

The Burrows Company

6 Southpoint Road
Orinda, CA 94563

October 15, 2014

RECEIVED

By Alameda County Environmental Health at 10:10 am, Oct 28, 2014

Mr. Keith Nowell
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: SOIL AND GROUNDWATER INVESTIGATION REPORT CERTIFICATION
RO 0000247
260 30th Street
Oakland, California

Dear Mr. Nowell:

You will find enclosed one copy of the following document prepared by P&D Environmental, Inc. for the subject site.

- Soil and Groundwater Investigation Report dated October 15, 2014 (document 0594.R1).

I declare, under penalty of perjury, that the information and/or recommendations contained in the above-mentioned work plan for the subject site is true and correct to the best of my knowledge.

Please don't hesitate to call me at (925) 788-5213 if you have any questions.

Sincerely,



Bruce Burrows

0594.L1

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

October 15, 2014
Report 0594.R1

Mr. Bruce Burrows
The Burrows Company
6 Southpoint Road
Orinda, CA 94563

SUBJECT: SOIL AND GROUNDWATER INVESTIGATION REPORT
(B1 THROUGH B4)
County LOP Case Number RO0000247
260 30th Street
Oakland, CA

Dear Mr. Burrows:

P&D Environmental, Inc. (P&D) has prepared this report documenting subsurface investigation activities in accordance with P&D's Data Gap Evaluation and Subsurface Investigation Work Plan dated June 30, 2014 (document 0594.W1) and comments provided in an email from the Alameda County Department of Environmental Health (ACDEH) dated August 26, 2014 that approved the work plan. Boreholes B1 through B4 were drilled for soil and groundwater sample collection on September 25, 2014.

A Site Location Map is attached as Figure 1, a Site Vicinity Aerial Photograph is attached as Figure 2, and a Site Map Aerial Photograph showing the borehole locations is attached as Figure 3. All work was performed under the direct supervision of a professional geologist.

BACKGROUND

It is our understanding that the subject site has historically been used as an automotive dealership and service center, and is currently occupied by an automotive repair shop. A detailed discussion of historical site investigation in 1997 associated with a 1,000 gallon capacity waste oil Underground Storage Tank (UST) that was closed in place is provided in P&D's Subsurface Investigation Work Plan dated June 30, 2014 (document 0594.W1). Review of building street numbers observed on the buildings and shown on Figure 3 shows that although the regulatory agency case is identified for the property at 260 30th Street, the closed in-place UST is located at 250 30th Street. The ground surface slope is approximately 0.066 to the east parallel to 30th Street adjacent to the site UST (as measured from Broadway along 30th Street for a distance of approximately 335 feet to the southeast of Broadway).

Review of the historical boring location map in Appendix A of P&D's June 30, 2014 work plan shows that the end of the UST located closest to 30th Street was located approximately near the separation between the second and third roll up door shown on the figure (when the easternmost roll up door is identified as the third roll up door). This location corresponds with a concrete patch in the sidewalk that appears to be different than the surrounding sidewalk and which measures

approximately 6 feet wide as measured perpendicular to the street and approximately 8.5 feet long as measured parallel to the street.. It is possible that an excavation of this size was made to obtain access to the top of the UST for the in-place UST closure. Based on the observed presence of historical boreholes SG-2, SB-3 and SB-4 in the sidewalk (historical borehole SB-1 was not observed in the sidewalk), the historical boring location map in Appendix A of the work plan is not accurate. In addition, the north arrow on the historical boring location map in Appendix A of the work plan is not accurate. A properly scaled map showing the concrete patch and observed historical borehole locations is attached with this report as Figure 4. The location of the former UST shown in Figure 3 of this report has been moved approximately 10 feet to the east from the location of the UST shown in P&D's June 30, 2014 work plan to correspond with the observed field conditions shown in Figure 4. No concrete patches that resemble UST removal concrete patches were observed in the sidewalk at locations uphill (to the west) from the subject site UST.

FIELD ACTIVITIES

Prior to performing field activities, drilling permit W2014-0862 was obtained from the Alameda County Public Works Agency (ACPWA), city excavation permit X1402307 and city obstruction permit OB1400761 were obtained from City of Oakland Planning and Building Department for work in the public right-of-way on 30th Street, the drilling locations were marked with white paint, Underground Service Alert was notified for underground utility location, a health and safety plan was prepared, and a traffic control plan was prepared. Notification of the drilling date was also provided to ACDEH.

Continuous Coring and Sample Collection

P&D personnel oversaw drilling at locations B1 through B4 on September 25, 2014 for collection of soil samples and groundwater grab samples from first-encountered groundwater (see Figure 3). All boreholes were hand augered to a depth of 5.0 feet below the ground surface (bgs) for utility clearance purposes. Borehole B4 was drilled adjacent to the south end of the closed in-place UST. Borehole B2 was drilled slightly further to the north than discussed in the ACDEH email dated August 26, 2014 that approved the P&D work plan based on the presence of a sanitary sewer trench located in the middle of 30th Street. All drilling was performed by Vironex, Inc. of Concord, California (Vironex) using Geoprobe direct push methods with a Macrocore barrel sampler lined with transparent PVC sleeves. Boreholes B1 through B4 were continuously cored to total depths of 20.0, 15.0, 15.0, and 17.0 feet bgs, respectively.

The soil from the boreholes was logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System, and was evaluated with a Photoionization Detector (PID) equipped with a 10.6 eV bulb that was calibrated with a 100 parts per million (ppm) isobutylene standard. The soil was also evaluated for other evidence of petroleum hydrocarbon contamination such as odors, staining, and discoloration. No elevated PID values, odors, staining, or discoloration were detected in any of the boreholes, with the following exceptions:

- B1 - moderate to strong petroleum hydrocarbon odors, bluish-gray staining, and PID values ranging from 17 to 88 ppm were detected between the depths of 15.0 and 17.5 feet bgs, and

- B4 - strong petroleum odors, bluish-gray staining, and PID values ranging from 1.4 to 385 ppm were detected between the depths of 12.5 to 14.5 feet bgs, and strong petroleum hydrocarbon odors were detected between the depths of 14.5 and 17.0 feet bgs.

Soil samples were retained for laboratory analysis from borehole B1 at depths of 15.0 and 17.0 feet bgs (where odors, discoloration, and elevated PID values were encountered) and from B4 at depths of 4.0, 8.0 and 14.0 feet bgs. The borehole B4 soil samples at depths of 4.0 and 8.0 feet bgs were collected for comparison with State Water Resources Control Board (SWRCB) Low Threat Closure Policy (LTCP) criteria, and the borehole B4 soil sample at a depth of 14.0 feet bgs was collected where odors, discoloration, and elevated PID values were encountered.

The soil sample from borehole B4 at a depth of 4.0 feet was collected from the bottom of the borehole using a stainless steel soil sampler lined with a 2-inch diameter, 6-inch long stainless steel tube driven by a slide hammer. Following removal of the stainless steel tube from the sampler the ends of the tube were evaluated with the PID and then sequentially covered with aluminum foil and plastic endcaps. The remaining soil samples were retained for laboratory analysis by cutting a 6-inch long section of transparent PVC tube soil core corresponding to the desired sample depth from the Macrocore barrel liner, evaluating the ends of the tube with the PID, and then sequentially covering the ends of the tube with aluminum foil and plastic endcaps. All of the soil samples were labeled and placed into a cooler with ice pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling. Copies of the boring logs are attached with this report as Appendix A.

Groundwater was first encountered at boreholes B1 through B4 at depths of approximately 17.5, 12.0, 13.0, and 14.5 feet bgs, respectively. The measured depth to water after drilling and prior to groundwater sample collection in boreholes B1 through B4 was 13.1, 10.1, 8.6 and 12.2 feet bgs, respectively.

Following verification of the presence of groundwater in boreholes B1 through B4 a temporary 1-inch diameter slotted PVC pipe was placed into each borehole. A groundwater grab sample was collected from the temporary PVC pipe at each of locations B1 through B4 in the following manner. Approximately 0.1-gallon of groundwater was purged from each borehole prior to groundwater sample collection using a peristaltic pump with polyethylene tubing. The groundwater samples were collected directly from the discharge tubing at each location into unpreserved 1-liter amber containers and 40-milliliter Volatile Organic Analysis (VOA) vials that were preserved with hydrochloric acid preservative and 40-milliliter unpreserved amber VOA vials that were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to ensure that no air bubbles were present, and then were labeled and transferred to a cooler with ice until they were transported to the laboratory. Chain of custody documentation accompanied the samples to the laboratory. No odor or sheen was detected on the water purged from the any of the boreholes with the exception of B4 where strong odor and sheen were observed on the purged groundwater.

Following groundwater sample collection from each borehole, the boreholes were grouted with neat cement grout using the temporary PVC casing as a tremie pipe. All drilling and sampling equipment was cleaned with an Alconox solution followed by a clean water rinse prior to use in

each borehole. All soil generated during subsurface investigation was stored in a 55-gallon drum at the site and labeled pending characterization and proper disposal.

GEOLOGY AND HYDROGEOLOGY

Based on review of regional geologic maps from U. S. Geological Survey Professional Paper 943, "Flatland Deposits - Their Geology and Engineering Properties and Their Importance to Comprehensive Planning," by E. J. Helley and K. R. Lajoie, 1979, the subject site is underlain by Late Pleistocene alluvium (Qpa). The Late Pleistocene alluvium is described as weakly consolidated slightly weathered poorly sorted irregularly interbedded clay, silt, sand, and gravel.

Based on review of the Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California (U.S. Geological Survey Miscellaneous Field Studies MF-2342, Version 1.0) by R.W Graymer, 2000, the site is predominantly underlain by Holocene alluvial fan and fluvial deposits (Qhaf) that are described as consisting of brown or tan, medium dense to dense, gravely sand or sandy gravel that generally grades upward to sandy or silty clay. To the west, the site is predominantly underlain by Pleistocene alluvial fan and fluvial deposits (Qpaf) that are described as consisting of brown, dense, gravelly and clayey sand or clayey gravel that fines upwards to sandy clay.

Review of the subsurface materials encountered in borehole B1 through B4 (see Appendix A) shows that the materials consisted predominantly of silty clay, sandy clay, clay, and clayey silt with coarse-grained materials encountered in feet bgs as follows:

- B1 - 17.5 to 18.5 clayey fine sand,
- B2 - 11.5 to 13.5 silty fine sand,
- B3 - 13.0 to 15.0 silty fine sand,
- B4 - 14.5 to 17.0 fine sand.

Based on the materials encountered in the boreholes, the subsurface materials most closely resemble the materials described above by Helley and Lajoie.

Groundwater was first encountered at a depth of 17.5, 12.0, 13.0, and 14.5 feet bgs, respectively in boreholes B1 through B4. The measured depth to water after drilling and prior to groundwater sample collection in boreholes B1 through B4 was 13.1, 10.1, 8.6 and 12.2 feet bgs, respectively.

Glen Echo Creek is located approximately 350 feet southeast of the subject site, and Lake Merritt is located approximately 2,800 feet south of the subject site (see Figure 1). The groundwater flow direction at the site is unknown, however based on the ground surface topography is assumed to be to the east-southeast towards Glen Echo Creek (see Figure 1).

LABORATORY ANALYSIS

All of the borehole soil and groundwater samples were analyzed at McCampbell Analytical, Inc. (McCampbell) in Pittsburg, California. All of the soil samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G) using EPA Method 8021B in conjunction with modified EPA Method 8015B, for Total Petroleum Hydrocarbons as Diesel (TPH-D) and Total Petroleum

Hydrocarbons as Motor Oil (TPH-MO) using EPA Method 3550B in conjunction with EPA Method 8015B, and for Volatile Organic Compounds (VOCs) including methyl-tert-butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (MBTEX), and naphthalene using EPA Method 5030B in conjunction with EPA Method 8260B. Additionally soil samples B4-4.0 and B4-8.0 were analyzed for Semi-Volatile Organic Compounds (SVOCs) using EPA Method 8270C.

All of the groundwater samples were analyzed for TPH-G by EPA Method 5030 in conjunction with EPA Method 8021B and modified EPA Method 8015B; TPH-D and TPH-MO by EPA Method 3510C in conjunction with modified EPA Method 8015B; and for VOCs, including MBTEX and naphthalene by EPA Method 8260B. In accordance with discussions with the ACDEH, all of the groundwater samples were extracted for EPA Method 8270C analysis, and the extract was placed on hold pending receipt of the borehole B4 soil sample results (located adjacent to the closed in-place UST). Following verification of the absence of naphthalene in the borehole B4 soil sample results, the ACDEH confirmed that analysis of the groundwater sample extract for EPA Method 8270C compounds was not required.

The borehole soil sample laboratory analytical results are summarized in Table 1, and the borehole groundwater sample laboratory analytical results are summarized in Table 2. Copies of the laboratory analytical reports and chain of custody documentation are attached with this report as Appendix B.

SITE CONCEPTUAL MODEL

The Chemicals of Potential Concern (COPCs) for the site include TPH-G, TPH-D, TPH-MO, and VOCs, including MBTEX and naphthalene. Potential offsite sources for the COPCs are shown on Figure 3. Based on the current investigation, the known extent of TPH-G, TPH-D, TPH-MO are shown in Figures 5, 6 and 7. The site geology and hydrogeology are described above.

Review of boring log B4, the soil sample results in Table 1 from above the water table indicates that the extent of petroleum hydrocarbons in soil in the vicinity of the subject site UST pit is limited and defined. Review of boring log B1 shows that elevated PID values, staining and discoloration, and odors were encountered upgradient of the subject site UST. Review of Table 2 and Figures 5 and 6 shows that the highest groundwater concentrations of TPH-G and TPH-D were detected in groundwater samples upgradient of the subject site UST. Based on this information, it appears that the detected TPH-G and TPH-D originated from an unknown upgradient source. Review of Figure 5 also shows that TPH-G was not detected in the groundwater samples from downgradient boreholes B2 and B3, indicating that the downgradient extent of TPH-G appears to have been defined.

Comparison of TPH-D and TPH-MO groundwater concentrations in Table 2 and Figures 6 and 7 shows that these compounds were not detected in the groundwater sample collected from B4 which is located directly downgradient of the closed in-place UST. The TPH-D and TPH-MO groundwater concentrations in boreholes B2 and B3 are consistent with a release from one of the USTs that was formerly located across 30th Street from the subject site. Although these USTs were identified as containing gasoline, it is possible that these USTs contained other petroleum hydrocarbons in the past. Based on the absence of TPH-D and TPH-MO in borehole B4, the

downgradient extent of these compounds associated with the subject site closed in-place UST appears to have been defined.

The physical and chemical characteristics associated with the migration of the COPCs are summarized in Table 3. The values provided in Table 3 were obtained from the Department of Toxic Substances Control Johnson & Ettinger screening-level model for groundwater contamination VLOOKUP chemical properties lookup table (last updated March 2014), except for the values for TPH-G and TPH-D which were obtained from the San Francisco Bay Regional Water Quality Control Board December 2013 User's Guide: Derivation and Application of Environmental Screening Levels Table J1 physical-chemical values.

In accordance with Table J-1, chemicals are considered to be "volatile" if the Henry's Law constant as expressed in atm m³/mole is greater than 0.00001 and the molecular weight is less than 200. For comparison with Table 3 Physical-Chemical data, 0.00001 is 1.0E-05. Review of Table 3 shows that based on Henry's Law constants and molecular weights, all of the COPCs are considered to be volatile except for TPH-MO. Similarly, review of Table 3 shows that based on solubility, all of the compounds are considered soluble. Based on the volatility these compounds (except TPH-MO) can potentially migrate in soil vapor to indoor air, and based on their solubility all of these compounds can migrate in groundwater.

DISCUSSION AND RECOMMENDATIONS

Comparison of the sample results in Tables 1 and 2 with regulatory agency screening levels is provided below.

Soil

Review of the soil sample results in Table 1 shows that petroleum hydrocarbons were not encountered in any of the soil samples at concentrations exceeding RWQCB December 2013 residential or commercial soil Environmental Screening Level (ESL) Table A-1 or A-2 values at depths of less than 10.0 feet bgs, or at concentrations exceeding RWQCB December 2013 residential or commercial soil ESL Table C-1 or C-2 values at depths greater than 10.0 feet bgs with the one exception of TPH-G in soil sample B1-15.0 (collected from upgradient borehole B1) at a concentration of 640 milligrams per kilogram (mg/kg) which exceeds the Table C-1 residential ESL value for TPH-G of 500 mg/kg, but does not exceed the commercial Table C-2 value for TPH-G of 770 mg/kg.

MTBE, BTEX, naphthalene, and SVOCs (including PAHs) were not detected in any of the soil samples, with the exceptions of ethylbenzene, xylenes, and naphthalene in soil sample B1-15.0 (collected from upgradient borehole B1) which were all detected at concentrations of 0.16, 0.65, and 0.12 mg/kg, respectively, which are all below their respective residential and commercial ESL values. TPH-G was additionally detected in soil samples B1-17.0 and B4-14.0 at concentrations of 22 and 21 mg/kg, respectively; TPH-D was detected in soil samples B1-15.0, B1-17.0, B4-4.0, B4-8.0, and B4-14.0 at concentrations of 19, 6.8, 5.3, 1.8, and 2.7 mg/kg, respectively; and TPH-MO was detected in the same samples at concentrations of 12, 5.6, 38, 9.7, and 13 mg/kg, respectively. All of these detected concentrations are all below their respective residential and commercial ESL values. Further review of the laboratory analytical report shows that the laboratory described the

TPH-G results for sample B1-15 as consisting of heavier gasoline-range compounds (possibly aged gasoline) and also as having no recognizable pattern, and the laboratory described the TPH-G results for soil samples B1-17.0 and B4-14.0 as also having no recognizable pattern. The laboratory described the TPH-D and TPH-MO results for sample B1-15.0 as consisting of gasoline-, oil-, and diesel-range compounds with no recognizable pattern; described the TPH-D and TPH-MO results for soil sample B1-17.0 as consisting of both gasoline-range compounds and Stoddard solvent/mineral spirits with no recognizable pattern, and also noted one to a few isolated peaks as being present in the TPH-D/TPH-MO chromatogram; and described the TPH-D and TPH-MO results for soil samples B4-4.0, B4-8.0, and B4-14.0 as consisting of gasoline range compounds and having no recognizable pattern.

Comparison of the sample results in Table 1 with the LTCP Table 1 Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Affecting Human Health shows that none of the detected analytes in the samples exceed any of their respective LTCP Table 1 values as follows:

- 0 to 5.0 feet bgs in a residential scenario,
- 5.0 to 10.0 feet bgs in a residential land use scenario, and
- 0.0 to 10 feet bgs for utility workers.

Benzene was not detected in any of the soil samples, and the detected concentrations of ethylbenzene and naphthalene in soil sample B1-15.0 are less than their respective LTCP criteria values.

Groundwater

Review of Table 2 shows that TPH-G was detected in groundwater samples B1-W and B4-W at concentrations of 2,400 and 460 µg/L, respectively; TPH-D was detected in samples B1-W, B2-W, and B3-W at concentrations of 600, 72, and 450 µg/L, respectively; and TPH-MO was detected in groundwater samples B2-W and B3-W at concentrations of 350 and 1,400 µg/L, respectively. Further review of the laboratory analytical results show that the lab described the TPH-G results for sample B4-W as having no recognizable pattern, described the TPH-D and TPH-MO results for sample B1-W as consisting of gasoline-range compounds, described the TPH-D and TPH-MO results for sample B2-W as consisting of both oil- and diesel-range compounds with no recognizable pattern, and described the TPH-D and TPH-MO results for sample B3-W as consisting of gasoline-, oil-, and diesel-range compounds with no recognizable pattern. All of these detected compounds were at concentrations exceeding their respective RWQCB December 2013 Table F-1a groundwater ESL values with the exception of 72 ug/L TPH-D in sample B2-W.

