samples submitted on October 17, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal flourish line.

David Baumeister
Project Manager

Enclosures

Date of Report: October 23, 2012
Samples Submitted: October 17, 2012
Laboratory Reference: 1210-157
Project: JK1204

Case Narrative

Samples were collected on October 16, 2012 and received by the laboratory on October 17, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

NWTPH Gx and Volatiles EPA 8260C (soil) Analysis

Per EPA Method 5035A, samples were received by the laboratory in pre-weighed 40 mL VOA vials within 48 hours of sample collection. They were stored in a freezer at between -7°C and -20°C until extraction or analysis.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Semivolatiles EPA 8270D/SIM Analysis

Due to the sample matrix of sample B5-1-S, the sample final volume was 10milliliters instead of 1 milliliter, therefore increasing the PQL's.

Internal Standard for PAH's Chrysene-d12 and Perylene-d12 does not meet acceptance criteria for sample B6-1-S due to sample matrix effects.

The sample B6-1-S was diluted 20x to eliminate the matrix effect, however this also caused an increase in the PQLs, resulting in many of the analytes being reported as non-detect. Reported are both sets of data, the 20x dilution and non-diluted samples. The results for the non-diluted data are flagged with an "E1" indicator and should be considered estimates.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-1-S					
Laboratory ID:	10-157-01					
Gasoline	ND	5.2	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	101	70-132				
Client ID:	B5-5-S					
Laboratory ID:	10-157-02					
Gasoline	ND	6.8	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	99	70-132				
Client ID:	B7-1-S					
Laboratory ID:	10-157-04					
Gasoline	ND	5.4	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	97	70-132				
Client ID:	B7-5-S					
Laboratory ID:	10-157-05					
Gasoline	ND	6.3	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	70-132				
Client ID:	B1-5-S					
Laboratory ID:	10-157-10					
Gasoline	ND	5.8	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	96	70-132				
Client ID:	B3-5-S					
Laboratory ID:	10-157-12					
Gasoline	ND	5.8	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	93	70-132				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

NWTPH-Gx

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-1-S					
Laboratory ID:	10-157-14					
Gasoline	ND	5.7	NWTPH-Gx	10-19-12	10-19-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	94	70-132				
Client ID:	B6-5-S					
Laboratory ID:	10-157-15					
Gasoline	ND	5.8	NWTPH-Gx	10-19-12	10-19-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Fluorobenzene</i>	92	70-132				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1019S1					
Benzene	ND	0.020	EPA 8021B	10-19-12	10-19-12	
Toluene	ND	0.050	EPA 8021B	10-19-12	10-19-12	
Ethyl Benzene	ND	0.050	EPA 8021B	10-19-12	10-19-12	
m,p-Xylene	ND	0.050	EPA 8021B	10-19-12	10-19-12	
o-Xylene	ND	0.050	EPA 8021B	10-19-12	10-19-12	
Gasoline	ND	5.0	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	92	70-132				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-157-01							
	ORIG	DUP						
Benzene	ND	ND	NA	NA	NA	NA	NA	30
Toluene	ND	ND	NA	NA	NA	NA	NA	30
Ethyl Benzene	ND	ND	NA	NA	NA	NA	NA	30
m,p-Xylene	ND	ND	NA	NA	NA	NA	NA	30
o-Xylene	ND	ND	NA	NA	NA	NA	NA	30
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				101	103	70-132		

SPIKE BLANKS

Laboratory ID:	SB1019S1									
	SB	SBD	SB	SBD	SB	SBD				
Benzene	0.964	0.975	1.00	1.00	96	98	71-125	1	11	
Toluene	0.975	0.985	1.00	1.00	98	99	77-125	1	11	
Ethyl Benzene	0.973	0.978	1.00	1.00	97	98	76-125	1	10	
m,p-Xylene	0.987	0.984	1.00	1.00	99	98	78-124	0	9	
o-Xylene	0.948	0.933	1.00	1.00	95	93	77-123	2	9	
Surrogate:										
Fluorobenzene					99	97	70-132			

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-15-W					
Laboratory ID:	10-157-03					
Gasoline	ND	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	71-116				
Client ID:	B2-15-W					
Laboratory ID:	10-157-06					
Gasoline	ND	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	71-116				
Client ID:	B2-25-W					
Laboratory ID:	10-157-07					
Gasoline	320	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	71-116				
Client ID:	B2-35-W					
Laboratory ID:	10-157-08					
Gasoline	160	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	71-116				
Client ID:	B2-45-W					
Laboratory ID:	10-157-09					
Gasoline	800	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	90	71-116				
Client ID:	B1-15-W					
Laboratory ID:	10-157-11					
Gasoline	ND	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	<i>Percent Recovery</i>	<i>Control Limits</i>				
Fluorobenzene	89	71-116				

Date of Report: October 23, 2012
Samples Submitted: October 17, 2012
Laboratory Reference: 1210-157
Project: JK1204

NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B3-15-W					
Laboratory ID:	10-157-13					
Gasoline	ND	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	89	71-116				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1018W1					
Benzene	ND	1.0	EPA 8021B	10-18-12	10-18-12	
Gasoline	ND	100	NWTPH-Gx	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	89	71-116				

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	10-157-07									
	ORIG	DUP								
Benzene	ND	ND	NA	NA		NA	NA	NA	30	
Gasoline	323	305	NA	NA		NA	NA	6	30	
Surrogate:										
Fluorobenzene						89	89	71-116		

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

NWTPH-Dx
 (with acid/silica gel clean-up)

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-1-S					
Laboratory ID:	10-157-01					
Diesel Range Organics	ND	140	NWTPH-Dx	10-19-12	10-19-12	
Lube Oil	2500	280	NWTPH-Dx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	106	50-150				

Client ID:	B5-5-S					
Laboratory ID:	10-157-02					
Diesel Range Organics	69	29	NWTPH-Dx	10-19-12	10-19-12	
Lube Oil Range Organics	65	58	NWTPH-Dx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	89	50-150				

Client ID:	B7-1-S					
Laboratory ID:	10-157-04					
Diesel Range Organics	ND	26	NWTPH-Dx	10-19-12	10-19-12	
Lube Oil	83	52	NWTPH-Dx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	111	50-150				

Client ID:	B7-5-S					
Laboratory ID:	10-157-05					
Diesel Range Organics	ND	29	NWTPH-Dx	10-19-12	10-19-12	
Lube Oil Range Organics	ND	58	NWTPH-Dx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	102	50-150				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

**NWTPH-Dx
 QUALITY CONTROL
 (with acid/silica gel clean-up)**

Matrix: Soil
 Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1019S1					
Diesel Range Organics	ND	25	NWTPH-Dx	10-19-12	10-19-12	
Lube Oil Range Organics	ND	50	NWTPH-Dx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
<i>o</i> -Terphenyl	131	50-150				

Analyte	Result		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-143-01							
	ORIG	DUP						
Diesel Range Organics	ND	ND					NA	NA
Lube Oil	74.0	58.7					23	NA
Surrogate:								
o-Terphenyl			103	103	50-150			

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C

page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-1-S					
Laboratory ID:	10-157-01					
Dichlorodifluoromethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Acetone	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Iodomethane	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-1-S					
Laboratory ID:	10-157-01					
1,1,2-Trichloroethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0030	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0075	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.0015	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	105	63-127				
Toluene-d8	100	65-129				
4-Bromofluorobenzene	96	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-5-S					
Laboratory ID:	10-157-02					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Acetone	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Iodomethane	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	0.0047	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-5-S					
Laboratory ID:	10-157-02					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	0.67	0.069	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0023	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0057	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>105</i>	<i>63-127</i>				
<i>Toluene-d8</i>	<i>100</i>	<i>65-129</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>52-125</i>				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C

page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-1-S					
Laboratory ID:	10-157-04					
Dichlorodifluoromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Acetone	0.031	0.0049	EPA 8260C	10-18-12	10-18-12	Y
Iodomethane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-1-S					
Laboratory ID:	10-157-04					
1,1,2-Trichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	0.053	0.00099	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0020	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
<i>Dibromofluoromethane</i>	97	63-127				
<i>Toluene-d8</i>	92	65-129				
<i>4-Bromofluorobenzene</i>	94	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-5-S					
Laboratory ID:	10-157-05					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Acetone	0.10	0.0053	EPA 8260C	10-18-12	10-18-12	Y
Iodomethane	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	0.0084	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Butanone	0.017	0.0053	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-5-S					
Laboratory ID:	10-157-05					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0021	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0053	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	96	63-127				
Toluene-d8	109	65-129				
4-Bromofluorobenzene	97	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B1-5-S					
Laboratory ID:	10-157-10					
Dichlorodifluoromethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Acetone	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Iodomethane	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B1-5-S					
Laboratory ID:	10-157-10					
1,1,2-Trichloroethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	0.021	0.0012	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0024	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0060	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.0012	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	100	63-127				
Toluene-d8	99	65-129				
4-Bromofluorobenzene	103	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B3-5-S					
Laboratory ID:	10-157-12					
Dichlorodifluoromethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Acetone	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Iodomethane	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B3-5-S					
Laboratory ID:	10-157-12					
1,1,2-Trichloroethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0025	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0063	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.0013	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	99	63-127				
Toluene-d8	101	65-129				
4-Bromofluorobenzene	103	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C