MTBE, BTEX, and naphthalene were not detected in any of the groundwater samples, with the exception of sample B1-W (collected from upgradient borehole B1) where ethylbenzene, xylenes, and naphthalene were detected at concentrations of 60, 210, and 9.1 micrograms per Liter (µg/L), respectively, all three of which exceed their respective RWQCB December 2013 Table F-1a groundwater ESL values. Additionally, none of the COPCs were detected at concentrations exceeding their respective December 2013 Table E-1 groundwater ESL for vapor intrusion to indoor air for a fine-coarse mix for industrial land use.

Comparison of the sample results in Table 1 with the LTCP Groundwater-Specific Criteria for MTBE and benzene for Scenarios 2 and 4 shows that because MTBE and benzene were not detected in any of the groundwater samples, none of the LTCP Groundwater-Specific criteria are exceeded.

Vapor Intrusion to Indoor Air

Vapor intrusion to indoor air is not considered to be a concern for the site based on the following site-specific information:

- The limited and defined extent of petroleum hydrocarbons in soil in the vicinity of the closed-in place UST (see boring log B4),
- the absence of COPCs in soil samples that were collected at a depth of less than 10 feet bgs at concentrations exceeding their respective soil ESL or LTCP values,
- the absence of COPC concentrations in groundwater exceeding their respective December 2013 Table E-1 groundwater ESL for vapor intrusion to indoor air for a fine-coarse mix for industrial land use.

LTCP General Criteria

The general criteria for the LTCP are satisfied as follows:

- (a) The subject site is located within the municipal water supply service area of EBMUD;
- (b) The unauthorized release consists only of petroleum;
- (c) The release has been stopped by in-place closure of the 1,000-gallon UST;
- (d) No free product has been detected in any soil or water samples collected at the site and for this reason removal of free product is not required,
- (e) A conceptual site model that assesses the nature, extent, and mobility of the release has been developed;
- (f) The extent of petroleum-impacted soil and groundwater has been defined and is limited, and for this reason no secondary source removal is required;
- (g) Soil and groundwater have been tested for MTBE, the results show that MTBE was not detected in any of the samples, and the results have been reported in accordance with Health and Safety Code section 25296.15; and
- (h) Review of site conditions shows that a nuisance as defined by Water Code section 13050 does not exist at the site.

Case Closure

Based on the defined extent of petroleum hydrocarbons in soil and groundwater that might be associated with the subject site closed in-place UST, offsite upgradient and nearby transgradient groundwater petroleum hydrocarbon sources, the LTCP general criteria being satisfied, and the absence of site conditions exceeding LTCP media-specific criteria, P&D recommends that the case be closed.

DISTRIBUTION

A copy of this report will be uploaded to the County ftp website and to GeoTracker.

LIMITATIONS

This report was prepared solely for the use of The Burrows Company. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between boreholes and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly revealed conditions must be evaluated and may invalidate the findings of this report.

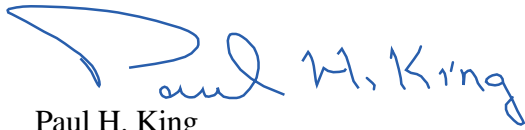
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities which is used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

October 15, 2014
Report 0594.R1

Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,
P&D Environmental, Inc.



Paul H. King
Professional Geologist # 5901
Expires: 12/31/15



Attachments:

Table 1 - Summary of Borehole Soil Sample Analytical Results
Table 2 - Summary of Borehole Groundwater Sample Analytical Results
Table 3 - Physical-Chemical and Toxicity Characteristics for Chemicals of Potential Concern

Figure 1 - Site Location Map
Figure 2 - Site Vicinity Aerial Photograph
Figure 3 - Site Map Aerial Photograph Showing Borehole Locations
Figure 4 - Site Plan Detail
Figure 5 - Site Map Aerial Photograph Showing TPH-G Concentrations in Groundwater
Figure 6 - Site Map Aerial Photograph Showing TPH-D Concentrations in Groundwater
Figure 7 - Site Map Aerial Photograph Showing TPH-MO Concentrations in Groundwater

Appendix A - Boring Logs
Appendix B - Laboratory Analytical Reports and Chain of Custody Documentation

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TABLES

Table 1
Summary of Borehole Soil Sample Analytical Results

Sample ID	Sample Collection Date	Sample Collection Depth (ft bgs)	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	Other VOCs by EPA Method 8260B	SVOCs by EPA Method 8270C
B1-15.0	9/25/2014	15.0	640, a,b	19, c,d,e	12, c,d,e	ND<0.050	ND<0.050	ND<0.050	0.16	0.65	ND, except Naphthalene = 0.12, n-Butyl benzene = 0.19, n-Propyl benzene = 0.19, 1,2,4-Trimethylbenzene = 1.2, 1,3,5-Trimethylbenzene = 0.43	NA
B1-17.0	9/25/2014	17.0	22, b	6.8, b,c,f,g	5.6, b,c,f,g	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	All ND	NA
B4-4.0	9/25/2014	4.0	ND<1.0	5.3, b,c	38, b,c	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	All ND	All ND
B4-8.0	9/25/2014	8.0	ND<1.0	1.8, b,c	9.7, b,c	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	All ND	All ND
B4-14.0	9/25/2014	14.0	21, b	2.7, b,c	13, b,c	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	All ND	NA
LTCP	Residential	0 to 5					1.9		21		9.7	
	Residential	5 to 10					2.8		32		9.7	
	Utility Worker	0 to 10					14		314		219	
ESL ¹	Shallow Residential	0 to 10	100	100	100	0.023	0.044	2.9	3.3	2.3	Naphthalene = 1.2, n-Butyl benzene = None, n-Propyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None	Various
ESL ²	Shallow Commercial	0 to 10	500	110	500	0.023	0.044	2.9	3.3	2.3	Naphthalene = 1.2, n-Butyl benzene = None, n-Propyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None	Various
ESL ³	Deeper Residential	x > 10	500	110	500	0.023	0.044	2.9	3.3	2.3	Naphthalene = 1.2, n-Butyl benzene = None, n-Propyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None	Various
ESL ⁴	Deeper Commercial	x > 10	770	110	1,000	0.023	0.044	2.9	3.3	2.3	Naphthalene = 1.2, n-Butyl benzene = None, n-Propyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None	Various
<p>NOTES:</p> <p>TPH-G = Total Petroleum Hydrocarbons as Gasoline. TPH-D = Total Petroleum Hydrocarbons as Diesel. TPH-MO = Total Petroleum Hydrocarbons as Motor Oil. MTBE = Methyl tertiary-butyl ether. ft bgs = feet below ground surface. ND = Not detected. NA = Not analyzed. a = Laboratory Note: Heavier gasoline range compounds are significant (aged gasoline?). b = Laboratory Note: No recognizable pattern. c = Laboratory Note: Gasoline range compounds are significant. d = Laboratory Note: Oil range compounds are significant. e = Laboratory Note: Diesel range compounds are significant; no recognizable pattern. f = Laboratory Note: Stoddard solvent/mineral spirit (?). g = Laboratory Note: One to a few isolated peaks present in the TPH-D/MO chromatogram.</p> <p>LTCP = Low Threat Closure Policy, by State Water Resources Control Board, effective August 17, 2012, from Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health. Residential land use and Utility Worker.</p> <p>ESL¹ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table A-1 – Shallow Soil Screening Levels, groundwater is a current or potential drinking water resource. Residential Land Use.</p> <p>ESL² = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table A-2 – Shallow Soil Screening Levels, groundwater is a current or potential drinking water resource. Commercial/Industrial Land Use.</p> <p>ESL³ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table C-1 – Deep Soil Screening Levels, groundwater is a current or potential drinking water resource. Residential Land Use.</p> <p>ESL⁴ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table C-2 – Deep Soil Screening Levels, groundwater is a current or potential drinking water resource. Commercial/Industrial Land Use.</p> <p>Results in bold exceed their respective ESL² value. Results, LTCP, and ESL values, reported in mg/kg (milligrams per kilogram), unless otherwise indicated.</p>												

Table 2
Summary of Borehole Groundwater Sample Analytical Results

Sample ID	Sample Collection Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	Other VOCs by EPA Method 8260B
B1-W	9/25/2014	2,400	600, b	ND<250	ND<2.5	ND<2.5	ND<2.5	60	210	ND, except Naphthalene = 9.1 , Isopropylbenzene = 4.2, n-Propyl benzene = 14, 1,2,4-Trimethylbenzene = 100, 1,3,5-Trimethylbenzene = 27
B2-W	9/25/2014	ND<50	72, c,d	350, c,d	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND
B3-W	9/25/2014	ND<50	450, b,c,d	1,400, b,c,d	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND
B4-W	9/25/2014	450, a	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND, except Isopropylbenzene = 1.3, n-Propyl benzene = 1.0, n-Butyl benzene = 0.50, sec-Butyl benzene = 0.62
LTCP	Scenario 2	None	None	None	1,000	3,000	None	None	None	None
Groundwater Specific Criteria	Scenario 4	None	None	None	1,000	1,000	None	None	None	None
ESL ¹		100	100	100	5.0	1.0	40	30	20	Naphthalene = 6.1, Isopropylbenzene = None, n-Propyl benzene = None, n-Butyl benzene = None, sec-Butyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None
ESL ²		No Value	No Value	No Value	9,900	27	95,000	310	37,000	
ESL ³		No Value	No Value	No Value	100,000	270	No Value	3,100	No Value	
NOTES:										
TPH-G = Total Petroleum Hydrocarbons as Gasoline.										
TPH-D = Total Petroleum Hydrocarbons as Diesel.										
MTBE = Methyl tertiary-butyl ether.										
VOCs = Volatile Organic Compounds.										
ND = Not detected.										
a = Laboratory Note: No recognizable pattern.										
b = Laboratory Note: Gasoline range compounds are significant.										
c = Laboratory Note: Oil range compounds are significant.										
d = Laboratory Note: Diesel range compounds are significant; no recognizable pattern.										
LTCP = Low Threat Closure Policy, by State Water Resources Control Board, effective August 17, 2012, from Groundwater Specific Criteria Scenarios 2 and 4.										
ESL ¹ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table F-1a – Groundwater Screening Levels, groundwater is a current or potential drinking water resource.										
ESL ² = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table E-1 – Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion. Fine-Coarse Mix. Residential Land Use.										
ESL ³ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table E-1 – Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion. Fine-Coarse Mix. Commercial/Industrial Land Use.										
Results in bold exceed their respective ESL¹ values.										
Results, LTCP, and ESL values, reported in µg/L (micrograms per Liter), unless otherwise indicated.										

Table 3
Physical-Chemical and Toxicity Characteristics for Chemicals of Potential Concern

CAS No.	Chemical	Organic carbon partition coefficient, K_{oc}^* (cm ³ /g)	Diffusivity in air, D_a^* (cm ² /s)	Diffusivity in water, D_w^* (cm ² /s)	Pure component water solubility, S^* (mg/L)	Henry's law constant, H^* (unitless)	Henry's law constant at reference temperature, H^* (atm-m ³ /mol)	Henry's law constant reference temperature, T_R^{***} (°C)	Normal boiling point, T_B^{***} (°K)	Critical temperature, T_C^{***} (°K)	Enthalpy of vaporization at the normal boiling point, $DH_{v,b}^{***}$ (cal/mol)	Unit risk factor, URF^{***} (mg/m ³) ⁻¹	Reference conc., RfC^{***} (mg/m3)	Molecular weight, MW^* (g/mol)
None	TPH-G	5.00E+03	7.00E-02	1.00E-05	2.40E+02	4.50E+01	1.10E+00	25	369.00	508.00	7,000	NA	5.7E-01	1.08E+02
None	TPH-D	5.00E+03	7.00E-02	1.00E-05	3.00E+00	3.20E+01	7.80E-01	25	473.00	568.90	7,000	NA	1.3E-01	1.70E+02
None	TPH-MO	5.00E+03	NA	NA	5.00E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA
71432	Benzene	5.90E+01	8.80E-02	9.80E-06	1.80E+03	2.30E-01	5.60E-03	25	353.24	562.16	7,342	2.9E-08	3.0E-02	7.80E+01
108883	Toluene	1.80E+02	8.70E-02	8.60E-06	5.30E+02	2.70E-01	6.60E-03	25	383.78	591.79	7,930	0.0E+00	3.0E-01	9.20E+01
100414	Ethylbenzene	3.60E+02	7.50E-02	7.80E-06	1.70E+02	3.20E-01	7.90E-03	25	409.34	617.20	8,501	2.5E-09	1.0E+00	1.06E+02
108383	m-Xylene	4.10E+02	7.00E-02	7.80E-06	1.60E+02	3.00E-01	7.30E-03	25	412.27	617.05	8,523	0.0E+00	1.0E-01	1.06E+02
95476	o-Xylene	4.10E+02	7.00E-02	7.80E-06	1.60E+02	3.00E-01	7.30E-03	25	417.60	630.30	8,661	0.0E+00	1.0E-01	1.06E+02
106423	p-Xylene	4.10E+02	7.00E-02	7.80E-06	1.60E+02	3.00E-01	7.30E-03	25	411.52	616.20	8,525	0.0E+00	1.0E-01	1.06E+02
1634044	MTBE	6.00E+00	8.00E-02	1.00E-05	1.50E+05	2.40E-02	5.90E-04	25	328.3	497.1	6677.66	2.60E-10	3.0E+00	8.80E+01
NOTES:														
TPH-G = Total Petroleum Hydrocarbons as Gasoline.														
TPH-D = Total Petroleum Hydrocarbons as Diesel.														
MTBE = methyl-tert-butyl ether														
TBA = tert-Butyl alcohol														
NA = Not Available.														
* = Values obtained from Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table J1 – Physical-Chemical Values														
** = Values obtained from Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated December 2013, from Table J2 - Toxicity Values														
*** = Data obtained from the California Department of Toxic Substances Control (DTSC) document <i>Interim Guidance Evaluating Human Health Risks from Total Petroleum Hydrocarbons (TPH)</i> , dated June 16, 2009, where TPH-G is approximated by C5-C8														
**** = CalEPA Toxicity criteria for MBTEX obtained from DTSC Johnson & Ettinger Screening-Level Model for Groundwater Contamination VLOOKUP Chemical Properties Lookup Table (last updated March 2014 DTSC/HERD)														

FIGURES

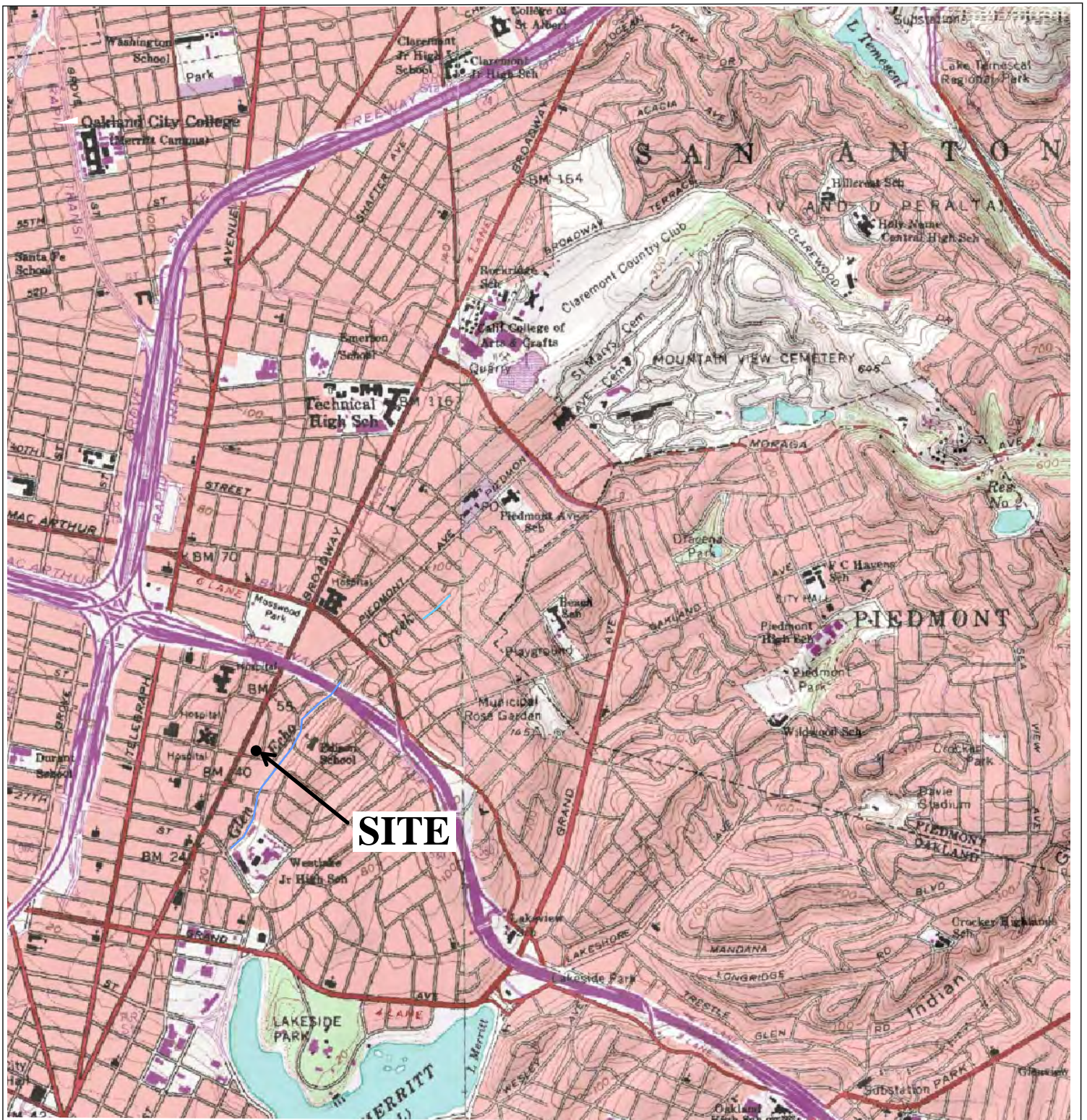


Figure 1
 Site Location Map
 260 30th Street
 Oakland, California

Base Map From:
 US Geological Survey Oakland East,
 California, and Oakland West, California
 7.5-Minute Quadrangles
 Photorevised 1980

P&D Environmental, Inc.
 55 Santa Clara Avenue
 Oakland, CA 94610

0 1000 2000



Approximate Scale in Feet

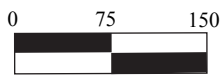




Figure 2
Site Vicinity Aerial Photograph
260 30th Street
Oakland, California

Base Map From:
Googl Earth, Image dated October 2011

P&D Environmental, Inc.
55 Santa Clara Avenue
Oakland, CA 94610



Approximate Scale in Feet





LEGEND



-  Subject Site Property Boundary
-  Borehole Location

Figure 3
Site Map Aerial Photograph Showing Borehole Locations
260 30th Street
Oakland, California