page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-1-S					
Laboratory ID:	10-157-14					
Dichlorodifluoromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Acetone	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Iodomethane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-1-S					
Laboratory ID:	10-157-14					
1,1,2-Trichloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0020	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0049	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.00099	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	103	63-127				
Toluene-d8	105	65-129				
4-Bromofluorobenzene	102	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-5-S					
Laboratory ID:	10-157-15					
Dichlorodifluoromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Acetone	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Iodomethane	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-5-S					
Laboratory ID:	10-157-15					
1,1,2-Trichloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0022	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0055	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.0011	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	107	63-127				
Toluene-d8	105	65-129				
4-Bromofluorobenzene	108	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL

page 1 of 2

Matrix: Soil
 Units: mg/kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1018S1					
Dichlorodifluoromethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Chloromethane	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Vinyl Chloride	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Bromomethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Chloroethane	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Trichlorofluoromethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Acetone	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Iodomethane	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Carbon Disulfide	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Methylene Chloride	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
(trans) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Methyl t-Butyl Ether	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloroethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Vinyl Acetate	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
2,2-Dichloropropane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
(cis) 1,2-Dichloroethene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
2-Butanone	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Bromochloromethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Chloroform	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,1,1-Trichloroethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Carbon Tetrachloride	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,1-Dichloropropene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Benzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloroethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Trichloroethene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2-Dichloropropane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Dibromomethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Bromodichloromethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
2-Chloroethyl Vinyl Ether	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
(cis) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Methyl Isobutyl Ketone	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Toluene	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
(trans) 1,3-Dichloropropene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1018S1					
1,1,2-Trichloroethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Tetrachloroethene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,3-Dichloropropane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
2-Hexanone	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Dibromochloromethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromoethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Chlorobenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,1,1,2-Tetrachloroethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Ethylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
m,p-Xylene	ND	0.0020	EPA 8260C	10-18-12	10-18-12	
o-Xylene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Styrene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Bromoform	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Isopropylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Bromobenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,1,2,2-Tetrachloroethane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichloropropane	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
n-Propylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
2-Chlorotoluene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
4-Chlorotoluene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,3,5-Trimethylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
tert-Butylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trimethylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
sec-Butylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,3-Dichlorobenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
p-Isopropyltoluene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,4-Dichlorobenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2-Dichlorobenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
n-Butylbenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2-Dibromo-3-chloropropane	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
1,2,4-Trichlorobenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Hexachlorobutadiene	ND	0.0050	EPA 8260C	10-18-12	10-18-12	
Naphthalene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
1,2,3-Trichlorobenzene	ND	0.0010	EPA 8260C	10-18-12	10-18-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	104	63-127				
Toluene-d8	101	65-129				
4-Bromofluorobenzene	106	52-125				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Soil
 Units: mg/kg

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1018S1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	0.0560	0.0554	0.0500	0.0500	112	111	65-141	1	15	
Benzene	0.0464	0.0461	0.0500	0.0500	93	92	69-121	1	15	
Trichloroethene	0.0482	0.0475	0.0500	0.0500	96	95	75-120	1	15	
Toluene	0.0475	0.0458	0.0500	0.0500	95	92	75-120	4	15	
Chlorobenzene	0.0548	0.0550	0.0500	0.0500	110	110	75-120	0	15	
Surrogate:										
Dibromofluoromethane					98	96	63-127			
Toluene-d8					95	91	65-129			
4-Bromofluorobenzene					101	99	52-125			

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-15-W					
Laboratory ID:	10-157-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	0.21	0.20	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	0.22	0.20	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	1.1	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-15-W					
Laboratory ID:	10-157-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	5.4	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
o-Xylene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Naphthalene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	66-120				
Toluene-d8	100	70-120				
4-Bromofluorobenzene	98	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-15-W					
Laboratory ID:	10-157-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	0.22	0.20	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-15-W					
Laboratory ID:	10-157-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	4.1	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
o-Xylene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	0.34	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	0.21	0.20	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Naphthalene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>63-120</i>				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-25-W					
Laboratory ID:	10-157-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	0.25	0.20	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-25-W					
Laboratory ID:	10-157-07					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	7.0	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	1.4	0.20	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	4.8	0.40	EPA 8260C	10-19-12	10-19-12	
o-Xylene	0.51	0.20	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	1.1	0.20	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	5.0	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	4.2	0.20	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	16	0.20	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	0.45	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Naphthalene	2.3	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	101	66-120				
Toluene-d8	107	70-120				
4-Bromofluorobenzene	103	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-35-W					
Laboratory ID:	10-157-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-35-W					
Laboratory ID:	10-157-08					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	1.7	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	0.34	0.20	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	0.65	0.40	EPA 8260C	10-19-12	10-19-12	
o-Xylene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	0.52	0.20	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	3.7	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	1.4	0.20	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	3.9	0.20	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	0.42	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Naphthalene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>102</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>102</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>63-120</i>				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-45-W					
Laboratory ID:	10-157-09					
Dichlorodifluoromethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	10	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	2.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	4.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	10	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	4.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	2.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.40	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B2-45-W					
Laboratory ID:	10-157-09					
1,1,2-Trichloroethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	13	0.40	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	4.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	1.5	0.40	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	6.6	0.80	EPA 8260C	10-19-12	10-19-12	
o-Xylene	0.47	0.40	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	2.7	0.40	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.40	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	17	0.40	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	19	0.40	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	68	0.40	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	1.7	0.40	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	0.64	0.40	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	2.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Naphthalene	9.0	2.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	98	66-120				
Toluene-d8	101	70-120				
4-Bromofluorobenzene	96	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B1-15-W					
Laboratory ID:	10-157-11					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	0.21	0.20	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B1-15-W					
Laboratory ID:	10-157-11					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	0.36	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
o-Xylene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	0.21	0.20	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Naphthalene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	108	66-120				
Toluene-d8	98	70-120				
4-Bromofluorobenzene	95	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B3-15-W					
Laboratory ID:	10-157-13					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B3-15-W					
Laboratory ID:	10-157-13					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
o-Xylene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Naphthalene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>100</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>97</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>63-120</i>				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1019W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloromethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Acetone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Iodomethane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-19-12	10-19-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Butanone	ND	5.0	EPA 8260C	10-19-12	10-19-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chloroform	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Benzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Trichloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Dibromomethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chloroethyl Vinyl Ether	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Toluene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID: MB1019W1						
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Tetrachloroethene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Hexanone	ND	2.0	EPA 8260C	10-19-12	10-19-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-19-12	10-19-12	
o-Xylene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Styrene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromoform	ND	1.0	EPA 8260C	10-19-12	10-19-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Bromobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
Naphthalene	ND	1.0	EPA 8260C	10-19-12	10-19-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-19-12	10-19-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>106</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>101</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>63-120</i>				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

VOLATILES by EPA 8260C
SB/SBD QUALITY CONTROL

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1019W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	9.84	9.41	10.0	10.0	98	94	65-141	4	15	
Benzene	10.3	10.4	10.0	10.0	103	104	77-125	1	15	
Trichloroethene	10.4	10.3	10.0	10.0	104	103	80-125	1	15	
Toluene	10.3	9.78	10.0	10.0	103	98	80-125	5	15	
Chlorobenzene	10.9	10.7	10.0	10.0	109	107	80-140	2	15	
Surrogate:										
Dibromofluoromethane					95	99	66-120			
Toluene-d8					96	94	70-120			
4-Bromofluorobenzene					96	95	63-120			

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-1-S					
Laboratory ID:	10-157-01					
n-Nitrosodimethylamine	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Pyridine	ND	3.8	EPA 8270D	10-19-12	10-23-12	
Phenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Aniline	ND	0.38	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethyl)ether	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2-Chlorophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
1,3-Dichlorobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
1,4-Dichlorobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Benzyl alcohol	ND	3.8	EPA 8270D	10-19-12	10-23-12	
1,2-Dichlorobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2-Methylphenol (o-Cresol)	ND	0.38	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroisopropyl)ether	ND	0.38	EPA 8270D	10-19-12	10-23-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.38	EPA 8270D	10-19-12	10-23-12	
n-Nitroso-di-n-propylamine	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Hexachloroethane	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Nitrobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Isophorone	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2-Nitrophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,4-Dimethylphenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethoxy)methane	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,4-Dichlorophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
1,2,4-Trichlorobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Naphthalene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
4-Chloroaniline	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Hexachlorobutadiene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
4-Chloro-3-methylphenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2-Methylnaphthalene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
1-Methylnaphthalene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Hexachlorocyclopentadiene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,4,6-Trichlorophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,3-Dichloroaniline	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,4,5-Trichlorophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2-Chloronaphthalene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2-Nitroaniline	ND	0.38	EPA 8270D	10-19-12	10-23-12	
1,4-Dinitrobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Dimethylphthalate	ND	0.38	EPA 8270D	10-19-12	10-23-12	
1,3-Dinitrobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,6-Dinitrotoluene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
1,2-Dinitrobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Acenaphthylene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
3-Nitroaniline	ND	0.38	EPA 8270D	10-19-12	10-23-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-1-S					
Laboratory ID:	10-157-01					
2,4-Dinitrophenol	ND	3.8	EPA 8270D	10-19-12	10-23-12	
Acenaphthene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
4-Nitrophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,4-Dinitrotoluene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Dibenzofuran	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,3,5,6-Tetrachlorophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
2,3,4,6-Tetrachlorophenol	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Diethylphthalate	ND	1.9	EPA 8270D	10-19-12	10-23-12	
4-Chlorophenyl-phenylether	ND	0.38	EPA 8270D	10-19-12	10-23-12	
4-Nitroaniline	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Fluorene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
4,6-Dinitro-2-methylphenol	ND	1.9	EPA 8270D	10-19-12	10-23-12	
n-Nitrosodiphenylamine	ND	0.38	EPA 8270D	10-19-12	10-23-12	
1,2-Diphenylhydrazine	ND	0.38	EPA 8270D	10-19-12	10-23-12	
4-Bromophenyl-phenylether	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Hexachlorobenzene	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Pentachlorophenol	ND	1.9	EPA 8270D	10-19-12	10-23-12	
Phenanthrene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Anthracene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Carbazole	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Di-n-butylphthalate	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Fluoranthene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Benzidine	ND	3.8	EPA 8270D	10-19-12	10-23-12	
Pyrene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Butylbenzylphthalate	ND	0.38	EPA 8270D	10-19-12	10-23-12	
bis-2-Ethylhexyladipate	ND	0.38	EPA 8270D	10-19-12	10-23-12	
3,3'-Dichlorobenzidine	ND	1.9	EPA 8270D	10-19-12	10-23-12	
Benzo[a]anthracene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Chrysene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
bis(2-Ethylhexyl)phthalate	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Di-n-octylphthalate	ND	0.38	EPA 8270D	10-19-12	10-23-12	
Benzo[b]fluoranthene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Benzo(j,k)fluoranthene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Benzo[a]pyrene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Indeno[1,2,3-cd]pyrene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Dibenz[a,h]anthracene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Benzo[g,h,i]perylene	ND	0.075	EPA 8270/SIM	10-19-12	10-22-12	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	78	24 - 95				
Phenol-d6	78	34 - 101				
Nitrobenzene-d5	80	32 - 102				
2-Fluorobiphenyl	90	44 - 104				
2,4,6-Tribromophenol	75	34 - 124				
Terphenyl-d14	84	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-5-S					
Laboratory ID:	10-157-02					
n-Nitrosodimethylamine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Pyridine	ND	0.39	EPA 8270D	10-19-12	10-19-12	
Phenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Aniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethyl)ether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Chlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Benzyl alcohol	ND	0.39	EPA 8270D	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Methylphenol (o-Cresol)	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroisopropyl)ether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.039	EPA 8270D	10-19-12	10-19-12	
n-Nitroso-di-n-propylamine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Hexachloroethane	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Nitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Isophorone	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Nitrophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4-Dimethylphenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethoxy)methane	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4-Dichlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Naphthalene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
4-Chloroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
4-Chloro-3-methylphenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Methylnaphthalene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
1-Methylnaphthalene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Hexachlorocyclopentadiene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4,6-Trichlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,3-Dichloroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4,5-Trichlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Chloronaphthalene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Nitroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,4-Dinitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Dimethylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,3-Dinitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,6-Dinitrotoluene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,2-Dinitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Acenaphthylene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
3-Nitroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B5-5-S					
Laboratory ID:	10-157-02					
2,4-Dinitrophenol	ND	0.39	EPA 8270D	10-19-12	10-19-12	
Acenaphthene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
4-Nitrophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4-Dinitrotoluene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Dibenzofuran	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,3,5,6-Tetrachlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,3,4,6-Tetrachlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Diethylphthalate	ND	0.19	EPA 8270D	10-19-12	10-19-12	
4-Chlorophenyl-phenylether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
4-Nitroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Fluorene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
4,6-Dinitro-2-methylphenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
n-Nitrosodiphenylamine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,2-Diphenylhydrazine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
4-Bromophenyl-phenylether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Hexachlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Pentachlorophenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Phenanthrene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Anthracene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Carbazole	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Di-n-butylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Fluoranthene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Benzidine	ND	0.39	EPA 8270D	10-19-12	10-19-12	
Pyrene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Butylbenzylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis-2-Ethylhexyladipate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
3,3'-Dichlorobenzidine	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Benzo[a]anthracene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Chrysene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
bis(2-Ethylhexyl)phthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Di-n-octylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Benzo[b]fluoranthene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Benzo(j,k)fluoranthene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[a]pyrene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Indeno[1,2,3-cd]pyrene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Dibenz[a,h]anthracene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[g,h,i]perylene	ND	0.0078	EPA 8270/SIM	10-19-12	10-20-12	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	54	24 - 95				
Phenol-d6	59	34 - 101				
Nitrobenzene-d5	60	32 - 102				
2-Fluorobiphenyl	69	44 - 104				
2,4,6-Tribromophenol	74	34 - 124				
Terphenyl-d14	78	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-1-S					
Laboratory ID:	10-157-04					
n-Nitrosodimethylamine	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Pyridine	ND	0.34	EPA 8270D	10-19-12	10-23-12	
Phenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Aniline	ND	0.034	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethyl)ether	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2-Chlorophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
1,3-Dichlorobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
1,4-Dichlorobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Benzyl alcohol	ND	0.34	EPA 8270D	10-19-12	10-23-12	
1,2-Dichlorobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2-Methylphenol (o-Cresol)	ND	0.034	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroisopropyl)ether	ND	0.034	EPA 8270D	10-19-12	10-23-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.034	EPA 8270D	10-19-12	10-23-12	
n-Nitroso-di-n-propylamine	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Hexachloroethane	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Nitrobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Isophorone	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2-Nitrophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,4-Dimethylphenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethoxy)methane	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,4-Dichlorophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
1,2,4-Trichlorobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Naphthalene	0.0083	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
4-Chloroaniline	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Hexachlorobutadiene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
4-Chloro-3-methylphenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2-Methylnaphthalene	0.016	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
1-Methylnaphthalene	0.0097	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Hexachlorocyclopentadiene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,4,6-Trichlorophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,3-Dichloroaniline	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,4,5-Trichlorophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2-Chloronaphthalene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2-Nitroaniline	ND	0.034	EPA 8270D	10-19-12	10-23-12	
1,4-Dinitrobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Dimethylphthalate	ND	0.034	EPA 8270D	10-19-12	10-23-12	
1,3-Dinitrobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,6-Dinitrotoluene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
1,2-Dinitrobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Acenaphthylene	ND	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
3-Nitroaniline	ND	0.034	EPA 8270D	10-19-12	10-23-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-1-S					
Laboratory ID:	10-157-04					
2,4-Dinitrophenol	ND	0.34	EPA 8270D	10-19-12	10-23-12	
Acenaphthene	ND	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
4-Nitrophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,4-Dinitrotoluene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Dibenzofuran	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,3,5,6-Tetrachlorophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
2,3,4,6-Tetrachlorophenol	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Diethylphthalate	ND	0.17	EPA 8270D	10-19-12	10-23-12	
4-Chlorophenyl-phenylether	ND	0.034	EPA 8270D	10-19-12	10-23-12	
4-Nitroaniline	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Fluorene	ND	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	10-19-12	10-23-12	
n-Nitrosodiphenylamine	ND	0.034	EPA 8270D	10-19-12	10-23-12	
1,2-Diphenylhydrazine	ND	0.034	EPA 8270D	10-19-12	10-23-12	
4-Bromophenyl-phenylether	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Hexachlorobenzene	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Pentachlorophenol	ND	0.17	EPA 8270D	10-19-12	10-23-12	
Phenanthrene	0.020	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Anthracene	ND	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Carbazole	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Di-n-butylphthalate	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Fluoranthene	0.024	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Benzidine	ND	0.34	EPA 8270D	10-19-12	10-23-12	
Pyrene	0.025	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Butylbenzylphthalate	ND	0.034	EPA 8270D	10-19-12	10-23-12	
bis-2-Ethylhexyladipate	ND	0.034	EPA 8270D	10-19-12	10-23-12	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	10-19-12	10-23-12	
Benzo[a]anthracene	0.014	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Chrysene	0.016	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
bis(2-Ethylhexyl)phthalate	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Di-n-octylphthalate	ND	0.034	EPA 8270D	10-19-12	10-23-12	
Benzo[b]fluoranthene	0.020	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Benzo(j,k)fluoranthene	ND	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Benzo[a]pyrene	0.017	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Indeno[1,2,3-cd]pyrene	0.0083	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Dibenz[a,h]anthracene	ND	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Benzo[g,h,i]perylene	0.013	0.0069	EPA 8270/SIM	10-19-12	10-22-12	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	64	24 - 95				
Phenol-d6	67	34 - 101				
Nitrobenzene-d5	67	32 - 102				
2-Fluorobiphenyl	79	44 - 104				
2,4,6-Tribromophenol	86	34 - 124				
Terphenyl-d14	80	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-5-S					
Laboratory ID:	10-157-05					
n-Nitrosodimethylamine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Pyridine	ND	0.39	EPA 8270D	10-19-12	10-19-12	
Phenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Aniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethyl)ether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Chlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Benzyl alcohol	ND	0.39	EPA 8270D	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Methylphenol (o-Cresol)	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroisopropyl)ether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.039	EPA 8270D	10-19-12	10-19-12	
n-Nitroso-di-n-propylamine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Hexachloroethane	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Nitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Isophorone	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Nitrophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4-Dimethylphenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethoxy)methane	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4-Dichlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Naphthalene	0.0098	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
4-Chloroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
4-Chloro-3-methylphenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Methylnaphthalene	0.0090	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
1-Methylnaphthalene	ND	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Hexachlorocyclopentadiene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4,6-Trichlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,3-Dichloroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4,5-Trichlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Chloronaphthalene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2-Nitroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,4-Dinitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Dimethylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,3-Dinitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,6-Dinitrotoluene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,2-Dinitrobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Acenaphthylene	ND	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
3-Nitroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B7-5-S					
Laboratory ID:	10-157-05					
2,4-Dinitrophenol	ND	0.39	EPA 8270D	10-19-12	10-19-12	
Acenaphthene	ND	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
4-Nitrophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,4-Dinitrotoluene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Dibenzofuran	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,3,5,6-Tetrachlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
2,3,4,6-Tetrachlorophenol	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Diethylphthalate	ND	0.19	EPA 8270D	10-19-12	10-19-12	
4-Chlorophenyl-phenylether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
4-Nitroaniline	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Fluorene	ND	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
4,6-Dinitro-2-methylphenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
n-Nitrosodiphenylamine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
1,2-Diphenylhydrazine	ND	0.039	EPA 8270D	10-19-12	10-19-12	
4-Bromophenyl-phenylether	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Hexachlorobenzene	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Pentachlorophenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Phenanthrene	0.013	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Anthracene	ND	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Carbazole	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Di-n-butylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Fluoranthene	0.016	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Benzidine	ND	0.39	EPA 8270D	10-19-12	10-19-12	
Pyrene	0.018	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Butylbenzylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
bis-2-Ethylhexyladipate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
3,3'-Dichlorobenzidine	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Benzo[a]anthracene	0.010	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Chrysene	0.0098	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
bis(2-Ethylhexyl)phthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Di-n-octylphthalate	ND	0.039	EPA 8270D	10-19-12	10-19-12	
Benzo[b]fluoranthene	0.013	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Benzo(j,k)fluoranthene	ND	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[a]pyrene	0.012	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Indeno[1,2,3-cd]pyrene	0.0080	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Dibenz[a,h]anthracene	ND	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[g,h,i]perylene	0.010	0.0077	EPA 8270/SIM	10-19-12	10-20-12	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	69	24 - 95				