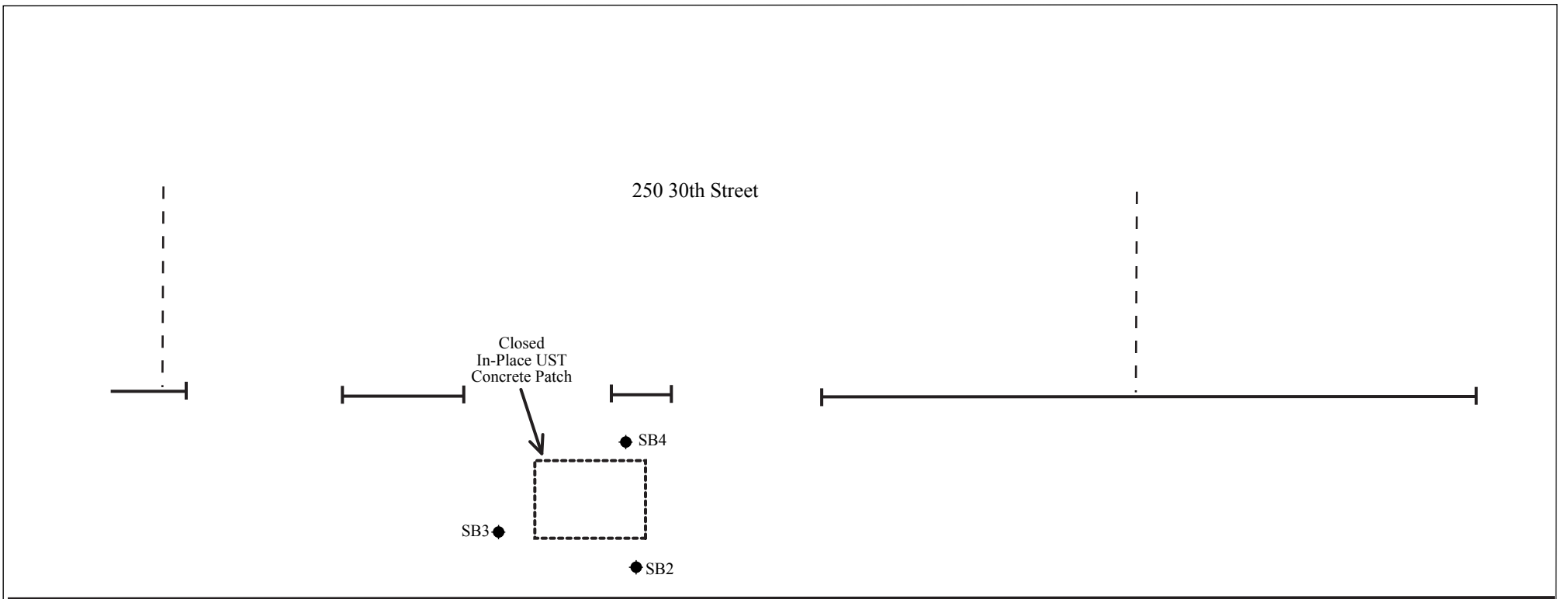
Base Map From:
 Googl Earth, Image dated October 2011

P&D Environmental, Inc.
 55 Santa Clara Avenue
 Oakland, CA 94610



Approximate Scale in Feet





LEGEND

- ◆ Historical Borehole Location By Others
- ◆ Borehole Location By P&D Environmental, Inc.

Figure 4
 Site Plan Detail
 260 30th Street
 Oakland, California

Base Map from:
 P&D Environmental Inc., Using a rolatape and a steel tape,
 October 2014

P&D Environmental, Inc.
 55 Santa Clara Ave., Suite 240
 Oakland, CA 94610

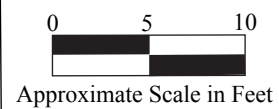




Figure 5
 Site Map Aerial Photograph Showing TPH-G Concentrations in Groundwater
 260 30th Street
 Oakland, California

Base Map From:
 Googl Earth, Image dated October 2011

P&D Environmental, Inc.
 55 Santa Clara Avenue
 Oakland, CA 94610

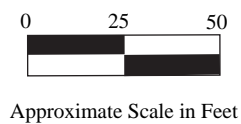




Figure 6
 Site Map Aerial Photograph Showing TPH-D Concentrations in Groundwater
 260 30th Street
 Oakland, California

Base Map From:
 Googl Earth, Image dated October 2011

P&D Environmental, Inc.
 55 Santa Clara Avenue
 Oakland, CA 94610

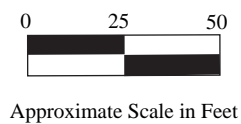
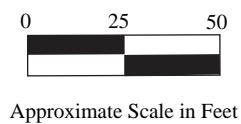




Figure 7
 Site Map Aerial Photograph Showing TPH-MO Concentrations in Groundwater
 260 30th Street
 Oakland, California

Base Map From:
 Googl Earth, Image dated October 2011

P&D Environmental, Inc.
 55 Santa Clara Avenue
 Oakland, CA 94610




APPENDIX A

Boring Logs


P&D ENVIRONMENTAL, INC.

BORING NO.: B1		PROJECT NO.: 0594		PROJECT NAME: 260 30th Street, Oakland		
BORING LOCATION: Approximately 1 ft. west of southwest corner of 250 30th St., and 3 ft. south of street curb ELEVATION AND DATUM: None						
DRILLING AGENCY: Vironex, Inc.		DRILLER: Rob		DATE & TIME STARTED:	DATE & TIME FINISHED:	
DRILLING EQUIPMENT: Geoprobe 6600				09/25/14 1300	09/25/14 1530	
COMPLETION DEPTH: 20.0 Feet		BEDROCK DEPTH: Not Encountered		LOGGED BY:	CHECKED BY:	
FIRST WATER DEPTH: 17.5 Feet		NO. OF SAMPLES: 2 Soil, 1 Water		MLBD		
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt and base rock (FILL).	FILL		No Well Constructed		Borehole was hand augered from 0.0 to 5.0 ft. using a 3.0-inch diameter hand auger.
	0.5 to 3.0 ft. Brown sandy clay (CL); medium stiff, moist. No Petroleum Hydrocarbon (PHC) odor. (0,15,85)	CL			0	Borehole was continuously cored from 5.0 to 20.0 ft. using a 5.0-foot long 2.0-inch O.D. Geoprobe Macrocore barrel sampler. The barrel sampler was lined with a 4.8-foot long 1.5-inch O.D. transparent PVC tube.
	3.0 to 5.0 ft. Brown clayey silt (ML); medium stiff, moist. No PHC odor. (0,0,100)	ML			0	
5	5.0 to 17.5 ft. Olive-brown silty clay (CL); stiff, moist, with orange mottling. No PHC odor. (0,0,100)				0	5.0 to 10.0 ft. 4.6 ft. recovery 10.0 to 15.0 ft. 4.8 ft. recovery 15.0 to 20.0 ft. 4.8 ft. recovery
10		CL			0	Water encountered during drilling at 17.5 ft. at 1425. Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 13.3 ft. at 1430 and at 13.1 ft. at 1440.
15	Bluish-gray staining and moderate to strong PHC odor from 15.0 to 17.5 ft. Wet at 17.0 ft. Saturated at 17.5 ft.	X			0	Approximately 0.1-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing connected to a peristaltic pump. Water sample B1-W collected at 1440 directly from the discharge tubing. No odor or sheen on sample. Water level was subsequently measured at 13.6 ft. at 1530.
	17.5 to 18.5 ft. Brown clayey fine sand (SC); loose, saturated. No PHC odor. (0,75,25)	X		B1-15.0	88	
	17.5 to 18.5 ft. Brown clayey fine sand (SC); loose, saturated. No PHC odor. (0,75,25)	SC			17	
	18.5 to 20.0 ft. Brown silty clay (CL); dense, moist. No PHC odor. (0,0,100)	CL		B1-17.0	0	
20					0	
25						Borehole grouted on 09/25/14 using neat cement grout and a tremie pipe. Mr. Steve Miller with Alameda County Public Works Agency onsite to observe and document grouting of the borehole.
30						<u>Drilling Notes:</u> 1) Field estimates of percent gravel, sand, and fines are shown in parentheses. 2) Density determinations are qualitative and are not based on quantitative evaluation.


P&D ENVIRONMENTAL, INC.

BORING NO.: B2		PROJECT NO.: 0594		PROJECT NAME: 260 30th Street, Oakland		
BORING LOCATION: Approximately 52 ft. east of southwest corner of 250 30th St., and 10 ft. south of street curb ELEVATION AND DATUM: None						
DRILLING AGENCY: Vironex, Inc.		DRILLER: Rob		DATE & TIME STARTED: 09/25/14 0930	DATE & TIME FINISHED: 09/25/14 1530	
DRILLING EQUIPMENT: Geoprobe 6600				LOGGED BY: MLBD	CHECKED BY: 	
COMPLETION DEPTH: 15.0 Feet		BEDROCK DEPTH: Not Encountered				
FIRST WATER DEPTH: 12.0 Feet		NO. OF SAMPLES: 1 Water				
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
0.0 to 0.5 ft.	Asphalt and base rock (FILL).	FILL		No Well Constructed	0	Borehole was hand augered from 0.0 to 5.0 ft. using a 3.0-inch diameter hand auger. Borehole was continuously cored from 5.0 to 15.0 ft. using a 5.0-foot long 2.0-inch O.D. Geoprobe Macrocore barrel sampler. The barrel sampler was lined with a 4.8-foot long 1.5-inch O.D. transparent PVC tube.
0.5 to 2.0 ft.	Brown gravelly clayey sand (FILL); medium dense, moist, with few coarse angular gravel to 0.25-inch diameter and orange mottling. No Petroleum Hydrocarbon (PHC) odor. (5,75,20)					
2.0 to 5.0 ft.	Olive-brown clay (FILL); mixed with brown gravelly clayey sand and wood fragments. No PHC odor. Gravel at 5.0 ft. (15,25,60)				0	
5.0 to 11.5 ft.	Brown sandy clay (CL); medium stiff, moist to wet, with fine sand and gray mottling. No PHC odor. (0,30,70)	CL			0	5.0 to 10.0 ft. 4.6 ft. recovery 10.0 to 15.0 ft. 4.2 ft. recovery Water encountered during drilling at 12.0 ft. at 1000.
11.5 to 13.5 ft.	Gray silty fine sand (SM); loose, saturated. No PHC odor. (0,80,20) Wet at 11.5 ft. Saturated at 12.0 ft.	SM		▼	0	Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 10.3 ft. at 1010 and at 10.1 ft. at 1015.
13.5 to 15.0 ft.	Brown clay (CL); soft, wet to saturated. No PHC odor. (0,0,100)	CL		▼	0	
15.0 to 20.0 ft.						Approximately 0.1-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing connected to a peristaltic pump. Water sample B2-W collected at 1020 directly from the discharge tubing. No odor or sheen on sample. Water level was subsequently measured at 11.9 ft. at 1130.
20.0 to 25.0 ft.						Borehole grouted on 09/25/14 using neat cement grout and a tremie pipe.
25.0 to 30.0 ft.						Mr. Steve Miller with Alameda County Public Works Agency onsite to observe and document grouting of the borehole.
						<u>Drilling Notes:</u>
						1) Field estimates of percent gravel, sand, and fines are shown in parentheses.
						2) Density determinations are qualitative and are not based on quantitative evaluation.

P&D ENVIRONMENTAL, INC.

BORING NO.: B3		PROJECT NO.: 0594		PROJECT NAME: 260 30th Street, Oakland		
BORING LOCATION: Approximately 74 ft. east of southwest corner of 250 30th St., and 3 ft. south of street curb ELEVATION AND DATUM: None						
DRILLING AGENCY: Vironex, Inc.		DRILLER: Rob		DATE & TIME STARTED: 09/25/14 1145	DATE & TIME FINISHED: 09/25/14 1530	
DRILLING EQUIPMENT: Geoprobe 6600				LOGGED BY: MLBD	CHECKED BY: 	
COMPLETION DEPTH: 15.0 Feet		BEDROCK DEPTH: Not Encountered				
FIRST WATER DEPTH: 13.0 Feet		NO. OF SAMPLES: 1 Water				
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt and base rock (FILL).			No Well Constructed		Borehole was hand augered from 0.0 to 5.0 ft. using a 3.0-inch diameter hand auger.
5	0.5 to 5.0 ft. Brown gravelly clayey sand (FILL); medium dense, moist. No Petroleum Hydrocarbon (PHC) odor. (10,55,35)	FILL			0	Borehole was continuously cored from 5.0 to 15.0 ft. using a 5.0-foot long 2.0-inch O.D. Geoprobe Macrocore barrel sampler. The barrel sampler was lined with a 4.8-foot long 1.5-inch O.D. transparent PVC tube.
	5.0 to 7.0 ft. Brown clay (CL); medium stiff, moist. No PHC odor. (0,0,100)	CL			0	5.0 to 10.0 ft. 4.8 ft. recovery 10.0 to 15.0 ft. 4.8 ft. recovery
10	7.0 to 10.0 ft. Gray clayey silt (ML); medium stiff, moist. No PHC odor. (0,0,100)	ML		▼	0	Water encountered during drilling at 13.0 ft. at 1215.
	10.0 to 13.0 ft. Brown sandy clay (CL); medium stiff, moist to wet, with fine sand. No PHC odor. (0,20,80) Wet at 12.5 ft. Saturated at 13.0 ft.	CL			0	Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 9.4 ft. at 1220 and at 8.6 ft. at 1230.
15	13.0 to 15.0 ft. Gray silty fine sand (SM); loose, saturated. No PHC odor. (0,80,20)	SM		▽	0	
20						Approximately 0.1-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing connected to a peristaltic pump. Water sample B3-W collected at 1245 directly from the discharge tubing. No odor or sheen on sample. Water level was subsequently measured at 9.6 ft. at 1345.
25						Borehole grouted on 09/25/14 using neat cement grout and a tremie pipe. Mr. Steve Miller with Alameda County Public Works Agency onsite to observe and document grouting of the borehole.
30						<u>Drilling Notes:</u> 1) Field estimates of percent gravel, sand, and fines are shown in parentheses. 2) Density determinations are qualitative and are not based on quantitative evaluation.

P&D ENVIRONMENTAL, INC.

DEPTH (FT.)		DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
BORING NO.: B4		PROJECT NO.: 0594		PROJECT NAME: 260 30th Street, Oakland			
BORING LOCATION: Approximately 34 ft. east of southwest corner of 250 30th St., and 3 ft. south of street curb ELEVATION AND DATUM: None							
DRILLING AGENCY: Vironex, Inc.		DRILLER: Rob			DATE & TIME STARTED: 09/25/14 0800		DATE & TIME FINISHED: 09/25/14 1400
DRILLING EQUIPMENT: Geoprobe 6600		COMPLETION DEPTH: 17.0 Feet			BEDROCK DEPTH: Not Encountered		LOGGED BY: MLBD
FIRST WATER DEPTH: 14.5 Feet		NO. OF SAMPLES: 3 Soil, 1 Water			CHECKED BY: 		
0.0 to 0.5 ft.		Asphalt and base rock (FILL).	FILL		No Well Constructed		Borehole was hand augered from 0.0 to 5.0 ft. using a 3.0-inch diameter hand auger.
0.5 to 5.0 ft.		Olive-brown gravelly sandy clay (CL); medium stiff, moist, with few coarse angular gravel to 0.25-inch diameter. No Petroleum Hydrocarbon (PHC) odor. (5,10,85)			B4-4.0	0	Borehole was continuously cored from 5.0 to 17.0 ft. using a 5.0-foot long 2.0-inch O.D. Geoprobe Macrocore barrel sampler. The barrel sampler was lined with a 4.8-foot long 1.5-inch O.D. transparent PVC tube.
5.0 to 12.0 ft.		Gray silty clay (CL); medium stiff, moist. No PHC odor. (0,0,100)	CL		B4-8.0	0	5.0 to 10.0 ft. 4.6 ft. recovery 10.0 to 15.0 ft. 4.8 ft. recovery 15.0 to 17.0 ft. 1.0 ft. recovery
12.0 to 14.5 ft.		Brown clay (CL); medium stiff to soft, with bluish-gray staining and strong PHC odor from 14.0 to 14.5 ft. (0,0,100) Wet at 14.0 ft. Saturated at 14.5 ft.			B4-14.0	0	Water encountered during drilling at 14.5 ft. at 0910.
14.5 to 17.0 ft.		Brown fine sand (SP); loose, saturated. Strong PHC odor. (0,95,5)	SP			0	Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 13.4 ft. at 0915 and at 12.2 ft. at 0925.
17.0 to 20.0 ft.						0	Approximately 0.1-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing connected to a peristaltic pump. Water sample B4-W collected at 1245 directly from the discharge tubing. Strong odor and sheen on sample. Water level was subsequently measured at 12.1 ft. at 1350.
20.0 to 25.0 ft.							Borehole grouted on 09/25/14 using neat cement grout and a tremie pipe.
25.0 to 30.0 ft.							Mr. Steve Miller with Alameda County Public Works Agency onsite to observe and document grouting of the borehole.
<p><u>Drilling Notes:</u></p> <p>1) Field estimates of percent gravel, sand, and fines are shown in parentheses.</p> <p>2) Density determinations are qualitative and are not based on quantitative evaluation.</p>							

APPENDIX B

Laboratory Analytical Reports and Chain of Custody Documentation

- **McCampell Work Order # 1409A25: Soil Samples B1-15.0, B1-17.0, B4-4.0, B4-8.0, and B4-14.0 TPH-G, TPH-D, TPH-MO, VOCs, and SVOCs Results**
- **McCampell Work Order # 1409A53: Groundwater Samples B1-W Through B4-W TPH-G, TPH-D, TPH-MO, and VOCs Results**



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1409A25

Report Created for: P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Project Contact: Michael Deschenes
Project P.O.:
Project Name: #0594; 260 30th Street, Oakland, CA

Project Received: 09/26/2014

Analytical Report reviewed & approved for release on 10/03/2014 by:

Question about
your data?

[Click here to email
McC Campbell](#)

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
WorkOrder: 1409A25

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
TEQ	Toxicity Equivalence

Analytical Qualifiers

d2	heavier gasoline range compounds are significant (aged gasoline?)
d9	no recognizable pattern
e2	diesel range compounds are significant; no recognizable pattern
e4	gasoline range compounds are significant.
e6	one to a few isolated peaks present in the TPH(d/mo) chromatogram
e7	oil range compounds are significant
e11	stoddard solvent/mineral spirit (?)

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.
F3	the surrogate standard recovery is outside of acceptance limits.