Phenol-d6	74	34 - 101				
Nitrobenzene-d5	72	32 - 102				
2-Fluorobiphenyl	80	44 - 104				
2,4,6-Tribromophenol	83	34 - 124				
Terphenyl-d14	106	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B1-5-S					
Laboratory ID:	10-157-10					
n-Nitrosodimethylamine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Pyridine	ND	0.37	EPA 8270D	10-19-12	10-19-12	
Phenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Aniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethyl)ether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Chlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Benzyl alcohol	ND	0.37	EPA 8270D	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Methylphenol (o-Cresol)	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroisopropyl)ether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.037	EPA 8270D	10-19-12	10-19-12	
n-Nitroso-di-n-propylamine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Hexachloroethane	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Nitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Isophorone	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Nitrophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4-Dimethylphenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethoxy)methane	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4-Dichlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Naphthalene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
4-Chloroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
4-Chloro-3-methylphenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Methylnaphthalene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
1-Methylnaphthalene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Hexachlorocyclopentadiene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4,6-Trichlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,3-Dichloroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4,5-Trichlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Chloronaphthalene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Nitroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,4-Dinitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Dimethylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,3-Dinitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,6-Dinitrotoluene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,2-Dinitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Acenaphthylene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
3-Nitroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B1-5-S					
Laboratory ID:	10-157-10					
2,4-Dinitrophenol	ND	0.37	EPA 8270D	10-19-12	10-19-12	
Acenaphthene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
4-Nitrophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4-Dinitrotoluene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Dibenzofuran	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,3,5,6-Tetrachlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,3,4,6-Tetrachlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Diethylphthalate	ND	0.19	EPA 8270D	10-19-12	10-19-12	
4-Chlorophenyl-phenylether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
4-Nitroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Fluorene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
4,6-Dinitro-2-methylphenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
n-Nitrosodiphenylamine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,2-Diphenylhydrazine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
4-Bromophenyl-phenylether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Hexachlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Pentachlorophenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Phenanthrene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Anthracene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Carbazole	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Di-n-butylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Fluoranthene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Benzidine	ND	0.37	EPA 8270D	10-19-12	10-19-12	
Pyrene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Butylbenzylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis-2-Ethylhexyladipate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
3,3'-Dichlorobenzidine	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Benzo[a]anthracene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Chrysene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
bis(2-Ethylhexyl)phthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Di-n-octylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Benzo[b]fluoranthene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Benzo(j,k)fluoranthene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[a]pyrene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Indeno[1,2,3-cd]pyrene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Dibenz[a,h]anthracene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[g,h,i]perylene	ND	0.0074	EPA 8270/SIM	10-19-12	10-20-12	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	70	24 - 95				
Phenol-d6	72	34 - 101				
Nitrobenzene-d5	74	32 - 102				
2-Fluorobiphenyl	75	44 - 104				
2,4,6-Tribromophenol	74	34 - 124				
Terphenyl-d14	81	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-1-S					
Laboratory ID:	10-157-14					
n-Nitrosodimethylamine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Pyridine	ND	0.35	EPA 8270D	10-19-12	10-23-12	
Phenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Aniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethyl)ether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Chlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,3-Dichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,4-Dichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Benzyl alcohol	ND	0.35	EPA 8270D	10-19-12	10-23-12	
1,2-Dichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Methylphenol (o-Cresol)	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroisopropyl)ether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.035	EPA 8270D	10-19-12	10-23-12	
n-Nitroso-di-n-propylamine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachloroethane	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Nitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Isophorone	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Nitrophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4-Dimethylphenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethoxy)methane	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4-Dichlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,2,4-Trichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Naphthalene	0.033	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
4-Chloroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachlorobutadiene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
4-Chloro-3-methylphenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Methylnaphthalene	0.067	0.035	EPA 8270D	10-19-12	10-23-12	
1-Methylnaphthalene	0.037	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachlorocyclopentadiene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4,6-Trichlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,3-Dichloroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4,5-Trichlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Chloronaphthalene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Nitroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,4-Dinitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Dimethylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,3-Dinitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,6-Dinitrotoluene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,2-Dinitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Acenaphthylene	ND	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
3-Nitroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-1-S					
Laboratory ID:	10-157-14					
2,4-Dinitrophenol	ND	0.35	EPA 8270D	10-19-12	10-23-12	
Acenaphthene	ND	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
4-Nitrophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4-Dinitrotoluene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Dibenzofuran	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,3,5,6-Tetrachlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,3,4,6-Tetrachlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Diethylphthalate	ND	0.17	EPA 8270D	10-19-12	10-23-12	
4-Chlorophenyl-phenylether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
4-Nitroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Fluorene	0.012	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	10-19-12	10-23-12	
n-Nitrosodiphenylamine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,2-Diphenylhydrazine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
4-Bromophenyl-phenylether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Pentachlorophenol	ND	0.17	EPA 8270D	10-19-12	10-23-12	
Phenanthrene	0.030	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Anthracene	0.0080	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Carbazole	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Di-n-butylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Fluoranthene	0.018	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Benzidine	ND	0.35	EPA 8270D	10-19-12	10-23-12	
Pyrene	0.018	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Butylbenzylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis-2-Ethylhexyladipate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	10-19-12	10-23-12	
Benzo[a]anthracene	0.014	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
Chrysene	0.017	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
bis(2-Ethylhexyl)phthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Di-n-octylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Benzo[b]fluoranthene	0.020	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
Benzo(j,k)fluoranthene	ND	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
Benzo[a]pyrene	0.022	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
Indeno[1,2,3-cd]pyrene	0.017	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
Dibenz[a,h]anthracene	ND	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
Benzo[g,h,i]perylene	0.030	0.0070	EPA 8270/SIM	10-19-12	10-22-12	E1
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	62	24 - 95				
Phenol-d6	62	34 - 101				
Nitrobenzene-d5	64	32 - 102				
2-Fluorobiphenyl	78	44 - 104				
2,4,6-Tribromophenol	97	34 - 124				
Terphenyl-d14	81	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-1-S					
Laboratory ID:	10-157-14					
n-Nitrosodimethylamine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Pyridine	ND	0.35	EPA 8270D	10-19-12	10-23-12	
Phenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Aniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethyl)ether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Chlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,3-Dichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,4-Dichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Benzyl alcohol	ND	0.35	EPA 8270D	10-19-12	10-23-12	
1,2-Dichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Methylphenol (o-Cresol)	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroisopropyl)ether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.035	EPA 8270D	10-19-12	10-23-12	
n-Nitroso-di-n-propylamine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachloroethane	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Nitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Isophorone	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Nitrophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4-Dimethylphenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis(2-Chloroethoxy)methane	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4-Dichlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,2,4-Trichlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Naphthalene	0.033	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
4-Chloroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachlorobutadiene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
4-Chloro-3-methylphenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Methylnaphthalene	0.067	0.035	EPA 8270D	10-19-12	10-23-12	
1-Methylnaphthalene	0.037	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachlorocyclopentadiene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4,6-Trichlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,3-Dichloroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4,5-Trichlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Chloronaphthalene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2-Nitroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,4-Dinitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Dimethylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,3-Dinitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,6-Dinitrotoluene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,2-Dinitrobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Acenaphthylene	ND	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
3-Nitroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-1-S					
Laboratory ID:	10-157-14					
2,4-Dinitrophenol	ND	0.35	EPA 8270D	10-19-12	10-23-12	
Acenaphthene	ND	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
4-Nitrophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,4-Dinitrotoluene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Dibenzofuran	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,3,5,6-Tetrachlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
2,3,4,6-Tetrachlorophenol	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Diethylphthalate	ND	0.17	EPA 8270D	10-19-12	10-23-12	
4-Chlorophenyl-phenylether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
4-Nitroaniline	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Fluorene	0.012	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	10-19-12	10-23-12	
n-Nitrosodiphenylamine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
1,2-Diphenylhydrazine	ND	0.035	EPA 8270D	10-19-12	10-23-12	
4-Bromophenyl-phenylether	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Hexachlorobenzene	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Pentachlorophenol	ND	0.17	EPA 8270D	10-19-12	10-23-12	
Phenanthrene	0.030	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Anthracene	0.0080	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Carbazole	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Di-n-butylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Fluoranthene	0.018	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Benzidine	ND	0.35	EPA 8270D	10-19-12	10-23-12	
Pyrene	0.018	0.0070	EPA 8270/SIM	10-19-12	10-22-12	
Butylbenzylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
bis-2-Ethylhexyladipate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	10-19-12	10-23-12	
Benzo[a]anthracene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
Chrysene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
bis(2-Ethylhexyl)phthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Di-n-octylphthalate	ND	0.035	EPA 8270D	10-19-12	10-23-12	
Benzo[b]fluoranthene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
Benzo[j,k]fluoranthene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
Benzo[a]pyrene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
Indeno[1,2,3-cd]pyrene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
Dibenz[a,h]anthracene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
Benzo[g,h,i]perylene	ND	0.14	EPA 8270/SIM	10-19-12	10-22-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
2-Fluorophenol	62	24 - 95				
Phenol-d6	62	34 - 101				
Nitrobenzene-d5	64	32 - 102				
2-Fluorobiphenyl	78	44 - 104				
2,4,6-Tribromophenol	97	34 - 124				
Terphenyl-d14	81	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-5-S					
Laboratory ID:	10-157-15					
n-Nitrosodimethylamine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Pyridine	ND	0.37	EPA 8270D	10-19-12	10-19-12	
Phenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Aniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethyl)ether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Chlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Benzyl alcohol	ND	0.37	EPA 8270D	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Methylphenol (o-Cresol)	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroisopropyl)ether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.037	EPA 8270D	10-19-12	10-19-12	
n-Nitroso-di-n-propylamine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Hexachloroethane	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Nitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Isophorone	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Nitrophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4-Dimethylphenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethoxy)methane	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4-Dichlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Naphthalene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
4-Chloroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
4-Chloro-3-methylphenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Methylnaphthalene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
1-Methylnaphthalene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Hexachlorocyclopentadiene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4,6-Trichlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,3-Dichloroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4,5-Trichlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Chloronaphthalene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2-Nitroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,4-Dinitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Dimethylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,3-Dinitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,6-Dinitrotoluene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,2-Dinitrobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Acenaphthylene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
3-Nitroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES EPA 8270D/SIM
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B6-5-S					
Laboratory ID:	10-157-15					
2,4-Dinitrophenol	ND	0.37	EPA 8270D	10-19-12	10-19-12	
Acenaphthene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
4-Nitrophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,4-Dinitrotoluene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Dibenzofuran	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,3,5,6-Tetrachlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
2,3,4,6-Tetrachlorophenol	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Diethylphthalate	ND	0.19	EPA 8270D	10-19-12	10-19-12	
4-Chlorophenyl-phenylether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
4-Nitroaniline	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Fluorene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
4,6-Dinitro-2-methylphenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
n-Nitrosodiphenylamine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
1,2-Diphenylhydrazine	ND	0.037	EPA 8270D	10-19-12	10-19-12	
4-Bromophenyl-phenylether	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Hexachlorobenzene	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Pentachlorophenol	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Phenanthrene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Anthracene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Carbazole	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Di-n-butylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Fluoranthene	0.0089	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Benzidine	ND	0.37	EPA 8270D	10-19-12	10-19-12	
Pyrene	0.011	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Butylbenzylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
bis-2-Ethylhexyladipate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
3,3'-Dichlorobenzidine	ND	0.19	EPA 8270D	10-19-12	10-19-12	
Benzo[a]anthracene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Chrysene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
bis(2-Ethylhexyl)phthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Di-n-octylphthalate	ND	0.037	EPA 8270D	10-19-12	10-19-12	
Benzo[b]fluoranthene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Benzo(j,k)fluoranthene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[a]pyrene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Indeno[1,2,3-cd]pyrene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Dibenz[a,h]anthracene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[g,h,i]perylene	ND	0.0075	EPA 8270/SIM	10-19-12	10-20-12	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	68	24 - 95				
Phenol-d6	71	34 - 101				
Nitrobenzene-d5	72	32 - 102				
2-Fluorobiphenyl	80	44 - 104				
2,4,6-Tribromophenol	89	34 - 124				
Terphenyl-d14	87	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