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-15.0	1409A25-001A	Soil	09/25/2014 14:35	GC16	95711
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		1.0	10	10/01/2014 16:58
tert-Amyl methyl ether (TAME)	ND		0.050	10	10/01/2014 16:58
Benzene	ND		0.050	10	10/01/2014 16:58
Bromobenzene	ND		0.050	10	10/01/2014 16:58
Bromochloromethane	ND		0.050	10	10/01/2014 16:58
Bromodichloromethane	ND		0.050	10	10/01/2014 16:58
Bromoform	ND		0.050	10	10/01/2014 16:58
Bromomethane	ND		0.050	10	10/01/2014 16:58
2-Butanone (MEK)	ND		0.20	10	10/01/2014 16:58
t-Butyl alcohol (TBA)	ND		0.50	10	10/01/2014 16:58
n-Butyl benzene	0.19		0.050	10	10/01/2014 16:58
sec-Butyl benzene	ND		0.050	10	10/01/2014 16:58
tert-Butyl benzene	ND		0.050	10	10/01/2014 16:58
Carbon Disulfide	ND		0.050	10	10/01/2014 16:58
Carbon Tetrachloride	ND		0.050	10	10/01/2014 16:58
Chlorobenzene	ND		0.050	10	10/01/2014 16:58
Chloroethane	ND		0.050	10	10/01/2014 16:58
Chloroform	ND		0.050	10	10/01/2014 16:58
Chloromethane	ND		0.050	10	10/01/2014 16:58
2-Chlorotoluene	ND		0.050	10	10/01/2014 16:58
4-Chlorotoluene	ND		0.050	10	10/01/2014 16:58
Dibromochloromethane	ND		0.050	10	10/01/2014 16:58
1,2-Dibromo-3-chloropropane	ND		0.040	10	10/01/2014 16:58
1,2-Dibromoethane (EDB)	ND		0.040	10	10/01/2014 16:58
Dibromomethane	ND		0.050	10	10/01/2014 16:58
1,2-Dichlorobenzene	ND		0.050	10	10/01/2014 16:58
1,3-Dichlorobenzene	ND		0.050	10	10/01/2014 16:58
1,4-Dichlorobenzene	ND		0.050	10	10/01/2014 16:58
Dichlorodifluoromethane	ND		0.050	10	10/01/2014 16:58
1,1-Dichloroethane	ND		0.050	10	10/01/2014 16:58
1,2-Dichloroethane (1,2-DCA)	ND		0.040	10	10/01/2014 16:58
1,1-Dichloroethene	ND		0.050	10	10/01/2014 16:58
cis-1,2-Dichloroethene	ND		0.050	10	10/01/2014 16:58
trans-1,2-Dichloroethene	ND		0.050	10	10/01/2014 16:58
1,2-Dichloropropane	ND		0.050	10	10/01/2014 16:58
1,3-Dichloropropane	ND		0.050	10	10/01/2014 16:58
2,2-Dichloropropane	ND		0.050	10	10/01/2014 16:58
1,1-Dichloropropene	ND		0.050	10	10/01/2014 16:58

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-15.0	1409A25-001A	Soil	09/25/2014 14:35	GC16	95711

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.050	10	10/01/2014 16:58
trans-1,3-Dichloropropene	ND	0.050	10	10/01/2014 16:58
Diisopropyl ether (DIPE)	ND	0.050	10	10/01/2014 16:58
Ethylbenzene	0.16	0.050	10	10/01/2014 16:58
Ethyl tert-butyl ether (ETBE)	ND	0.050	10	10/01/2014 16:58
Freon 113	ND	1.0	10	10/01/2014 16:58
Hexachlorobutadiene	ND	0.050	10	10/01/2014 16:58
Hexachloroethane	ND	0.050	10	10/01/2014 16:58
2-Hexanone	ND	0.050	10	10/01/2014 16:58
Isopropylbenzene	ND	0.050	10	10/01/2014 16:58
4-Isopropyl toluene	ND	0.050	10	10/01/2014 16:58
Methyl-t-butyl ether (MTBE)	ND	0.050	10	10/01/2014 16:58
Methylene chloride	ND	0.050	10	10/01/2014 16:58
4-Methyl-2-pentanone (MIBK)	ND	0.050	10	10/01/2014 16:58
Naphthalene	0.12	0.050	10	10/01/2014 16:58
n-Propyl benzene	0.19	0.050	10	10/01/2014 16:58
Styrene	ND	0.050	10	10/01/2014 16:58
1,1,1,2-Tetrachloroethane	ND	0.050	10	10/01/2014 16:58
1,1,2,2-Tetrachloroethane	ND	0.050	10	10/01/2014 16:58
Tetrachloroethene	ND	0.050	10	10/01/2014 16:58
Toluene	ND	0.050	10	10/01/2014 16:58
1,2,3-Trichlorobenzene	ND	0.050	10	10/01/2014 16:58
1,2,4-Trichlorobenzene	ND	0.050	10	10/01/2014 16:58
1,1,1-Trichloroethane	ND	0.050	10	10/01/2014 16:58
1,1,2-Trichloroethane	ND	0.050	10	10/01/2014 16:58
Trichloroethene	ND	0.050	10	10/01/2014 16:58
Trichlorofluoromethane	ND	0.050	10	10/01/2014 16:58
1,2,3-Trichloropropane	ND	0.050	10	10/01/2014 16:58
1,2,4-Trimethylbenzene	1.2	0.050	10	10/01/2014 16:58
1,3,5-Trimethylbenzene	0.43	0.050	10	10/01/2014 16:58
Vinyl Chloride	ND	0.050	10	10/01/2014 16:58
Xylenes, Total	0.65	0.050	10	10/01/2014 16:58

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Analytical Report

Client: P & D Environmental	WorkOrder: 1409A25
Project: #0594; 260 30th Street, Oakland, CA	Extraction Method: SW5030B
Date Received: 9/26/14 17:26	Analytical Method: SW8260B
Date Prepared: 9/26/14	Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-15.0	1409A25-001A	Soil	09/25/2014 14:35	GC16	95711

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	110	70-130		10/01/2014 16:58
Toluene-d8	87	70-130		10/01/2014 16:58
4-BFB	93	70-130		10/01/2014 16:58

Analyst(s): KF



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-17.0	1409A25-002A	Soil	09/25/2014 14:40	GC18	95711

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	09/30/2014 16:36
tert-Amyl methyl ether (TAME)	ND	0.0050	1	09/30/2014 16:36
Benzene	ND	0.0050	1	09/30/2014 16:36
Bromobenzene	ND	0.0050	1	09/30/2014 16:36
Bromochloromethane	ND	0.0050	1	09/30/2014 16:36
Bromodichloromethane	ND	0.0050	1	09/30/2014 16:36
Bromoform	ND	0.0050	1	09/30/2014 16:36
Bromomethane	ND	0.0050	1	09/30/2014 16:36
2-Butanone (MEK)	ND	0.020	1	09/30/2014 16:36
t-Butyl alcohol (TBA)	ND	0.050	1	09/30/2014 16:36
n-Butyl benzene	ND	0.0050	1	09/30/2014 16:36
sec-Butyl benzene	ND	0.0050	1	09/30/2014 16:36
tert-Butyl benzene	ND	0.0050	1	09/30/2014 16:36
Carbon Disulfide	ND	0.0050	1	09/30/2014 16:36
Carbon Tetrachloride	ND	0.0050	1	09/30/2014 16:36
Chlorobenzene	ND	0.0050	1	09/30/2014 16:36
Chloroethane	ND	0.0050	1	09/30/2014 16:36
Chloroform	ND	0.0050	1	09/30/2014 16:36
Chloromethane	ND	0.0050	1	09/30/2014 16:36
2-Chlorotoluene	ND	0.0050	1	09/30/2014 16:36
4-Chlorotoluene	ND	0.0050	1	09/30/2014 16:36
Dibromochloromethane	ND	0.0050	1	09/30/2014 16:36
1,2-Dibromo-3-chloropropane	ND	0.0040	1	09/30/2014 16:36
1,2-Dibromoethane (EDB)	ND	0.0040	1	09/30/2014 16:36
Dibromomethane	ND	0.0050	1	09/30/2014 16:36
1,2-Dichlorobenzene	ND	0.0050	1	09/30/2014 16:36
1,3-Dichlorobenzene	ND	0.0050	1	09/30/2014 16:36
1,4-Dichlorobenzene	ND	0.0050	1	09/30/2014 16:36
Dichlorodifluoromethane	ND	0.0050	1	09/30/2014 16:36
1,1-Dichloroethane	ND	0.0050	1	09/30/2014 16:36
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	09/30/2014 16:36
1,1-Dichloroethene	ND	0.0050	1	09/30/2014 16:36
cis-1,2-Dichloroethene	ND	0.0050	1	09/30/2014 16:36
trans-1,2-Dichloroethene	ND	0.0050	1	09/30/2014 16:36
1,2-Dichloropropane	ND	0.0050	1	09/30/2014 16:36
1,3-Dichloropropane	ND	0.0050	1	09/30/2014 16:36
2,2-Dichloropropane	ND	0.0050	1	09/30/2014 16:36
1,1-Dichloropropene	ND	0.0050	1	09/30/2014 16:36

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-17.0	1409A25-002A	Soil	09/25/2014 14:40	GC18	95711

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	09/30/2014 16:36
trans-1,3-Dichloropropene	ND	0.0050	1	09/30/2014 16:36
Diisopropyl ether (DIPE)	ND	0.0050	1	09/30/2014 16:36
Ethylbenzene	ND	0.0050	1	09/30/2014 16:36
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	09/30/2014 16:36
Freon 113	ND	0.10	1	09/30/2014 16:36
Hexachlorobutadiene	ND	0.0050	1	09/30/2014 16:36
Hexachloroethane	ND	0.0050	1	09/30/2014 16:36
2-Hexanone	ND	0.0050	1	09/30/2014 16:36
Isopropylbenzene	ND	0.0050	1	09/30/2014 16:36
4-Isopropyl toluene	ND	0.0050	1	09/30/2014 16:36
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	09/30/2014 16:36
Methylene chloride	ND	0.0050	1	09/30/2014 16:36
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	09/30/2014 16:36
Naphthalene	ND	0.0050	1	09/30/2014 16:36
n-Propyl benzene	ND	0.0050	1	09/30/2014 16:36
Styrene	ND	0.0050	1	09/30/2014 16:36
1,1,1,2-Tetrachloroethane	ND	0.0050	1	09/30/2014 16:36
1,1,2,2-Tetrachloroethane	ND	0.0050	1	09/30/2014 16:36
Tetrachloroethene	ND	0.0050	1	09/30/2014 16:36
Toluene	ND	0.0050	1	09/30/2014 16:36
1,2,3-Trichlorobenzene	ND	0.0050	1	09/30/2014 16:36
1,2,4-Trichlorobenzene	ND	0.0050	1	09/30/2014 16:36
1,1,1-Trichloroethane	ND	0.0050	1	09/30/2014 16:36
1,1,2-Trichloroethane	ND	0.0050	1	09/30/2014 16:36
Trichloroethene	ND	0.0050	1	09/30/2014 16:36
Trichlorofluoromethane	ND	0.0050	1	09/30/2014 16:36
1,2,3-Trichloropropane	ND	0.0050	1	09/30/2014 16:36
1,2,4-Trimethylbenzene	ND	0.0050	1	09/30/2014 16:36
1,3,5-Trimethylbenzene	ND	0.0050	1	09/30/2014 16:36
Vinyl Chloride	ND	0.0050	1	09/30/2014 16:36
Xylenes, Total	ND	0.0050	1	09/30/2014 16:36

(Cont.)



Analytical Report

Client: P & D Environmental	WorkOrder: 1409A25
Project: #0594; 260 30th Street, Oakland, CA	Extraction Method: SW5030B
Date Received: 9/26/14 17:26	Analytical Method: SW8260B
Date Prepared: 9/26/14	Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-17.0	1409A25-002A	Soil	09/25/2014 14:40	GC18	95711

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	93	70-130		09/30/2014 16:36
Toluene-d8	108	70-130		09/30/2014 16:36
4-BFB	72	70-130		09/30/2014 16:36

Analyst(s): KF



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC16	95711

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	10/03/2014 11:53
tert-Amyl methyl ether (TAME)	ND	0.0050	1	10/03/2014 11:53
Benzene	ND	0.0050	1	10/03/2014 11:53
Bromobenzene	ND	0.0050	1	10/03/2014 11:53
Bromochloromethane	ND	0.0050	1	10/03/2014 11:53
Bromodichloromethane	ND	0.0050	1	10/03/2014 11:53
Bromoform	ND	0.0050	1	10/03/2014 11:53
Bromomethane	ND	0.0050	1	10/03/2014 11:53
2-Butanone (MEK)	ND	0.020	1	10/03/2014 11:53
t-Butyl alcohol (TBA)	ND	0.050	1	10/03/2014 11:53
n-Butyl benzene	ND	0.0050	1	10/03/2014 11:53
sec-Butyl benzene	ND	0.0050	1	10/03/2014 11:53
tert-Butyl benzene	ND	0.0050	1	10/03/2014 11:53
Carbon Disulfide	ND	0.0050	1	10/03/2014 11:53
Carbon Tetrachloride	ND	0.0050	1	10/03/2014 11:53
Chlorobenzene	ND	0.0050	1	10/03/2014 11:53
Chloroethane	ND	0.0050	1	10/03/2014 11:53
Chloroform	ND	0.0050	1	10/03/2014 11:53
Chloromethane	ND	0.0050	1	10/03/2014 11:53
2-Chlorotoluene	ND	0.0050	1	10/03/2014 11:53
4-Chlorotoluene	ND	0.0050	1	10/03/2014 11:53
Dibromochloromethane	ND	0.0050	1	10/03/2014 11:53
1,2-Dibromo-3-chloropropane	ND	0.0040	1	10/03/2014 11:53
1,2-Dibromoethane (EDB)	ND	0.0040	1	10/03/2014 11:53
Dibromomethane	ND	0.0050	1	10/03/2014 11:53
1,2-Dichlorobenzene	ND	0.0050	1	10/03/2014 11:53
1,3-Dichlorobenzene	ND	0.0050	1	10/03/2014 11:53
1,4-Dichlorobenzene	ND	0.0050	1	10/03/2014 11:53
Dichlorodifluoromethane	ND	0.0050	1	10/03/2014 11:53
1,1-Dichloroethane	ND	0.0050	1	10/03/2014 11:53
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	10/03/2014 11:53
1,1-Dichloroethene	ND	0.0050	1	10/03/2014 11:53
cis-1,2-Dichloroethene	ND	0.0050	1	10/03/2014 11:53
trans-1,2-Dichloroethene	ND	0.0050	1	10/03/2014 11:53
1,2-Dichloropropane	ND	0.0050	1	10/03/2014 11:53
1,3-Dichloropropane	ND	0.0050	1	10/03/2014 11:53
2,2-Dichloropropane	ND	0.0050	1	10/03/2014 11:53
1,1-Dichloropropene	ND	0.0050	1	10/03/2014 11:53

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC16	95711

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	10/03/2014 11:53
trans-1,3-Dichloropropene	ND	0.0050	1	10/03/2014 11:53
Diisopropyl ether (DIPE)	ND	0.0050	1	10/03/2014 11:53
Ethylbenzene	ND	0.0050	1	10/03/2014 11:53
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	10/03/2014 11:53
Freon 113	ND	0.10	1	10/03/2014 11:53
Hexachlorobutadiene	ND	0.0050	1	10/03/2014 11:53
Hexachloroethane	ND	0.0050	1	10/03/2014 11:53
2-Hexanone	ND	0.0050	1	10/03/2014 11:53
Isopropylbenzene	ND	0.0050	1	10/03/2014 11:53
4-Isopropyl toluene	ND	0.0050	1	10/03/2014 11:53
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	10/03/2014 11:53
Methylene chloride	ND	0.0050	1	10/03/2014 11:53
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	10/03/2014 11:53
Naphthalene	ND	0.0050	1	10/03/2014 11:53
n-Propyl benzene	ND	0.0050	1	10/03/2014 11:53
Styrene	ND	0.0050	1	10/03/2014 11:53
1,1,1,2-Tetrachloroethane	ND	0.0050	1	10/03/2014 11:53
1,1,2,2-Tetrachloroethane	ND	0.0050	1	10/03/2014 11:53
Tetrachloroethene	ND	0.0050	1	10/03/2014 11:53
Toluene	ND	0.0050	1	10/03/2014 11:53
1,2,3-Trichlorobenzene	ND	0.0050	1	10/03/2014 11:53
1,2,4-Trichlorobenzene	ND	0.0050	1	10/03/2014 11:53
1,1,1-Trichloroethane	ND	0.0050	1	10/03/2014 11:53
1,1,2-Trichloroethane	ND	0.0050	1	10/03/2014 11:53
Trichloroethene	ND	0.0050	1	10/03/2014 11:53
Trichlorofluoromethane	ND	0.0050	1	10/03/2014 11:53
1,2,3-Trichloropropane	ND	0.0050	1	10/03/2014 11:53
1,2,4-Trimethylbenzene	ND	0.0050	1	10/03/2014 11:53
1,3,5-Trimethylbenzene	ND	0.0050	1	10/03/2014 11:53
Vinyl Chloride	ND	0.0050	1	10/03/2014 11:53
Xylenes, Total	ND	0.0050	1	10/03/2014 11:53

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC16	95711

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	107	70-130		10/03/2014 11:53
Toluene-d8	93	70-130		10/03/2014 11:53
4-BFB	92	70-130		10/03/2014 11:53

Analyst(s): KF



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC38	95754

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	09/30/2014 16:38
tert-Amyl methyl ether (TAME)	ND	0.0050	1	09/30/2014 16:38
Benzene	ND	0.0050	1	09/30/2014 16:38
Bromobenzene	ND	0.0050	1	09/30/2014 16:38
Bromochloromethane	ND	0.0050	1	09/30/2014 16:38
Bromodichloromethane	ND	0.0050	1	09/30/2014 16:38
Bromoform	ND	0.0050	1	09/30/2014 16:38
Bromomethane	ND	0.0050	1	09/30/2014 16:38
2-Butanone (MEK)	ND	0.020	1	09/30/2014 16:38
t-Butyl alcohol (TBA)	ND	0.050	1	09/30/2014 16:38
n-Butyl benzene	ND	0.0050	1	09/30/2014 16:38
sec-Butyl benzene	ND	0.0050	1	09/30/2014 16:38
tert-Butyl benzene	ND	0.0050	1	09/30/2014 16:38
Carbon Disulfide	ND	0.0050	1	09/30/2014 16:38
Carbon Tetrachloride	ND	0.0050	1	09/30/2014 16:38
Chlorobenzene	ND	0.0050	1	09/30/2014 16:38
Chloroethane	ND	0.0050	1	09/30/2014 16:38
Chloroform	ND	0.0050	1	09/30/2014 16:38
Chloromethane	ND	0.0050	1	09/30/2014 16:38
2-Chlorotoluene	ND	0.0050	1	09/30/2014 16:38
4-Chlorotoluene	ND	0.0050	1	09/30/2014 16:38
Dibromochloromethane	ND	0.0050	1	09/30/2014 16:38
1,2-Dibromo-3-chloropropane	ND	0.0040	1	09/30/2014 16:38
1,2-Dibromoethane (EDB)	ND	0.0040	1	09/30/2014 16:38
Dibromomethane	ND	0.0050	1	09/30/2014 16:38
1,2-Dichlorobenzene	ND	0.0050	1	09/30/2014 16:38
1,3-Dichlorobenzene	ND	0.0050	1	09/30/2014 16:38
1,4-Dichlorobenzene	ND	0.0050	1	09/30/2014 16:38
Dichlorodifluoromethane	ND	0.0050	1	09/30/2014 16:38
1,1-Dichloroethane	ND	0.0050	1	09/30/2014 16:38
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	09/30/2014 16:38
1,1-Dichloroethene	ND	0.0050	1	09/30/2014 16:38
cis-1,2-Dichloroethene	ND	0.0050	1	09/30/2014 16:38
trans-1,2-Dichloroethene	ND	0.0050	1	09/30/2014 16:38
1,2-Dichloropropane	ND	0.0050	1	09/30/2014 16:38
1,3-Dichloropropane	ND	0.0050	1	09/30/2014 16:38
2,2-Dichloropropane	ND	0.0050	1	09/30/2014 16:38
1,1-Dichloropropene	ND	0.0050	1	09/30/2014 16:38

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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC38	95754

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	09/30/2014 16:38
trans-1,3-Dichloropropene	ND	0.0050	1	09/30/2014 16:38
Diisopropyl ether (DIPE)	ND	0.0050	1	09/30/2014 16:38
Ethylbenzene	ND	0.0050	1	09/30/2014 16:38
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	09/30/2014 16:38
Freon 113	ND	0.10	1	09/30/2014 16:38
Hexachlorobutadiene	ND	0.0050	1	09/30/2014 16:38
Hexachloroethane	ND	0.0050	1	09/30/2014 16:38
2-Hexanone	ND	0.0050	1	09/30/2014 16:38
Isopropylbenzene	ND	0.0050	1	09/30/2014 16:38
4-Isopropyl toluene	ND	0.0050	1	09/30/2014 16:38
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	09/30/2014 16:38
Methylene chloride	ND	0.0050	1	09/30/2014 16:38
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	09/30/2014 16:38
Naphthalene	ND	0.0050	1	09/30/2014 16:38
n-Propyl benzene	ND	0.0050	1	09/30/2014 16:38
Styrene	ND	0.0050	1	09/30/2014 16:38
1,1,1,2-Tetrachloroethane	ND	0.0050	1	09/30/2014 16:38
1,1,2,2-Tetrachloroethane	ND	0.0050	1	09/30/2014 16:38
Tetrachloroethene	ND	0.0050	1	09/30/2014 16:38
Toluene	ND	0.0050	1	09/30/2014 16:38
1,2,3-Trichlorobenzene	ND	0.0050	1	09/30/2014 16:38
1,2,4-Trichlorobenzene	ND	0.0050	1	09/30/2014 16:38
1,1,1-Trichloroethane	ND	0.0050	1	09/30/2014 16:38
1,1,2-Trichloroethane	ND	0.0050	1	09/30/2014 16:38
Trichloroethene	ND	0.0050	1	09/30/2014 16:38
Trichlorofluoromethane	ND	0.0050	1	09/30/2014 16:38
1,2,3-Trichloropropane	ND	0.0050	1	09/30/2014 16:38
1,2,4-Trimethylbenzene	ND	0.0050	1	09/30/2014 16:38
1,3,5-Trimethylbenzene	ND	0.0050	1	09/30/2014 16:38
Vinyl Chloride	ND	0.0050	1	09/30/2014 16:38
Xylenes, Total	ND	0.0050	1	09/30/2014 16:38

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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC38	95754

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	93	70-130		09/30/2014 16:38
Toluene-d8	105	70-130		09/30/2014 16:38
4-BFB	92	70-130		09/30/2014 16:38

Analyst(s): AK



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-14.0	1409A25-005A	Soil	09/25/2014 09:00	GC18	95754

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	09/30/2014 13:20
tert-Amyl methyl ether (TAME)	ND	0.0050	1	09/30/2014 13:20
Benzene	ND	0.0050	1	09/30/2014 13:20
Bromobenzene	ND	0.0050	1	09/30/2014 13:20
Bromochloromethane	ND	0.0050	1	09/30/2014 13:20
Bromodichloromethane	ND	0.0050	1	09/30/2014 13:20
Bromoform	ND	0.0050	1	09/30/2014 13:20
Bromomethane	ND	0.0050	1	09/30/2014 13:20
2-Butanone (MEK)	ND	0.020	1	09/30/2014 13:20
t-Butyl alcohol (TBA)	ND	0.050	1	09/30/2014 13:20
n-Butyl benzene	ND	0.0050	1	09/30/2014 13:20
sec-Butyl benzene	ND	0.0050	1	09/30/2014 13:20
tert-Butyl benzene	ND	0.0050	1	09/30/2014 13:20
Carbon Disulfide	ND	0.0050	1	09/30/2014 13:20
Carbon Tetrachloride	ND	0.0050	1	09/30/2014 13:20
Chlorobenzene	ND	0.0050	1	09/30/2014 13:20
Chloroethane	ND	0.0050	1	09/30/2014 13:20
Chloroform	ND	0.0050	1	09/30/2014 13:20
Chloromethane	ND	0.0050	1	09/30/2014 13:20
2-Chlorotoluene	ND	0.0050	1	09/30/2014 13:20
4-Chlorotoluene	ND	0.0050	1	09/30/2014 13:20
Dibromochloromethane	ND	0.0050	1	09/30/2014 13:20
1,2-Dibromo-3-chloropropane	ND	0.0040	1	09/30/2014 13:20
1,2-Dibromoethane (EDB)	ND	0.0040	1	09/30/2014 13:20
Dibromomethane	ND	0.0050	1	09/30/2014 13:20
1,2-Dichlorobenzene	ND	0.0050	1	09/30/2014 13:20
1,3-Dichlorobenzene	ND	0.0050	1	09/30/2014 13:20
1,4-Dichlorobenzene	ND	0.0050	1	09/30/2014 13:20
Dichlorodifluoromethane	ND	0.0050	1	09/30/2014 13:20
1,1-Dichloroethane	ND	0.0050	1	09/30/2014 13:20
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	09/30/2014 13:20
1,1-Dichloroethene	ND	0.0050	1	09/30/2014 13:20
cis-1,2-Dichloroethene	ND	0.0050	1	09/30/2014 13:20
trans-1,2-Dichloroethene	ND	0.0050	1	09/30/2014 13:20
1,2-Dichloropropane	ND	0.0050	1	09/30/2014 13:20
1,3-Dichloropropane	ND	0.0050	1	09/30/2014 13:20
2,2-Dichloropropane	ND	0.0050	1	09/30/2014 13:20
1,1-Dichloropropene	ND	0.0050	1	09/30/2014 13:20

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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-14.0	1409A25-005A	Soil	09/25/2014 09:00	GC18	95754

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	09/30/2014 13:20
trans-1,3-Dichloropropene	ND	0.0050	1	09/30/2014 13:20
Diisopropyl ether (DIPE)	ND	0.0050	1	09/30/2014 13:20
Ethylbenzene	ND	0.0050	1	09/30/2014 13:20
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	09/30/2014 13:20
Freon 113	ND	0.10	1	09/30/2014 13:20
Hexachlorobutadiene	ND	0.0050	1	09/30/2014 13:20
Hexachloroethane	ND	0.0050	1	09/30/2014 13:20
2-Hexanone	ND	0.0050	1	09/30/2014 13:20
Isopropylbenzene	ND	0.0050	1	09/30/2014 13:20
4-Isopropyl toluene	ND	0.0050	1	09/30/2014 13:20
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	09/30/2014 13:20
Methylene chloride	ND	0.0050	1	09/30/2014 13:20
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	09/30/2014 13:20
Naphthalene	ND	0.0050	1	09/30/2014 13:20
n-Propyl benzene	ND	0.0050	1	09/30/2014 13:20
Styrene	ND	0.0050	1	09/30/2014 13:20
1,1,1,2-Tetrachloroethane	ND	0.0050	1	09/30/2014 13:20
1,1,2,2-Tetrachloroethane	ND	0.0050	1	09/30/2014 13:20
Tetrachloroethene	ND	0.0050	1	09/30/2014 13:20
Toluene	ND	0.0050	1	09/30/2014 13:20
1,2,3-Trichlorobenzene	ND	0.0050	1	09/30/2014 13:20
1,2,4-Trichlorobenzene	ND	0.0050	1	09/30/2014 13:20
1,1,1-Trichloroethane	ND	0.0050	1	09/30/2014 13:20
1,1,2-Trichloroethane	ND	0.0050	1	09/30/2014 13:20
Trichloroethene	ND	0.0050	1	09/30/2014 13:20
Trichlorofluoromethane	ND	0.0050	1	09/30/2014 13:20
1,2,3-Trichloropropane	ND	0.0050	1	09/30/2014 13:20
1,2,4-Trimethylbenzene	ND	0.0050	1	09/30/2014 13:20
1,3,5-Trimethylbenzene	ND	0.0050	1	09/30/2014 13:20
Vinyl Chloride	ND	0.0050	1	09/30/2014 13:20
Xylenes, Total	ND	0.0050	1	09/30/2014 13:20

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Analytical Report

Client: P & D Environmental	WorkOrder: 1409A25
Project: #0594; 260 30th Street, Oakland, CA	Extraction Method: SW5030B
Date Received: 9/26/14 17:26	Analytical Method: SW8260B
Date Prepared: 9/26/14	Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-14.0	1409A25-005A	Soil	09/25/2014 09:00	GC18	95754

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	92	70-130		09/30/2014 13:20
Toluene-d8	103	70-130		09/30/2014 13:20
4-BFB	91	70-130		09/30/2014 13:20

Analyst(s): AK



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/30/14

WorkOrder: 1409A25
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC17	95868

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	09/30/2014 16:13
Acenaphthylene	ND	0.25	1	09/30/2014 16:13
Acetochlor	ND	0.25	1	09/30/2014 16:13
Anthracene	ND	0.25	1	09/30/2014 16:13
Benzidine	ND	1.3	1	09/30/2014 16:13
Benzo (a) anthracene	ND	0.25	1	09/30/2014 16:13
Benzo (b) fluoranthene	ND	0.25	1	09/30/2014 16:13
Benzo (k) fluoranthene	ND	0.25	1	09/30/2014 16:13
Benzo (g,h,i) perylene	ND	0.25	1	09/30/2014 16:13
Benzo (a) pyrene	ND	0.25	1	09/30/2014 16:13
Benzyl Alcohol	ND	1.3	1	09/30/2014 16:13
1,1-Biphenyl	ND	0.25	1	09/30/2014 16:13
Bis (2-chloroethoxy) Methane	ND	0.25	1	09/30/2014 16:13
Bis (2-chloroethyl) Ether	ND	0.25	1	09/30/2014 16:13
Bis (2-chloroisopropyl) Ether	ND	0.25	1	09/30/2014 16:13
Bis (2-ethylhexyl) Adipate	ND	0.25	1	09/30/2014 16:13
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	09/30/2014 16:13
4-Bromophenyl Phenyl Ether	ND	0.25	1	09/30/2014 16:13
Butylbenzyl Phthalate	ND	0.25	1	09/30/2014 16:13
4-Chloroaniline	ND	0.25	1	09/30/2014 16:13
4-Chloro-3-methylphenol	ND	0.25	1	09/30/2014 16:13
2-Chloronaphthalene	ND	0.25	1	09/30/2014 16:13
2-Chlorophenol	ND	0.25	1	09/30/2014 16:13
4-Chlorophenyl Phenyl Ether	ND	0.25	1	09/30/2014 16:13
Chrysene	ND	0.25	1	09/30/2014 16:13
Dibenzo (a,h) anthracene	ND	0.25	1	09/30/2014 16:13
Dibenzofuran	ND	0.25	1	09/30/2014 16:13
Di-n-butyl Phthalate	ND	0.25	1	09/30/2014 16:13
1,2-Dichlorobenzene	ND	0.25	1	09/30/2014 16:13
1,3-Dichlorobenzene	ND	0.25	1	09/30/2014 16:13
1,4-Dichlorobenzene	ND	0.25	1	09/30/2014 16:13
3,3-Dichlorobenzidine	ND	0.50	1	09/30/2014 16:13
2,4-Dichlorophenol	ND	0.25	1	09/30/2014 16:13
Diethyl Phthalate	ND	0.25	1	09/30/2014 16:13
2,4-Dimethylphenol	ND	0.25	1	09/30/2014 16:13
Dimethyl Phthalate	ND	0.25	1	09/30/2014 16:13
4,6-Dinitro-2-methylphenol	ND	1.3	1	09/30/2014 16:13
2,4-Dinitrophenol	ND	6.3	1	09/30/2014 16:13

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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/30/14

WorkOrder: 1409A25
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC17	95868

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	09/30/2014 16:13
2,6-Dinitrotoluene	ND	0.25	1	09/30/2014 16:13
Di-n-octyl Phthalate	ND	0.50	1	09/30/2014 16:13
1,2-Diphenylhydrazine	ND	0.25	1	09/30/2014 16:13
Fluoranthene	ND	0.25	1	09/30/2014 16:13
Fluorene	ND	0.25	1	09/30/2014 16:13
Hexachlorobenzene	ND	0.25	1	09/30/2014 16:13
Hexachlorobutadiene	ND	0.25	1	09/30/2014 16:13
Hexachlorocyclopentadiene	ND	1.3	1	09/30/2014 16:13
Hexachloroethane	ND	0.25	1	09/30/2014 16:13
Indeno (1,2,3-cd) pyrene	ND	0.25	1	09/30/2014 16:13
Isophorone	ND	0.25	1	09/30/2014 16:13
2-Methylnaphthalene	ND	0.25	1	09/30/2014 16:13
2-Methylphenol (o-Cresol)	ND	0.25	1	09/30/2014 16:13
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	09/30/2014 16:13
Naphthalene	ND	0.25	1	09/30/2014 16:13
2-Nitroaniline	ND	1.3	1	09/30/2014 16:13
3-Nitroaniline	ND	1.3	1	09/30/2014 16:13
4-Nitroaniline	ND	1.3	1	09/30/2014 16:13
Nitrobenzene	ND	0.25	1	09/30/2014 16:13
2-Nitrophenol	ND	1.3	1	09/30/2014 16:13
4-Nitrophenol	ND	1.3	1	09/30/2014 16:13
N-Nitrosodiphenylamine	ND	0.25	1	09/30/2014 16:13
N-Nitrosodi-n-propylamine	ND	0.25	1	09/30/2014 16:13
Pentachlorophenol	ND	1.3	1	09/30/2014 16:13
Phenanthrene	ND	0.25	1	09/30/2014 16:13
Phenol	ND	0.25	1	09/30/2014 16:13
Pyrene	ND	0.25	1	09/30/2014 16:13
1,2,4-Trichlorobenzene	ND	0.25	1	09/30/2014 16:13
2,4,5-Trichlorophenol	ND	0.25	1	09/30/2014 16:13
2,4,6-Trichlorophenol	ND	0.25	1	09/30/2014 16:13

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Analytical Report

Client: P & D Environmental	WorkOrder: 1409A25
Project: #0594; 260 30th Street, Oakland, CA	Extraction Method: SW3550B
Date Received: 9/26/14 17:26	Analytical Method: SW8270C
Date Prepared: 9/30/14	Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC17	95868

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
2-Fluorophenol	94	30-130		09/30/2014 16:13
Phenol-d5	86	30-130		09/30/2014 16:13
Nitrobenzene-d5	78	30-130		09/30/2014 16:13
2-Fluorobiphenyl	75	30-130		09/30/2014 16:13
2,4,6-Tribromophenol	72	16-130		09/30/2014 16:13
4-Terphenyl-d14	83	30-130		09/30/2014 16:13

Analyst(s): HK



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/30/14

WorkOrder: 1409A25
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC17	95868

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	09/30/2014 16:41
Acenaphthylene	ND	0.25	1	09/30/2014 16:41
Acetochlor	ND	0.25	1	09/30/2014 16:41
Anthracene	ND	0.25	1	09/30/2014 16:41
Benzidine	ND	1.3	1	09/30/2014 16:41
Benzo (a) anthracene	ND	0.25	1	09/30/2014 16:41
Benzo (b) fluoranthene	ND	0.25	1	09/30/2014 16:41
Benzo (k) fluoranthene	ND	0.25	1	09/30/2014 16:41
Benzo (g,h,i) perylene	ND	0.25	1	09/30/2014 16:41
Benzo (a) pyrene	ND	0.25	1	09/30/2014 16:41
Benzyl Alcohol	ND	1.3	1	09/30/2014 16:41
1,1-Biphenyl	ND	0.25	1	09/30/2014 16:41
Bis (2-chloroethoxy) Methane	ND	0.25	1	09/30/2014 16:41
Bis (2-chloroethyl) Ether	ND	0.25	1	09/30/2014 16:41
Bis (2-chloroisopropyl) Ether	ND	0.25	1	09/30/2014 16:41
Bis (2-ethylhexyl) Adipate	ND	0.25	1	09/30/2014 16:41
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	09/30/2014 16:41
4-Bromophenyl Phenyl Ether	ND	0.25	1	09/30/2014 16:41
Butylbenzyl Phthalate	ND	0.25	1	09/30/2014 16:41
4-Chloroaniline	ND	0.25	1	09/30/2014 16:41
4-Chloro-3-methylphenol	ND	0.25	1	09/30/2014 16:41
2-Chloronaphthalene	ND	0.25	1	09/30/2014 16:41
2-Chlorophenol	ND	0.25	1	09/30/2014 16:41
4-Chlorophenyl Phenyl Ether	ND	0.25	1	09/30/2014 16:41
Chrysene	ND	0.25	1	09/30/2014 16:41
Dibenzo (a,h) anthracene	ND	0.25	1	09/30/2014 16:41
Dibenzofuran	ND	0.25	1	09/30/2014 16:41
Di-n-butyl Phthalate	ND	0.25	1	09/30/2014 16:41
1,2-Dichlorobenzene	ND	0.25	1	09/30/2014 16:41
1,3-Dichlorobenzene	ND	0.25	1	09/30/2014 16:41
1,4-Dichlorobenzene	ND	0.25	1	09/30/2014 16:41
3,3-Dichlorobenzidine	ND	0.50	1	09/30/2014 16:41
2,4-Dichlorophenol	ND	0.25	1	09/30/2014 16:41
Diethyl Phthalate	ND	0.25	1	09/30/2014 16:41
2,4-Dimethylphenol	ND	0.25	1	09/30/2014 16:41
Dimethyl Phthalate	ND	0.25	1	09/30/2014 16:41
4,6-Dinitro-2-methylphenol	ND	1.3	1	09/30/2014 16:41
2,4-Dinitrophenol	ND	6.3	1	09/30/2014 16:41

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/30/14

WorkOrder: 1409A25
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC17	95868

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	09/30/2014 16:41
2,6-Dinitrotoluene	ND	0.25	1	09/30/2014 16:41
Di-n-octyl Phthalate	ND	0.50	1	09/30/2014 16:41
1,2-Diphenylhydrazine	ND	0.25	1	09/30/2014 16:41
Fluoranthene	ND	0.25	1	09/30/2014 16:41
Fluorene	ND	0.25	1	09/30/2014 16:41
Hexachlorobenzene	ND	0.25	1	09/30/2014 16:41
Hexachlorobutadiene	ND	0.25	1	09/30/2014 16:41
Hexachlorocyclopentadiene	ND	1.3	1	09/30/2014 16:41
Hexachloroethane	ND	0.25	1	09/30/2014 16:41
Indeno (1,2,3-cd) pyrene	ND	0.25	1	09/30/2014 16:41
Isophorone	ND	0.25	1	09/30/2014 16:41
2-Methylnaphthalene	ND	0.25	1	09/30/2014 16:41
2-Methylphenol (o-Cresol)	ND	0.25	1	09/30/2014 16:41
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	09/30/2014 16:41
Naphthalene	ND	0.25	1	09/30/2014 16:41
2-Nitroaniline	ND	1.3	1	09/30/2014 16:41
3-Nitroaniline	ND	1.3	1	09/30/2014 16:41
4-Nitroaniline	ND	1.3	1	09/30/2014 16:41
Nitrobenzene	ND	0.25	1	09/30/2014 16:41
2-Nitrophenol	ND	1.3	1	09/30/2014 16:41
4-Nitrophenol	ND	1.3	1	09/30/2014 16:41
N-Nitrosodiphenylamine	ND	0.25	1	09/30/2014 16:41
N-Nitrosodi-n-propylamine	ND	0.25	1	09/30/2014 16:41
Pentachlorophenol	ND	1.3	1	09/30/2014 16:41
Phenanthrene	ND	0.25	1	09/30/2014 16:41
Phenol	ND	0.25	1	09/30/2014 16:41
Pyrene	ND	0.25	1	09/30/2014 16:41
1,2,4-Trichlorobenzene	ND	0.25	1	09/30/2014 16:41
2,4,5-Trichlorophenol	ND	0.25	1	09/30/2014 16:41
2,4,6-Trichlorophenol	ND	0.25	1	09/30/2014 16:41