**SEMIVOLATILES by EPA 8270D/SIM
 METHOD BLANK QUALITY CONTROL**

page 1 of 2

Matrix: Soil
 Units: mg/Kg

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1019S1					
n-Nitrosodimethylamine	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Pyridine	ND	0.33	EPA 8270D	10-19-12	10-19-12	
Phenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Aniline	ND	0.033	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethyl)ether	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2-Chlorophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
1,3-Dichlorobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
1,4-Dichlorobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Benzyl alcohol	ND	0.33	EPA 8270D	10-19-12	10-19-12	
1,2-Dichlorobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2-Methylphenol (o-Cresol)	ND	0.033	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroisopropyl)ether	ND	0.033	EPA 8270D	10-19-12	10-19-12	
(3+4)-Methylphenol (m,p-Cresol)	ND	0.033	EPA 8270D	10-19-12	10-19-12	
n-Nitroso-di-n-propylamine	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Hexachloroethane	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Nitrobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Isophorone	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2-Nitrophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,4-Dimethylphenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
bis(2-Chloroethoxy)methane	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,4-Dichlorophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
1,2,4-Trichlorobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Naphthalene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
4-Chloroaniline	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Hexachlorobutadiene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
4-Chloro-3-methylphenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
1-Methylnaphthalene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Hexachlorocyclopentadiene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,4,6-Trichlorophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,3-Dichloroaniline	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,4,5-Trichlorophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2-Chloronaphthalene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2-Nitroaniline	ND	0.033	EPA 8270D	10-19-12	10-19-12	
1,4-Dinitrobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Dimethylphthalate	ND	0.033	EPA 8270D	10-19-12	10-19-12	
1,3-Dinitrobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,6-Dinitrotoluene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
1,2-Dinitrobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Acenaphthylene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
3-Nitroaniline	ND	0.033	EPA 8270D	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

SEMIVOLATILES by EPA 8270D/SIM
METHOD BLANK QUALITY CONTROL
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1019S1					
2,4-Dinitrophenol	ND	0.33	EPA 8270D	10-19-12	10-19-12	
Acenaphthene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
4-Nitrophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,4-Dinitrotoluene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Dibenzofuran	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,3,5,6-Tetrachlorophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
2,3,4,6-Tetrachlorophenol	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Diethylphthalate	ND	0.17	EPA 8270D	10-19-12	10-19-12	
4-Chlorophenyl-phenylether	ND	0.033	EPA 8270D	10-19-12	10-19-12	
4-Nitroaniline	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Fluorene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
4,6-Dinitro-2-methylphenol	ND	0.17	EPA 8270D	10-19-12	10-19-12	
n-Nitrosodiphenylamine	ND	0.033	EPA 8270D	10-19-12	10-19-12	
1,2-Diphenylhydrazine	ND	0.033	EPA 8270D	10-19-12	10-19-12	
4-Bromophenyl-phenylether	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Hexachlorobenzene	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Pentachlorophenol	ND	0.17	EPA 8270D	10-19-12	10-19-12	
Phenanthrene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Anthracene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Carbazole	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Di-n-butylphthalate	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Fluoranthene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Benzidine	ND	0.33	EPA 8270D	10-19-12	10-19-12	
Pyrene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Butylbenzylphthalate	ND	0.033	EPA 8270D	10-19-12	10-19-12	
bis-2-Ethylhexyladipate	ND	0.033	EPA 8270D	10-19-12	10-19-12	
3,3'-Dichlorobenzidine	ND	0.17	EPA 8270D	10-19-12	10-19-12	
Benzo[a]anthracene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Chrysene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
bis(2-Ethylhexyl)phthalate	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Di-n-octylphthalate	ND	0.033	EPA 8270D	10-19-12	10-19-12	
Benzo[b]fluoranthene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Benzo(j,k)fluoranthene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[a]pyrene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Indeno[1,2,3-cd]pyrene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Dibenz[a,h]anthracene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Benzo[g,h,i]perylene	ND	0.0067	EPA 8270/SIM	10-19-12	10-20-12	
Surrogate:	Percent Recovery	Control Limits				
2-Fluorophenol	80	24 - 95				
Phenol-d6	83	34 - 101				
Nitrobenzene-d5	80	32 - 102				
2-Fluorobiphenyl	82	44 - 104				
2,4,6-Tribromophenol	74	34 - 124				
Terphenyl-d14	94	47 - 114				