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/30/14

WorkOrder: 1409A25
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC17	95868

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	103	30-130		09/30/2014 16:41
Phenol-d5	94	30-130		09/30/2014 16:41
Nitrobenzene-d5	82	30-130		09/30/2014 16:41
2-Fluorobiphenyl	80	30-130		09/30/2014 16:41
2,4,6-Tribromophenol	75	16-130		09/30/2014 16:41
4-Terphenyl-d14	90	30-130		09/30/2014 16:41

Analyst(s): HK



Analytical Report

Client: P & D Environmental	WorkOrder: 1409A25
Project: #0594; 260 30th Street, Oakland, CA	Extraction Method: SW5030B
Date Received: 9/26/14 17:26	Analytical Method: SW8021B/8015Bm
Date Prepared: 9/26/14-9/29/14	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-15.0	1409A25-001A	Soil	09/25/2014 14:35	GC7	95750

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	640	20	20	09/27/2014 19:52
MTBE	---	1.0	20	09/27/2014 19:52
Benzene	---	0.10	20	09/27/2014 19:52
Toluene	---	0.10	20	09/27/2014 19:52
Ethylbenzene	---	0.10	20	09/27/2014 19:52
Xylenes	---	0.10	20	09/27/2014 19:52

Surrogates	REC (%)	Limits	Analytical Comments: d2,d9
2-Fluorotoluene	125	70-130	09/27/2014 19:52

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-17.0	1409A25-002A	Soil	09/25/2014 14:40	GC19	95750

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	22	1.0	1	10/01/2014 02:08
MTBE	---	0.050	1	10/01/2014 02:08
Benzene	---	0.0050	1	10/01/2014 02:08
Toluene	---	0.0050	1	10/01/2014 02:08
Ethylbenzene	---	0.0050	1	10/01/2014 02:08
Xylenes	---	0.0050	1	10/01/2014 02:08

Surrogates	REC (%)	Limits	Analytical Comments: d9
2-Fluorotoluene	100	70-130	10/01/2014 02:08

Analyst(s): IA



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14-9/29/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC3	95750

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	09/28/2014 03:34
MTBE	---	0.050	1	09/28/2014 03:34
Benzene	---	0.0050	1	09/28/2014 03:34
Toluene	---	0.0050	1	09/28/2014 03:34
Ethylbenzene	---	0.0050	1	09/28/2014 03:34
Xylenes	---	0.0050	1	09/28/2014 03:34

Surrogates	REC (%)	Limits
2-Fluorotoluene	90	70-130

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC7	95750

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	09/27/2014 21:51
MTBE	---	0.050	1	09/27/2014 21:51
Benzene	---	0.0050	1	09/27/2014 21:51
Toluene	---	0.0050	1	09/27/2014 21:51
Ethylbenzene	---	0.0050	1	09/27/2014 21:51
Xylenes	---	0.0050	1	09/27/2014 21:51

Surrogates	REC (%)	Limits
2-Fluorotoluene	99	70-130

Analyst(s): IA



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14-9/29/14

WorkOrder: 1409A25
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-14.0	1409A25-005A	Soil	09/25/2014 09:00	GC19	95794
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	21		1.0	1	09/30/2014 14:47
MTBE	---		0.050	1	09/30/2014 14:47
Benzene	---		0.0050	1	09/30/2014 14:47
Toluene	---		0.0050	1	09/30/2014 14:47
Ethylbenzene	---		0.0050	1	09/30/2014 14:47
Xylenes	---		0.0050	1	09/30/2014 14:47
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: d9	
2-Fluorotoluene	72		70-130		09/30/2014 14:47
<u>Analyst(s):</u> IA					



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-15.0	1409A25-001A	Soil	09/25/2014 14:35	GC6A	95752

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	19	1.0	1	10/02/2014 05:03
TPH-Motor Oil (C18-C36)	12	5.0	1	10/02/2014 05:03

Surrogates	REC (%)	Limits	Analytical Comments: e4,e7,e2
C9	98	70-130	10/02/2014 05:03

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-17.0	1409A25-002A	Soil	09/25/2014 14:40	GC6A	95752

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	6.8	1.0	1	10/02/2014 06:15
TPH-Motor Oil (C18-C36)	5.6	5.0	1	10/02/2014 06:15

Surrogates	REC (%)	Limits	Analytical Comments: e11,e2,e7,e6
C9	111	70-130	10/02/2014 06:15

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-4.0	1409A25-003A	Soil	09/25/2014 08:15	GC6B	95752

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	5.3	1.0	1	10/02/2014 02:40
TPH-Motor Oil (C18-C36)	38	5.0	1	10/02/2014 02:40

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2
C9	102	70-130	10/02/2014 02:40

Analyst(s): TK

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street, Oakland, CA
Date Received: 9/26/14 17:26
Date Prepared: 9/26/14

WorkOrder: 1409A25
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-8.0	1409A25-004A	Soil	09/25/2014 08:20	GC6A	95752

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.8	1.0	1	10/02/2014 07:26
TPH-Motor Oil (C18-C36)	9.7	5.0	1	10/02/2014 07:26

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2	Date Analyzed
C9	99	70-130		10/02/2014 07:26

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-14.0	1409A25-005A	Soil	09/25/2014 09:00	GC6B	95752

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2.7	1.0	1	10/02/2014 01:28
TPH-Motor Oil (C18-C36)	13	5.0	1	10/02/2014 01:28

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2	Date Analyzed
C9	106	70-130		10/02/2014 01:28

Analyst(s): TK



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/25/14
Date Analyzed: 9/26/14
Instrument: GC10, GC16
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95711
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-95711
 1409978-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0424	0.0050	0.050	-	85	55-106
Benzene	ND	0.0541	0.0050	0.050	-	108	69-118
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.175	0.050	0.20	-	87	63-117
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0524	0.0050	0.050	-	105	74-117
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0481	0.0040	0.050	-	96	58-120
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0509	0.0040	0.050	-	102	70-113
1,1-Dichloroethene	ND	0.0474	0.0050	0.050	-	95	61-124
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/25/14
Date Analyzed: 9/26/14
Instrument: GC10, GC16
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95711
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-95711
 1409978-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0479	0.0050	0.050	-	96	71-111
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0456	0.0050	0.050	-	91	67-108
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0456	0.0050	0.050	-	91	58-113
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0553	0.0050	0.050	-	111	73-125
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0482	0.0050	0.050	-	96	73-118
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	0.111	0.126		0.12	89	101	70-130
Toluene-d8	0.127	0.121		0.12	102	97	70-130
4-BFB	0.0100	0.0122		0.012	80	97	70-130

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/25/14
Date Analyzed: 9/26/14
Instrument: GC10, GC16
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95711
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-95711
 1409978-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0346	0.0344	0.050	ND	69	69	56-94	0	30
Benzene	0.0430	0.0426	0.050	ND	86	85	60-106	0.929	30
t-Butyl alcohol (TBA)	0.132	0.131	0.20	ND	66	66	56-140	0	30
Chlorobenzene	0.0417	0.0411	0.050	ND	83	82	61-108	1.39	30
1,2-Dibromoethane (EDB)	0.0382	0.0381	0.050	ND	76	76	54-119	0	30
1,2-Dichloroethane (1,2-DCA)	0.0411	0.0408	0.050	ND	82	82	48-115	0	30
1,1-Dichloroethene	0.0384	0.0386	0.050	ND	77	77	46-111	0	30
Diisopropyl ether (DIPE)	0.0389	0.0387	0.050	ND	78	77	53-111	0.630	30
Ethyl tert-butyl ether (ETBE)	0.0371	0.0370	0.050	ND	74	74	61-104	0	30
Methyl-t-butyl ether (MTBE)	0.0363	0.0365	0.050	ND	73	73	58-107	0	30
Toluene	0.0430	0.0431	0.050	ND	86	86	64-114	0	30
Trichloroethene	0.0394	0.0398	0.050	ND	79	80	60-116	0.886	30
Surrogate Recovery									
Dibromofluoromethane	0.134	0.132	0.18		77	75	64-117	1.99	30
Toluene-d8	0.116	0.116	0.18		66,F3	67,F3	79-130	0.153	30
4-BFB	0.0127	0.0126	0.018		73,F3	72,F3	88-121	0.636	30

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/26/14
Date Analyzed: 9/28/14
Instrument: GC9b
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95752
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-95752
 1409A25-005AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	42.5	1.0	40	-	106	70-130
Surrogate Recovery							
C9	25.7	25.5		25	103	102	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	50.0	49.4	40	2.686	118	117	70-130	1.21	30
Surrogate Recovery									
C9	28.8	28.5	25		115	114	70-130	0.819	30

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/26/14
Date Analyzed: 9/27/14 - 9/29/14
Instrument: GC10, GC16
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95754
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-95754
 1409A25-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0378	0.0050	0.050	-	76	55-106
Benzene	ND	0.0466	0.0050	0.050	-	93	69-118
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.158	0.050	0.20	-	79	63-117
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0446	0.0050	0.050	-	89	74-117
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0426	0.0040	0.050	-	85	58-120
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0445	0.0040	0.050	-	89	70-113
1,1-Dichloroethene	ND	0.0475	0.0050	0.050	-	95	61-124
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/26/14
Date Analyzed: 9/27/14 - 9/29/14
Instrument: GC10, GC16
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95754
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-95754
 1409A25-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0411	0.0050	0.050	-	82	71-111
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0402	0.0050	0.050	-	80	67-108
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0398	0.0050	0.050	-	80	58-113
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0473	0.0050	0.050	-	95	73-125
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0441	0.0050	0.050	-	88	73-118
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	0.112	0.135		0.12	90	108	70-130
Toluene-d8	0.130	0.118		0.12	104	94	70-130
4-BFB	0.00996	0.0127		0.012	80	102	70-130

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/26/14
Date Analyzed: 9/27/14 - 9/29/14
Instrument: GC10, GC16
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95754
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-95754
 1409A25-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0302	0.0320	0.050	ND	60,F1	64,F1	70-130	5.88	30
Benzene	0.0416	0.0423	0.050	ND	83	85	70-130	1.50	30
t-Butyl alcohol (TBA)	0.128	0.123	0.20	ND	64,F1	61,F1	70-130	3.96	30
Chlorobenzene	0.0394	0.0410	0.050	ND	79	82	70-130	4.08	30
1,2-Dibromoethane (EDB)	0.0344	0.0367	0.050	ND	69,F1	73	70-130	6.54	30
1,2-Dichloroethane (1,2-DCA)	0.0408	0.0432	0.050	ND	82	86	70-130	5.66	30
1,1-Dichloroethene	0.0433	0.0467	0.050	ND	87	93	70-130	7.55	30
Diisopropyl ether (DIPE)	0.0390	0.0404	0.050	ND	78	81	70-130	3.42	30
Ethyl tert-butyl ether (ETBE)	0.0353	0.0374	0.050	ND	71	75	70-130	5.66	30
Methyl-t-butyl ether (MTBE)	0.0338	0.0370	0.050	ND	68,F1	74	70-130	9.25	30
Toluene	0.0390	0.0413	0.050	ND	78	83	70-130	5.61	30
Trichloroethene	0.0428	0.0441	0.050	ND	86	88	70-130	2.81	30
Surrogate Recovery									
Dibromofluoromethane	0.122	0.128	0.12		98	102	70-130	4.53	30
Toluene-d8	0.119	0.122	0.12		95	98	70-130	2.78	30
4-BFB	0.0108	0.0108	0.012		87	87	70-130	0	30



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/30/14
Date Analyzed: 9/30/14
Instrument: GC21
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95868
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-95868
 1409B19-003AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	3.48	0.25	5	-	70	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.25	-	-	-	-
4-Chloro-3-methylphenol	ND	4.28	0.25	5	-	86	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	4.29	0.25	5	-	86	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	3.70	0.25	5	-	74	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	3.77	0.25	5	-	75	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/30/14
Date Analyzed: 9/30/14
Instrument: GC21
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95868
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-95868
 1409B19-003AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 &/or 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	3.40	1.3	5	-	68	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	4.07	0.25	5	-	81	30-130
Pentachlorophenol	ND	2.85	1.3	5	-	57	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.61	0.25	5	-	92	30-130
Pyrene	ND	3.75	0.25	5	-	75	30-130
1,2,4-Trichlorobenzene	ND	3.80	0.25	5	-	76	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

Surrogate Recovery

2-Fluorophenol	4.15	4.00		5	83	80	30-130
Phenol-d5	4.15	4.12		5	83	82	30-130
Nitrobenzene-d5	3.83	3.77		5	77	75	30-130
2-Fluorobiphenyl	3.38	3.39		5	68	68	30-130
2,4,6-Tribromophenol	3.57	3.74		5	71	75	16-130
4-Terphenyl-d14	3.89	3.95		5	78	79	30-130

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/30/14
Date Analyzed: 9/30/14
Instrument: GC21
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95868
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-95868
 1409B19-003AMS/MSD

QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	4.62	4.55	5	ND	92	91	30-130	1.37	30
4-Chloro-3-methylphenol	5.80	5.78	5	ND	116	116	30-130	0	30
2-Chlorophenol	5.57	5.48	5	ND	111	110	30-130	1.54	30
1,4-Dichlorobenzene	4.64	4.57	5	ND	93	91	30-130	1.58	30
2,4-Dinitrotoluene	5.09	4.94	5	ND	102	99	30-130	2.98	30
4-Nitrophenol	4.72	4.60	5	ND	94	92	30-130	2.56	30
N-Nitrosodi-n-propylamine	5.20	5.09	5	ND	104	102	30-130	2.16	30
Pentachlorophenol	3.19	3.18	5	ND	64	64	30-130	0	30
Phenol	6.10	5.94	5	ND	122	119	30-130	2.74	30
Pyrene	4.98	4.84	5	ND	100	97	30-130	2.74	30
1,2,4-Trichlorobenzene	4.93	4.98	5	ND	99	100	30-130	1.01	30

Surrogate Recovery

2-Fluorophenol	5.14	5.06	5		103	101	30-130	1.64	30
Phenol-d5	5.19	5.16	5		104	103	30-130	0.530	30
Nitrobenzene-d5	4.79	4.77	5		96	95	30-130	0.303	30
2-Fluorobiphenyl	4.32	4.26	5		86	85	30-130	1.36	30
2,4,6-Tribromophenol	4.56	4.38	5		91	88	16-130	4.25	30
4-Terphenyl-d14	5.12	4.89	5		102	98	30-130	4.53	30



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/26/14
Date Analyzed: 9/29/14
Instrument: GC19
Matrix: Soil
Project: #0594; 260 30th Street, Oakland, CA

WorkOrder: 1409A25
BatchID: 95750
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-95750

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.600	0.40	0.60	-	100	70-130
MTBE	ND	0.0860	0.050	0.10	-	86	70-130
Benzene	ND	0.109	0.0050	0.10	-	109	70-130
Toluene	ND	0.116	0.0050	0.10	-	115	70-130
Ethylbenzene	ND	0.116	0.0050	0.10	-	115	70-130
Xylenes	ND	0.365	0.0050	0.30	-	122	70-130
Surrogate Recovery							
2-Fluorotoluene	0.107	0.110		0.10	107	110	70-130



Quality Control Report

Client: P & D Environmental	WorkOrder: 1409A25
Date Prepared: 9/29/14	BatchID: 95794
Date Analyzed: 9/29/14	Extraction Method: SW5030B
Instrument: GC19	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: #0594; 260 30th Street, Oakland, CA	Sample ID: MB/LCS-95794 1409A64-002AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.594	0.40	0.60	-	99	70-130
MTBE	ND	0.0862	0.050	0.10	-	86	70-130
Benzene	ND	0.110	0.0050	0.10	-	110	70-130
Toluene	ND	0.112	0.0050	0.10	-	112	70-130
Ethylbenzene	ND	0.113	0.0050	0.10	-	113	70-130
Xylenes	ND	0.348	0.0050	0.30	-	116	70-130

Surrogate Recovery

2-Fluorotoluene	0.108	0.107		0.10	108	107	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.634	0.617	0.60	ND	106	103	70-130	2.84	20
MTBE	0.0832	0.0851	0.10	ND	83	85	70-130	2.23	20
Benzene	0.100	0.0993	0.10	ND	100	99	70-130	1.05	20
Toluene	0.103	0.102	0.10	ND	103	101	70-130	1.68	20
Ethylbenzene	0.108	0.106	0.10	ND	108	106	70-130	1.90	20
Xylenes	0.340	0.333	0.30	ND	113	111	70-130	2.00	20

Surrogate Recovery

2-Fluorotoluene	0.105	0.103	0.10		105	103	70-130	2.12	20
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1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1409A25

ClientCode: PDEO

WaterTrax
 WriteOn
 EDF
 Excel
 EQUS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Michael Deschenes
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610
(510) 658-6916 FAX: 510-834-0152

Email: lab@pdenviro.com
cc/3rd Party:
PO:
ProjectNo: #0594; 260 30th Street, Oakland, CA

Bill to:

Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT:

5 days

Date Received: 09/26/2014

Date Printed: 10/03/2014

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1409A25-001	B1-15.0	Soil	9/25/2014 14:35	<input type="checkbox"/>	A		A										
1409A25-002	B1-17.0	Soil	9/25/2014 14:40	<input type="checkbox"/>	A		A										
1409A25-003	B4-4.0	Soil	9/25/2014 8:15	<input type="checkbox"/>	A	A	A										
1409A25-004	B4-8.0	Soil	9/25/2014 8:20	<input type="checkbox"/>	A	A	A										
1409A25-005	B4-14.0	Soil	9/25/2014 9:00	<input type="checkbox"/>	A		A										

Test Legend:

1	8260B_S	2	8270D_S	3	G-MBTX_S	4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A contain testgroup.

Prepared by: Melissa Valles

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0594; 260 30th Street, Oakland, CA
Comments:

QC Level: LEVEL 2
Client Contact: Michael Deschenes
Contact's Email: lab@pdenviro.com

Work Order: 1409A25
Date Received: 9/26/2014

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1409A25-001A	B1-15.0	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	9/25/2014 14:35	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days			
1409A25-002A	B1-17.0	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	9/25/2014 14:40	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days			
1409A25-003A	B4-4.0	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	9/25/2014 8:15	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days			
			SW8260B (VOCs)			<input type="checkbox"/>		5 days			
1409A25-004A	B4-8.0	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	9/25/2014 8:20	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days			
			SW8260B (VOCs)			<input type="checkbox"/>		5 days			
1409A25-005A	B4-14.0	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	<input type="checkbox"/>	9/25/2014 9:00	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days			

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

Acetate Liner = Acetate Liner

CHAIN OF CUSTODY RECORD

1409A25

PAGE 1 OF 1

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave., Suite 240
Oakland, CA 94610
(510) 658-6916

PROJECT NUMBER:

0594

PROJECT NAME:

260 30th STREET
OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE)

MICHAEL BASS-DESCHENES *Michael Bass-Deschenes*

NUMBER OF CONTAINERS

ANALYSIS(ES):

TPH (G.D.M.G.)
EPA 8260B
Analyzed 9/25/14 per email
PATHS BY EPA 8270
8270 full basic list 9/25/14

PRESERVATIVE

REMARKS

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION
B1-15.0	9/25/14	1435	Soil	88 ppm
B1-17.0	9/25/14	1440	↓	17 ppm
B4-4.0	9/25/14	0815	Soil	0 ppm
B4-8.0	↓	0820	↓	0 ppm
B4-14.0	↓	0900	↓	285 ppm

1	X	X	X	
1	X	X	X	
1	X	X	X	(X)
1	X	X	X	(X)
1	X	X	X	

ICE NORMAL TAT
" " "
ICE NORMAL TAT
" ↓ ↓

ICE # 5.0
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
PRESERVATION VOAS O&G METALS OTHER
APPROPRIATE CONTAINERS PRESERVED IN LAB

RELINQUISHED BY: (SIGNATURE)

Michael Bass-Deschenes

DATE TIME
9/26 1435

RECEIVED BY: (SIGNATURE)

[Signature]

Total No. of Samples (This Shipment) **5**
Total No. of Containers (This Shipment) **5**

LABORATORY: **McCAMPBELL ANALYTICAL inc.**

RELINQUISHED BY: (SIGNATURE)

[Signature]

DATE TIME
9/26 1648

RECEIVED BY: (SIGNATURE)

[Signature]

LABORATORY CONTACT: **ANGELA RYDELIUS (877) 252-9262**

RELINQUISHED BY: (SIGNATURE)

[Signature]

DATE TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: () YES (X) NO

Results and billing to:
P&D Environmental, Inc.
lab@pdenviro.com

REMARKS:



Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **9/26/2014 5:26:12 PM**
 Project Name: **#0594; 260 30th Street, Oakland, CA** LogIn Reviewed by: **Melissa Valles**
 WorkOrder No: **1409A25** Matrix: Soil Carrier: Daniel (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 5°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: pH<2; 522: pH<4)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)
 Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA

* NOTE: If the "No" box is checked, see comments below.

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1409A53

Report Created for: P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Project Contact: Paul King
Project P.O.:
Project Name: #0594; 260 30th Street Oakland, CA.

Project Received: 09/26/2014

Analytical Report reviewed & approved for release on 10/06/2014 by:

Question about
your data?

[Click here to email
McC Campbell](#)

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
WorkOrder: 1409A53

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
TEQ	Toxicity Equivalence

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	weakly modified or unmodified gasoline is significant
d9	no recognizable pattern
e2	diesel range compounds are significant; no recognizable pattern
e4	gasoline range compounds are significant.
e7	oil range compounds are significant

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.
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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-W	1409A53-001B	Water	09/25/2014 14:40	GC28	95851

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	50	5	09/30/2014 15:06
tert-Amyl methyl ether (TAME)	ND	2.5	5	09/30/2014 15:06
Benzene	ND	2.5	5	09/30/2014 15:06
Bromobenzene	ND	2.5	5	09/30/2014 15:06
Bromochloromethane	ND	2.5	5	09/30/2014 15:06
Bromodichloromethane	ND	2.5	5	09/30/2014 15:06
Bromoform	ND	2.5	5	09/30/2014 15:06
Bromomethane	ND	2.5	5	09/30/2014 15:06
2-Butanone (MEK)	ND	10	5	09/30/2014 15:06
t-Butyl alcohol (TBA)	ND	10	5	09/30/2014 15:06
n-Butyl benzene	ND	2.5	5	09/30/2014 15:06
sec-Butyl benzene	ND	2.5	5	09/30/2014 15:06
tert-Butyl benzene	ND	2.5	5	09/30/2014 15:06
Carbon Disulfide	ND	2.5	5	09/30/2014 15:06
Carbon Tetrachloride	ND	2.5	5	09/30/2014 15:06
Chlorobenzene	ND	2.5	5	09/30/2014 15:06
Chloroethane	ND	2.5	5	09/30/2014 15:06
Chloroform	ND	2.5	5	09/30/2014 15:06
Chloromethane	ND	2.5	5	09/30/2014 15:06
2-Chlorotoluene	ND	2.5	5	09/30/2014 15:06
4-Chlorotoluene	ND	2.5	5	09/30/2014 15:06
Dibromochloromethane	ND	2.5	5	09/30/2014 15:06
1,2-Dibromo-3-chloropropane	ND	1.0	5	09/30/2014 15:06
1,2-Dibromoethane (EDB)	ND	2.5	5	09/30/2014 15:06
Dibromomethane	ND	2.5	5	09/30/2014 15:06
1,2-Dichlorobenzene	ND	2.5	5	09/30/2014 15:06
1,3-Dichlorobenzene	ND	2.5	5	09/30/2014 15:06
1,4-Dichlorobenzene	ND	2.5	5	09/30/2014 15:06
Dichlorodifluoromethane	ND	2.5	5	09/30/2014 15:06
1,1-Dichloroethane	ND	2.5	5	09/30/2014 15:06
1,2-Dichloroethane (1,2-DCA)	ND	2.5	5	09/30/2014 15:06
1,1-Dichloroethene	ND	2.5	5	09/30/2014 15:06
cis-1,2-Dichloroethene	ND	2.5	5	09/30/2014 15:06
trans-1,2-Dichloroethene	ND	2.5	5	09/30/2014 15:06
1,2-Dichloropropane	ND	2.5	5	09/30/2014 15:06
1,3-Dichloropropane	ND	2.5	5	09/30/2014 15:06
2,2-Dichloropropane	ND	2.5	5	09/30/2014 15:06
1,1-Dichloropropene	ND	2.5	5	09/30/2014 15:06

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-W	1409A53-001B	Water	09/25/2014 14:40	GC28	95851

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	2.5	5	09/30/2014 15:06
trans-1,3-Dichloropropene	ND	2.5	5	09/30/2014 15:06
Diisopropyl ether (DIPE)	ND	2.5	5	09/30/2014 15:06
Ethylbenzene	60	2.5	5	09/30/2014 15:06
Ethyl tert-butyl ether (ETBE)	ND	2.5	5	09/30/2014 15:06
Freon 113	ND	2.5	5	09/30/2014 15:06
Hexachlorobutadiene	ND	2.5	5	09/30/2014 15:06
Hexachloroethane	ND	2.5	5	09/30/2014 15:06
2-Hexanone	ND	2.5	5	09/30/2014 15:06
Isopropylbenzene	4.2	2.5	5	09/30/2014 15:06
4-Isopropyl toluene	ND	2.5	5	09/30/2014 15:06
Methyl-t-butyl ether (MTBE)	ND	2.5	5	09/30/2014 15:06
Methylene chloride	ND	2.5	5	09/30/2014 15:06
4-Methyl-2-pentanone (MIBK)	ND	2.5	5	09/30/2014 15:06
Naphthalene	9.1	2.5	5	09/30/2014 15:06
n-Propyl benzene	14	2.5	5	09/30/2014 15:06
Styrene	ND	2.5	5	09/30/2014 15:06
1,1,1,2-Tetrachloroethane	ND	2.5	5	09/30/2014 15:06
1,1,2,2-Tetrachloroethane	ND	2.5	5	09/30/2014 15:06
Tetrachloroethene	ND	2.5	5	09/30/2014 15:06
Toluene	ND	2.5	5	09/30/2014 15:06
1,2,3-Trichlorobenzene	ND	2.5	5	09/30/2014 15:06
1,2,4-Trichlorobenzene	ND	2.5	5	09/30/2014 15:06
1,1,1-Trichloroethane	ND	2.5	5	09/30/2014 15:06
1,1,2-Trichloroethane	ND	2.5	5	09/30/2014 15:06
Trichloroethene	ND	2.5	5	09/30/2014 15:06
Trichlorofluoromethane	ND	2.5	5	09/30/2014 15:06
1,2,3-Trichloropropane	ND	2.5	5	09/30/2014 15:06
1,2,4-Trimethylbenzene	100	2.5	5	09/30/2014 15:06
1,3,5-Trimethylbenzene	27	2.5	5	09/30/2014 15:06
Vinyl Chloride	ND	2.5	5	09/30/2014 15:06
Xylenes, Total	210	2.5	5	09/30/2014 15:06

(Cont.)



Analytical Report

Client: P & D Environmental

WorkOrder: 1409A53

Project: #0594; 260 30th Street Oakland, CA.

Extraction Method: SW5030B

Date Received: 9/26/14 21:06

Analytical Method: SW8260B

Date Prepared: 9/28/14-9/30/14

Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-W	1409A53-001B	Water	09/25/2014 14:40	GC28	95851

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	96	70-130		09/30/2014 15:06
Toluene-d8	96	70-130		09/30/2014 15:06
4-BFB	84	70-130		09/30/2014 15:06

Analyst(s): KBO



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B2-W	1409A53-002B	Water	09/25/2014 10:20	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	09/28/2014 00:00
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/28/2014 00:00
Benzene	ND	0.50	1	09/28/2014 00:00
Bromobenzene	ND	0.50	1	09/28/2014 00:00
Bromochloromethane	ND	0.50	1	09/28/2014 00:00
Bromodichloromethane	ND	0.50	1	09/28/2014 00:00
Bromoform	ND	0.50	1	09/28/2014 00:00
Bromomethane	ND	0.50	1	09/28/2014 00:00
2-Butanone (MEK)	ND	2.0	1	09/28/2014 00:00
t-Butyl alcohol (TBA)	ND	2.0	1	09/28/2014 00:00
n-Butyl benzene	ND	0.50	1	09/28/2014 00:00
sec-Butyl benzene	ND	0.50	1	09/28/2014 00:00
tert-Butyl benzene	ND	0.50	1	09/28/2014 00:00
Carbon Disulfide	ND	0.50	1	09/28/2014 00:00
Carbon Tetrachloride	ND	0.50	1	09/28/2014 00:00
Chlorobenzene	ND	0.50	1	09/28/2014 00:00
Chloroethane	ND	0.50	1	09/28/2014 00:00
Chloroform	ND	0.50	1	09/28/2014 00:00
Chloromethane	ND	0.50	1	09/28/2014 00:00
2-Chlorotoluene	ND	0.50	1	09/28/2014 00:00
4-Chlorotoluene	ND	0.50	1	09/28/2014 00:00
Dibromochloromethane	ND	0.50	1	09/28/2014 00:00
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/28/2014 00:00
1,2-Dibromoethane (EDB)	ND	0.50	1	09/28/2014 00:00
Dibromomethane	ND	0.50	1	09/28/2014 00:00
1,2-Dichlorobenzene	ND	0.50	1	09/28/2014 00:00
1,3-Dichlorobenzene	ND	0.50	1	09/28/2014 00:00
1,4-Dichlorobenzene	ND	0.50	1	09/28/2014 00:00
Dichlorodifluoromethane	ND	0.50	1	09/28/2014 00:00
1,1-Dichloroethane	ND	0.50	1	09/28/2014 00:00
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/28/2014 00:00
1,1-Dichloroethene	ND	0.50	1	09/28/2014 00:00
cis-1,2-Dichloroethene	ND	0.50	1	09/28/2014 00:00
trans-1,2-Dichloroethene	ND	0.50	1	09/28/2014 00:00
1,2-Dichloropropane	ND	0.50	1	09/28/2014 00:00
1,3-Dichloropropane	ND	0.50	1	09/28/2014 00:00
2,2-Dichloropropane	ND	0.50	1	09/28/2014 00:00
1,1-Dichloropropene	ND	0.50	1	09/28/2014 00:00

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B2-W	1409A53-002B	Water	09/25/2014 10:20	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	09/28/2014 00:00
trans-1,3-Dichloropropene	ND	0.50	1	09/28/2014 00:00
Diisopropyl ether (DIPE)	ND	0.50	1	09/28/2014 00:00
Ethylbenzene	ND	0.50	1	09/28/2014 00:00
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/28/2014 00:00
Freon 113	ND	0.50	1	09/28/2014 00:00
Hexachlorobutadiene	ND	0.50	1	09/28/2014 00:00
Hexachloroethane	ND	0.50	1	09/28/2014 00:00
2-Hexanone	ND	0.50	1	09/28/2014 00:00
Isopropylbenzene	ND	0.50	1	09/28/2014 00:00
4-Isopropyl toluene	ND	0.50	1	09/28/2014 00:00
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/28/2014 00:00
Methylene chloride	ND	0.50	1	09/28/2014 00:00
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/28/2014 00:00
Naphthalene	ND	0.50	1	09/28/2014 00:00
n-Propyl benzene	ND	0.50	1	09/28/2014 00:00
Styrene	ND	0.50	1	09/28/2014 00:00
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/28/2014 00:00
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/28/2014 00:00
Tetrachloroethene	ND	0.50	1	09/28/2014 00:00
Toluene	ND	0.50	1	09/28/2014 00:00
1,2,3-Trichlorobenzene	ND	0.50	1	09/28/2014 00:00
1,2,4-Trichlorobenzene	ND	0.50	1	09/28/2014 00:00
1,1,1-Trichloroethane	ND	0.50	1	09/28/2014 00:00
1,1,2-Trichloroethane	ND	0.50	1	09/28/2014 00:00
Trichloroethene	ND	0.50	1	09/28/2014 00:00
Trichlorofluoromethane	ND	0.50	1	09/28/2014 00:00
1,2,3-Trichloropropane	ND	0.50	1	09/28/2014 00:00
1,2,4-Trimethylbenzene	ND	0.50	1	09/28/2014 00:00
1,3,5-Trimethylbenzene	ND	0.50	1	09/28/2014 00:00
Vinyl Chloride	ND	0.50	1	09/28/2014 00:00
Xylenes, Total	ND	0.50	1	09/28/2014 00:00

(Cont.)



Analytical Report

Client: P & D Environmental

WorkOrder: 1409A53

Project: #0594; 260 30th Street Oakland, CA.

Extraction Method: SW5030B

Date Received: 9/26/14 21:06

Analytical Method: SW8260B

Date Prepared: 9/28/14-9/30/14

Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B2-W	1409A53-002B	Water	09/25/2014 10:20	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		09/28/2014 00:00
Toluene-d8	97	70-130		09/28/2014 00:00
4-BFB	84	70-130		09/28/2014 00:00

Analyst(s): KBO



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B3-W	1409A53-003B	Water	09/25/2014 12:45	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	09/28/2014 00:38
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/28/2014 00:38
Benzene	ND	0.50	1	09/28/2014 00:38
Bromobenzene	ND	0.50	1	09/28/2014 00:38
Bromochloromethane	ND	0.50	1	09/28/2014 00:38
Bromodichloromethane	ND	0.50	1	09/28/2014 00:38
Bromoform	ND	0.50	1	09/28/2014 00:38
Bromomethane	ND	0.50	1	09/28/2014 00:38
2-Butanone (MEK)	ND	2.0	1	09/28/2014 00:38
t-Butyl alcohol (TBA)	ND	2.0	1	09/28/2014 00:38
n-Butyl benzene	ND	0.50	1	09/28/2014 00:38
sec-Butyl benzene	ND	0.50	1	09/28/2014 00:38
tert-Butyl benzene	ND	0.50	1	09/28/2014 00:38
Carbon Disulfide	ND	0.50	1	09/28/2014 00:38
Carbon Tetrachloride	ND	0.50	1	09/28/2014 00:38
Chlorobenzene	ND	0.50	1	09/28/2014 00:38
Chloroethane	ND	0.50	1	09/28/2014 00:38
Chloroform	ND	0.50	1	09/28/2014 00:38
Chloromethane	ND	0.50	1	09/28/2014 00:38
2-Chlorotoluene	ND	0.50	1	09/28/2014 00:38
4-Chlorotoluene	ND	0.50	1	09/28/2014 00:38
Dibromochloromethane	ND	0.50	1	09/28/2014 00:38
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/28/2014 00:38
1,2-Dibromoethane (EDB)	ND	0.50	1	09/28/2014 00:38
Dibromomethane	ND	0.50	1	09/28/2014 00:38
1,2-Dichlorobenzene	ND	0.50	1	09/28/2014 00:38
1,3-Dichlorobenzene	ND	0.50	1	09/28/2014 00:38
1,4-Dichlorobenzene	ND	0.50	1	09/28/2014 00:38
Dichlorodifluoromethane	ND	0.50	1	09/28/2014 00:38
1,1-Dichloroethane	ND	0.50	1	09/28/2014 00:38
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/28/2014 00:38
1,1-Dichloroethene	ND	0.50	1	09/28/2014 00:38
cis-1,2-Dichloroethene	ND	0.50	1	09/28/2014 00:38
trans-1,2-Dichloroethene	ND	0.50	1	09/28/2014 00:38
1,2-Dichloropropane	ND	0.50	1	09/28/2014 00:38
1,3-Dichloropropane	ND	0.50	1	09/28/2014 00:38
2,2-Dichloropropane	ND	0.50	1	09/28/2014 00:38
1,1-Dichloropropene	ND	0.50	1	09/28/2014 00:38

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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B3-W	1409A53-003B	Water	09/25/2014 12:45	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	09/28/2014 00:38
trans-1,3-Dichloropropene	ND	0.50	1	09/28/2014 00:38
Diisopropyl ether (DIPE)	ND	0.50	1	09/28/2014 00:38
Ethylbenzene	ND	0.50	1	09/28/2014 00:38
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/28/2014 00:38
Freon 113	ND	0.50	1	09/28/2014 00:38
Hexachlorobutadiene	ND	0.50	1	09/28/2014 00:38
Hexachloroethane	ND	0.50	1	09/28/2014 00:38
2-Hexanone	ND	0.50	1	09/28/2014 00:38
Isopropylbenzene	ND	0.50	1	09/28/2014 00:38
4-Isopropyl toluene	ND	0.50	1	09/28/2014 00:38
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/28/2014 00:38
Methylene chloride	ND	0.50	1	09/28/2014 00:38
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/28/2014 00:38
Naphthalene	ND	0.50	1	09/28/2014 00:38
n-Propyl benzene	ND	0.50	1	09/28/2014 00:38
Styrene	ND	0.50	1	09/28/2014 00:38
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/28/2014 00:38
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/28/2014 00:38
Tetrachloroethene	ND	0.50	1	09/28/2014 00:38
Toluene	ND	0.50	1	09/28/2014 00:38
1,2,3-Trichlorobenzene	ND	0.50	1	09/28/2014 00:38
1,2,4-Trichlorobenzene	ND	0.50	1	09/28/2014 00:38
1,1,1-Trichloroethane	ND	0.50	1	09/28/2014 00:38
1,1,2-Trichloroethane	ND	0.50	1	09/28/2014 00:38
Trichloroethene	ND	0.50	1	09/28/2014 00:38
Trichlorofluoromethane	ND	0.50	1	09/28/2014 00:38
1,2,3-Trichloropropane	ND	0.50	1	09/28/2014 00:38
1,2,4-Trimethylbenzene	ND	0.50	1	09/28/2014 00:38
1,3,5-Trimethylbenzene	ND	0.50	1	09/28/2014 00:38
Vinyl Chloride	ND	0.50	1	09/28/2014 00:38
Xylenes, Total	ND	0.50	1	09/28/2014 00:38

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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B3-W	1409A53-003B	Water	09/25/2014 12:45	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		09/28/2014 00:38
Toluene-d8	97	70-130		09/28/2014 00:38
4-BFB	86	70-130		09/28/2014 00:38