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

**SEMIVOLATILES by EPA 8270D/SIM
 MS/MSD QUALITY CONTROL**

Matrix: Soil
 Units: mg/Kg

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	Limit	Flags
MATRIX SPIKES										
Laboratory ID:	10-157-04									
	MS	MSD	MS	MSD		MS	MSD			
Phenol	0.794	0.912	1.33	1.33	ND	60	69	43 - 104	14	25
2-Chlorophenol	0.837	0.988	1.33	1.33	ND	63	74	41 - 104	17	32
1,4-Dichlorobenzene	0.371	0.462	0.667	0.667	ND	56	69	23 - 95	22	42
n-Nitroso-di-n-propylamine	0.383	0.448	0.667	0.667	ND	57	67	34 - 105	16	27
1,2,4-Trichlorobenzene	0.429	0.509	0.667	0.667	ND	64	76	26 - 106	17	32
4-Chloro-3-methylphenol	0.893	1.02	1.33	1.33	ND	67	77	52 - 109	13	20
Acenaphthene	0.467	0.538	0.667	0.667	ND	70	81	51 - 104	14	21
4-Nitrophenol	0.889	1.01	1.33	1.33	ND	67	76	52 - 121	13	22
2,4-Dinitrotoluene	0.435	0.485	0.667	0.667	ND	65	73	53 - 115	11	22
Pentachlorophenol	0.790	0.874	1.33	1.33	ND	59	66	29 - 131	10	28
Pyrene	0.486	0.562	0.667	0.667	ND	73	84	41 - 123	15	35
Surrogate:										
2-Fluorophenol						53	65	24 - 95		
Phenol-d6						59	68	34 - 101		
Nitrobenzene-d5						56	67	32 - 102		
2-Fluorobiphenyl						70	82	44 - 104		
2,4,6-Tribromophenol						76	89	34 - 124		
Terphenyl-d14						69	80	47 - 114		

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date	Date	Flags
				Prepared	Analyzed	
Lab ID:	10-157-01					
Client ID:	B5-1-S					
Antimony	ND	5.7	6010C	10-19-12	10-19-12	
Arsenic	ND	11	6010C	10-19-12	10-19-12	
Beryllium	ND	0.57	6010C	10-19-12	10-19-12	
Cadmium	ND	0.57	6010C	10-19-12	10-19-12	
Chromium	16	0.57	6010C	10-19-12	10-19-12	
Copper	51	1.1	6010C	10-19-12	10-19-12	
Lead	21	5.7	6010C	10-19-12	10-19-12	
Mercury	ND	0.28	7471B	10-19-12	10-19-12	
Nickel	22	2.8	6010C	10-19-12	10-19-12	
Selenium	ND	11	6010C	10-19-12	10-19-12	
Silver	ND	0.57	6020A	10-22-12	10-22-12	
Thallium	ND	2.8	6020A	10-19-12	10-21-12	
Zinc	40	2.8	6010C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date	Date	Flags
				Prepared	Analyzed	
Lab ID:	10-157-02					
Client ID:	B5-5-S					
Antimony	ND	5.8	6010C	10-19-12	10-19-12	
Arsenic	ND	12	6010C	10-19-12	10-19-12	
Beryllium	ND	0.58	6010C	10-19-12	10-19-12	
Cadmium	ND	0.58	6010C	10-19-12	10-19-12	
Chromium	15	0.58	6010C	10-19-12	10-19-12	
Copper	6.5	1.2	6010C	10-19-12	10-19-12	
Lead	ND	5.8	6010C	10-19-12	10-19-12	
Mercury	ND	0.29	7471B	10-19-12	10-19-12	
Nickel	12	2.9	6010C	10-19-12	10-19-12	
Selenium	ND	12	6010C	10-19-12	10-19-12	
Silver	ND	0.58	6020A	10-22-12	10-22-12	
Thallium	ND	2.9	6020A	10-19-12	10-21-12	
Zinc	20	2.9	6010C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date	Date	Flags
				Prepared	Analyzed	
Lab ID:	10-157-04					
Client ID:	B7-1-S					
Antimony	ND	5.2	6010C	10-19-12	10-19-12	
Arsenic	ND	10	6010C	10-19-12	10-19-12	
Beryllium	ND	0.52	6010C	10-19-12	10-19-12	
Cadmium	ND	0.52	6010C	10-19-12	10-19-12	
Chromium	30	0.52	6010C	10-19-12	10-19-12	
Copper	14	1.0	6010C	10-19-12	10-19-12	
Lead	17	5.2	6010C	10-19-12	10-19-12	
Mercury	ND	0.26	7471B	10-19-12	10-19-12	
Nickel	41	2.6	6010C	10-19-12	10-19-12	
Selenium	ND	10	6010C	10-19-12	10-19-12	
Silver	ND	0.52	6020A	10-22-12	10-22-12	
Thallium	ND	2.6	6020A	10-19-12	10-21-12	
Zinc	50	2.6	6010C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date	Date	Flags
				Prepared	Analyzed	
Lab ID:	10-157-05					
Client ID:	B7-5-S					
Antimony	ND	5.8	6010C	10-19-12	10-19-12	
Arsenic	ND	12	6010C	10-19-12	10-19-12	
Beryllium	ND	0.58	6010C	10-19-12	10-19-12	
Cadmium	ND	0.58	6010C	10-19-12	10-19-12	
Chromium	22	0.58	6010C	10-19-12	10-19-12	
Copper	11	1.2	6010C	10-19-12	10-19-12	
Lead	9.0	5.8	6010C	10-19-12	10-19-12	
Mercury	ND	0.29	7471B	10-19-12	10-19-12	
Nickel	25	2.9	6010C	10-19-12	10-19-12	
Selenium	ND	12	6010C	10-19-12	10-19-12	
Silver	ND	0.58	6020A	10-22-12	10-22-12	
Thallium	ND	2.9	6020A	10-19-12	10-21-12	
Zinc	36	2.9	6010C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date Prepared	Date Analyzed	Flags
Lab ID:	10-157-14					
Client ID:	B6-1-S					
Antimony	ND	5.2	6010C	10-19-12	10-19-12	
Arsenic	ND	10	6010C	10-19-12	10-19-12	
Beryllium	ND	0.52	6010C	10-19-12	10-19-12	
Cadmium	ND	0.52	6010C	10-19-12	10-19-12	
Chromium	25	0.52	6010C	10-19-12	10-19-12	
Copper	12	1.0	6010C	10-19-12	10-19-12	
Lead	12	5.2	6010C	10-19-12	10-19-12	
Mercury	ND	0.26	7471B	10-19-12	10-19-12	
Nickel	34	2.6	6010C	10-19-12	10-19-12	
Selenium	ND	10	6010C	10-19-12	10-19-12	
Silver	ND	0.52	6020A	10-22-12	10-22-12	
Thallium	ND	2.6	6020A	10-19-12	10-21-12	
Zinc	51	2.6	6010C	10-19-12	10-19-12	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

TOTAL METALS
EPA 6010C/6020A/7471B

Matrix: Soil
 Units: mg/kg (ppm)

Analyte	Result	PQL	EPA Method	Date	Date	Flags
				Prepared	Analyzed	
Lab ID:	10-157-15					
Client ID:	B6-5-S					
Antimony	ND	5.6	6010C	10-19-12	10-19-12	
Arsenic	ND	11	6010C	10-19-12	10-19-12	
Beryllium	ND	0.56	6010C	10-19-12	10-19-12	
Cadmium	ND	0.56	6010C	10-19-12	10-19-12	
Chromium	22	0.56	6010C	10-19-12	10-19-12	
Copper	9.3	1.1	6010C	10-19-12	10-19-12	
Lead	7.0	5.6	6010C	10-19-12	10-19-12	
Mercury	ND	0.28	7471B	10-19-12	10-19-12	
Nickel	28	2.8	6010C	10-19-12	10-19-12	
Selenium	ND	11	6010C	10-19-12	10-19-12	
Silver	ND	0.56	6020A	10-22-12	10-22-12	
Thallium	ND	2.8	6020A	10-19-12	10-21-12	
Zinc	29	2.8	6010C	10-19-12	10-19-12	

Date of Report: October 23, 2012
Samples Submitted: October 17, 2012
Laboratory Reference: 1210-157
Project: JK1204

**TOTAL METALS
EPA 6010C/6020A
METHOD BLANK QUALITY CONTROL**

Date Extracted: 10-19&22-12
Date Analyzed: 10-19,21&22-12

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1019SH1&MB1022SM2

Analyte	Method	Result	PQL
Antimony	6010C	ND	5.0
Arsenic	6010C	ND	10
Beryllium	6010C	ND	0.50
Cadmium	6010C	ND	0.50
Chromium	6010C	ND	0.50
Copper	6010C	ND	1.0
Lead	6010C	ND	5.0
Nickel	6010C	ND	2.5
Selenium	6010C	ND	10
Silver	6020A	ND	0.50
Thallium	6020A	ND	2.5
Zinc	6010C	ND	2.5

Date of Report: October 23, 2012
Samples Submitted: October 17, 2012
Laboratory Reference: 1210-157
Project: JK1204

**TOTAL METALS
EPA 7471B
METHOD BLANK QUALITY CONTROL**

Date Extracted: 10-19-12
Date Analyzed: 10-19-12

Matrix: Soil
Units: mg/kg (ppm)

Lab ID: MB1019S1

Analyte	Method	Result	PQL
Mercury	7471B	ND	0.25

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

**TOTAL METALS
 EPA 6010C/6020A
 DUPLICATE QUALITY CONTROL**

Date Extracted: 10-19&22-12
 Date Analyzed: 10-19,21&22-12

Matrix: Soil
 Units: mg/kg (ppm)

Lab ID: 10-157-14

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Antimony	ND	ND	NA	5.0	
Arsenic	ND	ND	NA	10	
Beryllium	ND	ND	NA	0.50	
Cadmium	ND	ND	NA	0.50	
Chromium	24.0	24.7	3	0.50	
Copper	11.8	11.2	6	1.0	
Lead	11.9	11.6	3	5.0	
Nickel	32.9	33.4	1	2.5	
Selenium	ND	ND	NA	10	
Silver	ND	ND	NA	0.50	
Thallium	ND	ND	NA	2.5	
Zinc	48.7	50.6	4	2.5	

Date of Report: October 23, 2012
Samples Submitted: October 17, 2012
Laboratory Reference: 1210-157
Project: JK1204

**TOTAL METALS
EPA 7471B
DUPLICATE QUALITY CONTROL**

Date Extracted: 10-19-12

Date Analyzed: 10-19-12

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 10-143-01

Analyte	Sample Result	Duplicate Result	RPD	PQL	Flags
Mercury	ND	ND	NA	0.25	

Date of Report: October 23, 2012
 Samples Submitted: October 17, 2012
 Laboratory Reference: 1210-157
 Project: JK1204

**TOTAL METALS
 EPA 6010C/6020A
 MS/MSD QUALITY CONTROL**

Date Extracted: 10-19&22-12
 Date Analyzed: 10-19,21&22-12

Matrix: Soil
 Units: mg/kg (ppm)

Lab ID: 10-157-14

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Antimony	100	95.9	96	100	100	4	
Arsenic	100	102	102	104	104	2	
Beryllium	50.0	51.5	103	51.8	104	1	
Cadmium	50.0	51.5	103	52.1	104	1	
Chromium	100	124	100	126	102	2	
Copper	50.0	63.7	104	64.0	104	1	
Lead	250	250	95	251	95	0	
Nickel	100	134	101	134	101	0	
Selenium	100	102	102	104	104	2	
Silver	25.0	19.4	78	23.4	94	19	
Thallium	50.0	53.1	106	54.6	109	3	
Zinc	100	160	111	156	107	3	

Date of Report: October 23, 2012
Samples Submitted: October 17, 2012
Laboratory Reference: 1210-157
Project: JK1204

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

Date Extracted: 10-19-12

Date Analyzed: 10-19-12

Matrix: Soil

Units: mg/kg (ppm)

Lab ID: 10-143-01

Analyte	Spike Level	MS	Percent Recovery	MSD	Percent Recovery	RPD	Flags
Mercury	0.500	0.506	101	0.506	101	0	

Date of Report: October 23, 2012
Samples Submitted: October 17, 2012
Laboratory Reference: 1210-157
Project: JK1204

% MOISTURE

Date Analyzed: 10-17-12

Client ID	Lab ID	% Moisture
B5-1-S	10-157-01	12
B5-5-S	10-157-02	14
B7-1-S	10-157-04	3
B7-5-S	10-157-05	14
B1-5-S	10-157-10	10
B3-5-S	10-157-12	8
B6-1-S	10-157-14	4
B6-5-S	10-157-15	11



Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- E1 - The value reported should be considered an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



OnSite Environmental Inc.

Analytical Laboratory Testing Services
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Phone: (425) 883-3881 • www.onsite-env.com

Chain of Custody

Page 1 of 2

Company: Pacific Grand Lake Group
Project Number: JK1204
Project Name: 6317 Colfax Ave
Project Manager: Alan Wallace
Sampled by: BSW

Turnaround Request (in working days) Laboratory Number: **10-157**

(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☒ 3 Days
☒ Standard (7 Days) (TPH analysis 5 Days) 5/3/12
☐ (other) _____

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH	NWTPH	NWTPH	NWTPH	Volatiles	Halogenes	Semivolatiles (with low-level PAHs)	PCBs	Organochlorine	Organophosphorus	Chlorinated Acid Herbicides	Total Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease)	% Moisture	
1	B5-1-S	10-16-12	1539	Soil	5		X	X	X	X		X					X					X
2	B5-5-S		1540	Soil	6			X	X	X		X					X					X
3	B5-15-W		1550	W	5			X		X												
4	B7-1-S		1530	Soil	5			X	X	X		X					X					X
5	B7-5-S	10-16-12	1535	Soil	5			X	X	X		X					X					X

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	<u>[Signature]</u>	<u>P.G.C.</u>	<u>10/17/12</u>	<u>—</u>	
Received	<u>Van</u>	<u>spdy</u>	<u>10/17</u>	<u>9:40</u>	
Relinquished	<u>Van</u>	<u>spdy</u>	<u>10/17</u>	<u>11:00</u>	
Received	<u>[Signature]</u>	<u>QXG</u>	<u>10/17/12</u>	<u>11:00</u>	
Relinquished					
Received					
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐



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Chain of Custody

Page 2 of 2

Company: Pacific Ground Work Group
 Project Number: JK1204
 Project Name: 6317 CalBurner
 Project Manager: Glen Wallace
 Sampled by: GSV

Turnaround Request (in working days)		Laboratory Number: <u>10-157</u>													
(Check One)															
☐ Same Day	☐ 1 Day														
☐ 2 Days	☒ 3 Days														
☒ Standard (7 Days) (TPH analysis 3 Days)															
☐ _____ (other)															

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	No. of Cont.	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx	Volatiles 8260B	Halogenated Volatiles 8260B	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081A	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total PCA Metals	TCLP Metals	HEM (oil and grease) 1664	% Moisture	
6	B2-15-L	10-16-12	820	L	5			X	X														
7	B2-25-W	10-16-12	920	L	5			X	X														
8	B2-35-W	10-16-12	1030	W	5			X	X														
9	B2-45-W	10/16/12	1145	W	5			X	X														
10	B1-5-S	10/16/12	1315	Soil	5			X	X		X												X
11	B1-15-W	10/16/12	1330	W	5			X	X														
12	B3-5-S	10-16-12	1430	Soil	5			X	X														X
13	B3-15-W	10-16-12	1440	W	5			X	X														
14	B6-1-S	10-16-12	1560	S	5			X	X		X							X					X
15	B6-5-S	10-16-12	1515	S	5			X	X		X							X					↓

Signature	Company	Date	Time	Comments/Special Instructions
<u>[Signature]</u>	<u>PGL</u>	<u>10/17/12</u>	<u>—</u>	
<u>[Signature]</u>	<u>SPRY</u>	<u>10/17</u>	<u>9:40</u>	
<u>[Signature]</u>	<u>SPRY</u>	<u>10/17</u>	<u>1100</u>	
<u>[Signature]</u>	<u>SE</u>	<u>10/17/12</u>	<u>1100</u>	
Reviewed/Date	Reviewed/Date			Chromatograms with final report ☐

Data Package: Level III ☐ Level IV ☐

Electronic Data Deliverables (EDDs) ☐



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

October 23, 2012

Glen Wallace
Pacific Groundwater Group
2377 Eastlake Avenue E, Suite 200
Seattle, WA 98102

Re: Analytical Data for Project JK 1204
Laboratory Reference No. 1210-173

Dear Glen:

Enclosed are the analytical results and associated quality control data for samples submitted on October 18, 2012.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "DB", followed by a long horizontal line extending to the right.

David Baumeister
Project Manager

Enclosures

Date of Report: October 23, 2012
Samples Submitted: October 18, 2012
Laboratory Reference: 1210-173
Project: JK 1204

Case Narrative

Samples were collected on October 17, 2012 and received by the laboratory on October 18, 2012. They were maintained at the laboratory at a temperature of 2°C to 6°C.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

NWTPH-Gx

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-15-W					
Laboratory ID:	10-173-01					
Gasoline	ND	100	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	85	71-116				
Client ID:	B4-25-W					
Laboratory ID:	10-173-02					
Gasoline	ND	100	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	83	71-116				
Client ID:	B4-35-W					
Laboratory ID:	10-173-03					
Gasoline	ND	100	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	82	71-116				
Client ID:	B4-45-W					
Laboratory ID:	10-173-04					
Gasoline	ND	100	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	82	71-116				
Client ID:	B8-20-W					
Laboratory ID:	10-173-05					
Gasoline	240	100	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	82	71-116				
Client ID:	B9-20-W					
Laboratory ID:	10-173-06					
Gasoline	3500	100	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	85	71-116				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

**NWTPH-Gx
 QUALITY CONTROL**

Matrix: Water
 Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1019W1					
Gasoline	ND	100	NWTPH-Gx	10-19-12	10-19-12	
Surrogate:	Percent Recovery	Control Limits				
Fluorobenzene	87	71-116				

Analyte	Result	Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE								
Laboratory ID:	10-173-01							
	ORIG	DUP						
Gasoline	ND	ND	NA	NA	NA	NA	NA	30
Surrogate:								
Fluorobenzene				85	82	71-116		

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-15-W					
Laboratory ID:	10-173-01					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Chloromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Acetone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Iodomethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-22-12	10-22-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Butanone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroform	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1-Trichloroethane	0.23	0.20	EPA 8260C	10-22-12	10-22-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Benzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Trichloroethene	0.33	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Dibromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-22-12	10-22-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Toluene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-15-W					
Laboratory ID:	10-173-01					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Tetrachloroethene	2.5	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Hexanone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-22-12	10-22-12	
o-Xylene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Styrene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromoform	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Naphthalene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>91</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>95</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>63-120</i>				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-25-W					
Laboratory ID:	10-173-02					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Chloromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Acetone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Iodomethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-22-12	10-22-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Butanone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroform	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Benzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Trichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Dibromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-22-12	10-22-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Toluene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-25-W					
Laboratory ID:	10-173-02					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Tetrachloroethene	0.43	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Hexanone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-22-12	10-22-12	
o-Xylene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Styrene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromoform	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Naphthalene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
<i>Surrogate:</i>	<i>Percent Recovery</i>	<i>Control Limits</i>				
<i>Dibromofluoromethane</i>	<i>90</i>	<i>66-120</i>				
<i>Toluene-d8</i>	<i>94</i>	<i>70-120</i>				
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>63-120</i>				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-35-W					
Laboratory ID:	10-173-03					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Chloromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Acetone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Iodomethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-22-12	10-22-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Butanone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroform	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Benzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Trichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Dibromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-22-12	10-22-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Toluene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-35-W					
Laboratory ID:	10-173-03					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Tetrachloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Hexanone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-22-12	10-22-12	
o-Xylene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Styrene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromoform	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Naphthalene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	88	66-120				
Toluene-d8	95	70-120				
4-Bromofluorobenzene	100	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-45-W					
Laboratory ID:	10-173-04					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Chloromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Acetone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Iodomethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Carbon Disulfide	0.22	0.20	EPA 8260C	10-22-12	10-22-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-22-12	10-22-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Butanone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroform	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Benzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Trichloroethene	0.21	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Dibromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-22-12	10-22-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Toluene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B4-45-W					
Laboratory ID:	10-173-04					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Tetrachloroethene	9.6	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Hexanone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-22-12	10-22-12	
o-Xylene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Styrene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromoform	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Naphthalene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	90	66-120				
Toluene-d8	99	70-120				
4-Bromofluorobenzene	101	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B8-20-W					
Laboratory ID:	10-173-05					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Chloromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Acetone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Iodomethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-22-12	10-22-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Butanone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroform	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Benzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Trichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Dibromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-22-12	10-22-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Toluene	1.2	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B8-20-W					
Laboratory ID:	10-173-05					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Tetrachloroethene	0.39	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Hexanone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Ethylbenzene	8.8	0.20	EPA 8260C	10-22-12	10-22-12	
m,p-Xylene	17	0.40	EPA 8260C	10-22-12	10-22-12	
o-Xylene	3.9	0.20	EPA 8260C	10-22-12	10-22-12	
Styrene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromoform	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Isopropylbenzene	1.9	0.20	EPA 8260C	10-22-12	10-22-12	
Bromobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Propylbenzene	8.0	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3,5-Trimethylbenzene	2.6	0.20	EPA 8260C	10-22-12	10-22-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trimethylbenzene	5.5	0.20	EPA 8260C	10-22-12	10-22-12	
sec-Butylbenzene	0.87	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
p-Isopropyltoluene	0.25	0.20	EPA 8260C	10-22-12	10-22-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Butylbenzene	2.4	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Naphthalene	2.7	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	90	66-120				
Toluene-d8	94	70-120				
4-Bromofluorobenzene	99	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 1 of 2

Matrix: Water
 Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B9-20-W					
Laboratory ID:	10-173-06					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Chloromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Acetone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Iodomethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-22-12	10-22-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
(cis) 1,2-Dichloroethene	29	0.20	EPA 8260C	10-22-12	10-22-12	
2-Butanone	13	5.0	EPA 8260C	10-22-12	10-22-12	Y
Bromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroform	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Benzene	0.21	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Trichloroethene	1.9	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Dibromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-22-12	10-22-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Toluene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
 page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	B9-20-W					
Laboratory ID:	10-173-06					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Tetrachloroethene	16	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Hexanone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Ethylbenzene	3.8	0.20	EPA 8260C	10-22-12	10-22-12	
m,p-Xylene	0.57	0.40	EPA 8260C	10-22-12	10-22-12	
o-Xylene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Styrene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromoform	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Isopropylbenzene	4.4	0.20	EPA 8260C	10-22-12	10-22-12	
Bromobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Propylbenzene	21	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3,5-Trimethylbenzene	4.8	0.20	EPA 8260C	10-22-12	10-22-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trimethylbenzene	24	0.20	EPA 8260C	10-22-12	10-22-12	
sec-Butylbenzene	7.5	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
p-Isopropyltoluene	3.3	0.20	EPA 8260C	10-22-12	10-22-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Naphthalene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	92	66-120				
Toluene-d8	99	70-120				
4-Bromofluorobenzene	103	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL
 page 1 of 2

Matrix: Water

Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1022W2					
Dichlorodifluoromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Chloromethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Vinyl Chloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Trichlorofluoromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Acetone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Iodomethane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Carbon Disulfide	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methylene Chloride	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl t-Butyl Ether	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Vinyl Acetate	ND	2.0	EPA 8260C	10-22-12	10-22-12	
2,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Butanone	ND	5.0	EPA 8260C	10-22-12	10-22-12	
Bromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chloroform	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Carbon Tetrachloride	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Benzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Trichloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Dibromomethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromodichloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chloroethyl Vinyl Ether	ND	2.0	EPA 8260C	10-22-12	10-22-12	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Toluene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260C	10-22-12	10-22-12	

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

VOLATILES by EPA 8260C
METHOD BLANK QUALITY CONTROL

page 2 of 2

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Laboratory ID:	MB1022W2					
1,1,2-Trichloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Tetrachloroethene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Hexanone	ND	2.0	EPA 8260C	10-22-12	10-22-12	
Dibromochloromethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromoethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Chlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Ethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
m,p-Xylene	ND	0.40	EPA 8260C	10-22-12	10-22-12	
o-Xylene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Styrene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromoform	ND	1.0	EPA 8260C	10-22-12	10-22-12	
Isopropylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Bromobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichloropropane	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Propylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
2-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
4-Chlorotoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
tert-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
sec-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,3-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
p-Isopropyltoluene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,4-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
n-Butylbenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Hexachlorobutadiene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Naphthalene	ND	1.0	EPA 8260C	10-22-12	10-22-12	
1,2,3-Trichlorobenzene	ND	0.20	EPA 8260C	10-22-12	10-22-12	
Surrogate:	Percent Recovery	Control Limits				
Dibromofluoromethane	90	66-120				
Toluene-d8	96	70-120				
4-Bromofluorobenzene	100	63-120				

Date of Report: October 23, 2012
 Samples Submitted: October 18, 2012
 Laboratory Reference: 1210-173
 Project: JK 1204

**VOLATILES by EPA 8260C
 SB/SBD QUALITY CONTROL**

Matrix: Water
 Units: ug/L

Analyte	Result		Spike Level		Percent		Recovery	RPD	Limit	Flags
					Recovery	Limits				
SPIKE BLANKS										
Laboratory ID:	SB1022W2									
	SB	SBD	SB	SBD	SB	SBD				
1,1-Dichloroethene	10.3	9.78	10.0	10.0	103	98	65-141	5	15	
Benzene	9.12	8.81	10.0	10.0	91	88	77-125	3	15	
Trichloroethene	9.51	9.30	10.0	10.0	95	93	80-125	2	15	
Toluene	9.46	9.31	10.0	10.0	95	93	80-125	2	15	
Chlorobenzene	9.89	9.54	10.0	10.0	99	95	80-140	4	15	
Surrogate:										
Dibromofluoromethane					92	90	66-120			
Toluene-d8					95	95	70-120			
4-Bromofluorobenzene					102	98	63-120			



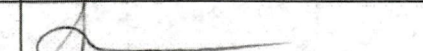
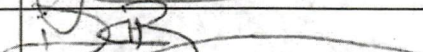
Data Qualifiers and Abbreviations

- A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.
- B - The analyte indicated was also found in the blank sample.
- C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.
- E - The value reported exceeds the quantitation range and is an estimate.
- F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.
- H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.
- I - Compound recovery is outside of the control limits.
- J - The value reported was below the practical quantitation limit. The value is an estimate.
- K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.
- L - The RPD is outside of the control limits.
- M - Hydrocarbons in the gasoline range are impacting the diesel range result.
- M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.
- N - Hydrocarbons in the lube oil range are impacting the diesel range result.
- N1 - Hydrocarbons in diesel range are impacting lube oil range results.
- O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.
- P - The RPD of the detected concentrations between the two columns is greater than 40.
- Q - Surrogate recovery is outside of the control limits.
- S - Surrogate recovery data is not available due to the necessary dilution of the sample.
- T - The sample chromatogram is not similar to a typical _____.
- U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- U1 - The practical quantitation limit is elevated due to interferences present in the sample.
- V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.
- W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.
- X - Sample extract treated with a mercury cleanup procedure.
- Y - The calibration verification for this analyte exceeded the 20% drift specified in method 8260C, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.
- Z -
- ND - Not Detected at PQL
- PQL - Practical Quantitation Limit
- RPD - Relative Percent Difference



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Page 1 of 1[illegible]

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		PGL	10/19/12	1500	
Received		CSE	10/18/12	1800	
Relinquished					
Received					
Relinquished					
Received					
Reviewed/Date	Reviewed/Date		Chromatograms with final report ☐		

500

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