Analyst(s): KBO



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-W	1409A53-004B	Water	09/25/2014 12:30	GC28	95799
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	10	1	09/28/2014 01:17	
tert-Amyl methyl ether (TAME)	ND	0.50	1	09/28/2014 01:17	
Benzene	ND	0.50	1	09/28/2014 01:17	
Bromobenzene	ND	0.50	1	09/28/2014 01:17	
Bromochloromethane	ND	0.50	1	09/28/2014 01:17	
Bromodichloromethane	ND	0.50	1	09/28/2014 01:17	
Bromoform	ND	0.50	1	09/28/2014 01:17	
Bromomethane	ND	0.50	1	09/28/2014 01:17	
2-Butanone (MEK)	ND	2.0	1	09/28/2014 01:17	
t-Butyl alcohol (TBA)	ND	2.0	1	09/28/2014 01:17	
n-Butyl benzene	0.50	0.50	1	09/28/2014 01:17	
sec-Butyl benzene	0.62	0.50	1	09/28/2014 01:17	
tert-Butyl benzene	ND	0.50	1	09/28/2014 01:17	
Carbon Disulfide	ND	0.50	1	09/28/2014 01:17	
Carbon Tetrachloride	ND	0.50	1	09/28/2014 01:17	
Chlorobenzene	ND	0.50	1	09/28/2014 01:17	
Chloroethane	ND	0.50	1	09/28/2014 01:17	
Chloroform	ND	0.50	1	09/28/2014 01:17	
Chloromethane	ND	0.50	1	09/28/2014 01:17	
2-Chlorotoluene	ND	0.50	1	09/28/2014 01:17	
4-Chlorotoluene	ND	0.50	1	09/28/2014 01:17	
Dibromochloromethane	ND	0.50	1	09/28/2014 01:17	
1,2-Dibromo-3-chloropropane	ND	0.20	1	09/28/2014 01:17	
1,2-Dibromoethane (EDB)	ND	0.50	1	09/28/2014 01:17	
Dibromomethane	ND	0.50	1	09/28/2014 01:17	
1,2-Dichlorobenzene	ND	0.50	1	09/28/2014 01:17	
1,3-Dichlorobenzene	ND	0.50	1	09/28/2014 01:17	
1,4-Dichlorobenzene	ND	0.50	1	09/28/2014 01:17	
Dichlorodifluoromethane	ND	0.50	1	09/28/2014 01:17	
1,1-Dichloroethane	ND	0.50	1	09/28/2014 01:17	
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/28/2014 01:17	
1,1-Dichloroethene	ND	0.50	1	09/28/2014 01:17	
cis-1,2-Dichloroethene	ND	0.50	1	09/28/2014 01:17	
trans-1,2-Dichloroethene	ND	0.50	1	09/28/2014 01:17	
1,2-Dichloropropane	ND	0.50	1	09/28/2014 01:17	
1,3-Dichloropropane	ND	0.50	1	09/28/2014 01:17	
2,2-Dichloropropane	ND	0.50	1	09/28/2014 01:17	
1,1-Dichloropropene	ND	0.50	1	09/28/2014 01:17	

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Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/28/14-9/30/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-W	1409A53-004B	Water	09/25/2014 12:30	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	09/28/2014 01:17
trans-1,3-Dichloropropene	ND	0.50	1	09/28/2014 01:17
Diisopropyl ether (DIPE)	ND	0.50	1	09/28/2014 01:17
Ethylbenzene	ND	0.50	1	09/28/2014 01:17
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	09/28/2014 01:17
Freon 113	ND	0.50	1	09/28/2014 01:17
Hexachlorobutadiene	ND	0.50	1	09/28/2014 01:17
Hexachloroethane	ND	0.50	1	09/28/2014 01:17
2-Hexanone	ND	0.50	1	09/28/2014 01:17
Isopropylbenzene	1.3	0.50	1	09/28/2014 01:17
4-Isopropyl toluene	ND	0.50	1	09/28/2014 01:17
Methyl-t-butyl ether (MTBE)	ND	0.50	1	09/28/2014 01:17
Methylene chloride	ND	0.50	1	09/28/2014 01:17
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	09/28/2014 01:17
Naphthalene	ND	0.50	1	09/28/2014 01:17
n-Propyl benzene	1.0	0.50	1	09/28/2014 01:17
Styrene	ND	0.50	1	09/28/2014 01:17
1,1,1,2-Tetrachloroethane	ND	0.50	1	09/28/2014 01:17
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/28/2014 01:17
Tetrachloroethene	ND	0.50	1	09/28/2014 01:17
Toluene	ND	0.50	1	09/28/2014 01:17
1,2,3-Trichlorobenzene	ND	0.50	1	09/28/2014 01:17
1,2,4-Trichlorobenzene	ND	0.50	1	09/28/2014 01:17
1,1,1-Trichloroethane	ND	0.50	1	09/28/2014 01:17
1,1,2-Trichloroethane	ND	0.50	1	09/28/2014 01:17
Trichloroethene	ND	0.50	1	09/28/2014 01:17
Trichlorofluoromethane	ND	0.50	1	09/28/2014 01:17
1,2,3-Trichloropropane	ND	0.50	1	09/28/2014 01:17
1,2,4-Trimethylbenzene	ND	0.50	1	09/28/2014 01:17
1,3,5-Trimethylbenzene	ND	0.50	1	09/28/2014 01:17
Vinyl Chloride	ND	0.50	1	09/28/2014 01:17
Xylenes, Total	ND	0.50	1	09/28/2014 01:17

(Cont.)



Analytical Report

Client: P & D Environmental

WorkOrder: 1409A53

Project: #0594; 260 30th Street Oakland, CA.

Extraction Method: SW5030B

Date Received: 9/26/14 21:06

Analytical Method: SW8260B

Date Prepared: 9/28/14-9/30/14

Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-W	1409A53-004B	Water	09/25/2014 12:30	GC28	95799

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		09/28/2014 01:17
Toluene-d8	94	70-130		09/28/2014 01:17
4-BFB	84	70-130		09/28/2014 01:17

Analyst(s): KBO



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 10/1/14-10/3/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-W	1409A53-001A	Water	09/25/2014 14:40	GC3	95970

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	2400	50	1	10/01/2014 17:03
MTBE	---	5.0	1	10/01/2014 17:03
Benzene	---	0.50	1	10/01/2014 17:03
Toluene	---	0.50	1	10/01/2014 17:03
Ethylbenzene	---	0.50	1	10/01/2014 17:03
Xylenes	---	0.50	1	10/01/2014 17:03

Surrogates	REC (%)	Qualifiers	Limits	Analytical Comments: d1,c4
aaa-TFT_2	516	S	70-130	10/01/2014 17:03

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B2-W	1409A53-002A	Water	09/25/2014 10:20	GC3	95970

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	10/03/2014 03:33
MTBE	---	5.0	1	10/03/2014 03:33
Benzene	---	0.50	1	10/03/2014 03:33
Toluene	---	0.50	1	10/03/2014 03:33
Ethylbenzene	---	0.50	1	10/03/2014 03:33
Xylenes	---	0.50	1	10/03/2014 03:33

Surrogates	REC (%)	Limits
aaa-TFT_2	104	70-130

Analyst(s): IA



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 10/1/14-10/3/14

WorkOrder: 1409A53
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B3-W	1409A53-003A	Water	09/25/2014 12:45	GC3	95970

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	10/01/2014 18:34
MTBE	---	5.0	1	10/01/2014 18:34
Benzene	---	0.50	1	10/01/2014 18:34
Toluene	---	0.50	1	10/01/2014 18:34
Ethylbenzene	---	0.50	1	10/01/2014 18:34
Xylenes	---	0.50	1	10/01/2014 18:34
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
aaa-TFT_2	106	70-130		10/01/2014 18:34

Analyst(s): IA

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-W	1409A53-004A	Water	09/25/2014 12:30	GC3	95970

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	450	50	1	10/01/2014 21:04
MTBE	---	5.0	1	10/01/2014 21:04
Benzene	---	0.50	1	10/01/2014 21:04
Toluene	---	0.50	1	10/01/2014 21:04
Ethylbenzene	---	0.50	1	10/01/2014 21:04
Xylenes	---	0.50	1	10/01/2014 21:04
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>	Analytical Comments: d9,c4
aaa-TFT_2	159	S	70-130	10/01/2014 21:04

Analyst(s): IA



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/26/14

WorkOrder: 1409A53
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1-W	1409A53-001A	Water	09/25/2014 14:40	GC11A	95730

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	600	50	1	10/02/2014 04:19
TPH-Motor Oil (C18-C36)	ND	250	1	10/02/2014 04:19

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: e4
C9	112	70-130	10/02/2014 04:19

Analyst(s): MAM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B2-W	1409A53-002A	Water	09/25/2014 10:20	GC2A	95730

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	72	50	1	10/06/2014 14:52
TPH-Motor Oil (C18-C36)	350	250	1	10/06/2014 14:52

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: e7,e2
C9	109	70-130	10/06/2014 14:52

Analyst(s): MAM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B3-W	1409A53-003A	Water	09/25/2014 12:45	GC6B	95730

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	450	50	1	10/02/2014 20:03
TPH-Motor Oil (C18-C36)	1400	250	1	10/02/2014 20:03

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	Analytical Comments: e4,e7,e2
C9	101	70-130	10/02/2014 20:03

Analyst(s): TK

(Cont.)



Analytical Report

Client: P & D Environmental
Project: #0594; 260 30th Street Oakland, CA.
Date Received: 9/26/14 21:06
Date Prepared: 9/26/14

WorkOrder: 1409A53
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B4-W	1409A53-004A	Water	09/25/2014 12:30	GC6B	95730

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	10/02/2014 23:39
TPH-Motor Oil (C18-C36)	ND	250	1	10/02/2014 23:39

Surrogates	REC (%)	Limits	Date Analyzed
C9	100	70-130	10/02/2014 23:39

Analyst(s): TK



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/27/14
Date Analyzed: 9/27/14
Instrument: GC28
Matrix: Water
Project: #0594; 260 30th Street Oakland, CA.

WorkOrder: 1409A53
BatchID: 95799
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-95799
 1409A03-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	10.2	0.50	10	-	102	64-120
Benzene	ND	11.0	0.50	10	-	110	73-123
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	34.0	2.0	40	-	85	29-146
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	11.2	0.50	10	-	112	77-116
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	10.5	0.50	10	-	105	68-111
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	9.90	0.50	10	-	99	37-150
1,1-Dichloroethene	ND	10.1	0.50	10	-	101	37-153
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/27/14
Date Analyzed: 9/27/14
Instrument: GC28
Matrix: Water
Project: #0594; 260 30th Street Oakland, CA.

WorkOrder: 1409A53
BatchID: 95799
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-95799
 1409A03-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	9.87	0.50	10	-	99	62-125
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.1	0.50	10	-	101	63-126
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	10.1	0.50	10	-	101	56-126
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	10.6	0.50	10	-	105	78-114
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.7	0.50	10	-	107	67-133
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	23.4	24.0		25	94	96	77-120
Toluene-d8	24.0	23.8		25	96	95	78-118
4-BFB	2.09	2.03		2.5	84	81	63-129

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/27/14
Date Analyzed: 9/27/14
Instrument: GC28
Matrix: Water
Project: #0594; 260 30th Street Oakland, CA.

WorkOrder: 1409A53
BatchID: 95799
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-95799
 1409A03-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.1	11.0	10	ND	101	110	70-130	8.54	20
Benzene	10.7	11.1	10	ND	107	111	70-130	3.60	20
t-Butyl alcohol (TBA)	33.0	40.4	40	ND	82	101	70-130	20.1,F1	20
Chlorobenzene	11.0	11.5	10	ND	111	115	70-130	3.64	20
1,2-Dibromoethane (EDB)	10.4	11.3	10	ND	104	113	70-130	8.37	20
1,2-Dichloroethane (1,2-DCA)	9.81	10.5	10	ND	98	105	70-130	6.55	20
1,1-Dichloroethene	10.0	10.4	10	ND	100	104	70-130	3.98	20
Diisopropyl ether (DIPE)	9.71	10.2	10	ND	97	102	70-130	5.29	20
Ethyl tert-butyl ether (ETBE)	9.97	10.8	10	ND	100	108	70-130	7.85	20
Methyl-t-butyl ether (MTBE)	9.99	11.1	10	ND	100	111	70-130	10.8	20
Toluene	10.4	10.7	10	ND	104	107	70-130	3.01	20
Trichloroethene	11.2	11.6	10	0.6709	106	109	70-130	3.25	20
Surrogate Recovery									
Dibromofluoromethane	23.6	24.0	25		94	96	70-130	1.83	20
Toluene-d8	23.6	23.4	25		94	94	70-130	0	20
4-BFB	2.00	2.04	2.5		80	81	70-130	1.54	20

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/29/14
Date Analyzed: 9/29/14
Instrument: GC28
Matrix: Water
Project: #0594; 260 30th Street Oakland, CA.

WorkOrder: 1409A53
BatchID: 95851
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-95851
 1409A31-062AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	7.98	0.50	10	-	80	64-120
Benzene	ND	9.02	0.50	10	-	90	73-123
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	26.0	2.0	40	-	65	29-146
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.31	0.50	10	-	93	77-116
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	8.45	0.50	10	-	85	68-111
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	7.87	0.50	10	-	79	37-150
1,1-Dichloroethene	ND	9.53	0.50	10	-	95	37-153
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/29/14
Date Analyzed: 9/29/14
Instrument: GC28
Matrix: Water
Project: #0594; 260 30th Street Oakland, CA.

WorkOrder: 1409A53
BatchID: 95851
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-95851
 1409A31-062AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	8.05	0.50	10	-	81	62-125
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	8.00	0.50	10	-	80	63-126
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	7.92	0.50	10	-	79	56-126
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.01	0.50	10	-	90	78-114
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	9.04	0.50	10	-	90	67-133
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	23.8	23.4		25	95	94	77-120
Toluene-d8	24.3	24.3		25	97	97	78-118
4-BFB	2.11	2.06		2.5	85	82	63-129

(Cont.)



Quality Control Report

Client: P & D Environmental
Date Prepared: 9/29/14
Date Analyzed: 9/29/14
Instrument: GC28
Matrix: Water
Project: #0594; 260 30th Street Oakland, CA.

WorkOrder: 1409A53
BatchID: 95851
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-95851
 1409A31-062AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	8.39	8.75	10	ND	84	87	70-130	4.18	20
Benzene	9.07	9.24	10	ND	91	92	70-130	1.79	20
t-Butyl alcohol (TBA)	27.8	33.2	40	ND	70	83	70-130	17.7	20
Chlorobenzene	9.45	9.52	10	ND	94	95	70-130	0.790	20
1,2-Dibromoethane (EDB)	9.01	9.52	10	ND	90	95	70-130	5.48	20
1,2-Dichloroethane (1,2-DCA)	8.05	8.54	10	ND	80	85	70-130	5.94	20
1,1-Dichloroethene	9.61	10.0	10	ND	96	100	70-130	4.15	20
Diisopropyl ether (DIPE)	12.8	13.1	10	4.696	81	84	70-130	2.04	20
Ethyl tert-butyl ether (ETBE)	8.15	8.32	10	ND	82	83	70-130	2.10	20
Methyl-t-butyl ether (MTBE)	8.25	8.70	10	ND	82	87	70-130	5.38	20
Toluene	8.79	8.89	10	ND	87	88	70-130	1.13	20
Trichloroethene	8.79	9.17	10	ND	88	92	70-130	4.24	20
Surrogate Recovery									
Dibromofluoromethane	23.9	23.7	25		95	95	70-130	0	20
Toluene-d8	24.4	23.9	25		97	96	70-130	1.84	20
4-BFB	2.00	2.02	2.5		80	81	70-130	0.826	20



Quality Control Report

Client: P & D Environmental	WorkOrder: 1409A53
Date Prepared: 10/1/14	BatchID: 95970
Date Analyzed: 10/1/14	Extraction Method: SW5030B
Instrument: GC3	Analytical Method: SW8021B/8015Bm
Matrix: Water	Unit: µg/L
Project: #0594; 260 30th Street Oakland, CA.	Sample ID: MB/LCS-95970 1409A50-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	65.9	40	60	-	110	70-130
MTBE	ND	10.1	5.0	10	-	101	70-130
Benzene	ND	10.2	0.50	10	-	102	70-130
Toluene	ND	10.2	0.50	10	-	102	70-130
Ethylbenzene	ND	10.1	0.50	10	-	101	70-130
Xylenes	ND	30.7	0.50	30	-	102	70-130

Surrogate Recovery

aaa-TFT_2	10.3	9.84		10	103	98	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	66.4	66.4	60	ND	111	111	70-130	0	20
MTBE	10.6	9.73	10	ND	101	92	70-130	8.16	20
Benzene	10.8	10.3	10	ND	108	103	70-130	4.72	20
Toluene	10.8	10.2	10	ND	108	102	70-130	4.93	20
Ethylbenzene	10.8	10.2	10	ND	107	102	70-130	4.75	20
Xylenes	32.7	31.1	30	ND	108	103	70-130	4.85	20

Surrogate Recovery

aaa-TFT_2	10.0	9.87	10		100	99	70-130	1.33	20
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Quality Control Report

Client: P & D Environmental
Date Prepared: 9/26/14
Date Analyzed: 9/28/14
Instrument: GC9a
Matrix: Water
Project: #0594; 260 30th Street Oakland, CA.

WorkOrder: 1409A53
BatchID: 95730
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS-95730

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	967	50	1000	-	97	61-157
Surrogate Recovery							
C9	606	642		625	97	103	70-134



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1409A53

ClientCode: PDEO

WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Paul King
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610
(510) 658-6916 FAX: 510-834-0152

Email: lab@pdenviro.com
cc/3rd Party:
PO:
ProjectNo: #0594; 260 30th Street Oakland, CA.

Bill to:

Accounts Payable
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Requested TAT:

5 days

Date Received: 09/26/2014

Date Printed: 10/06/2014

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1409A53-001	B1-W	Water	9/25/2014 14:40	<input type="checkbox"/>	B	A	C										
1409A53-002	B2-W	Water	9/25/2014 10:20	<input type="checkbox"/>	B	A	C										
1409A53-003	B3-W	Water	9/25/2014 12:45	<input type="checkbox"/>	B	A	C										
1409A53-004	B4-W	Water	9/25/2014 12:30	<input type="checkbox"/>	B	A	C										

Test Legend:

1	8260B_W	2	G-MBTEx_W	3	PREXTFEE	4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A contain testgroup.

Prepared by: Jena Alfaro

Comments: All samples set up for 8270 Extract and HOLD per P.K. 9/29/14

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL

QC Level: LEVEL 2

Work Order: 1409A53

Project: #0594; 260 30th Street Oakland, CA.

Client Contact: Paul King

Date Received: 9/26/2014

Comments: All samples set up for 8270 Extract and HOLD per P.K. 9/29/14

Contact's Email: lab@pdenviro.com

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1409A53-001A	B1-W	Water	Multi-Range TPH(g,d,mo)	7	VOA w/ HCl & 2-AVOA	<input type="checkbox"/>	9/25/2014 14:40	5 days	Present	<input type="checkbox"/>	
				1	1LA	<input type="checkbox"/>				<input type="checkbox"/>	
1409A53-001B	B1-W	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	9/25/2014 14:40	5 days	Present	<input type="checkbox"/>	
1409A53-001C	B1-W	Water	SW8270C (SVOCs)	1	1LA	<input type="checkbox"/>	9/25/2014 14:40	5 days	Present	<input type="checkbox"/>	
1409A53-002A	B2-W	Water	Multi-Range TPH(g,d,mo)	7	VOA w/ HCl & 2-AVOA	<input type="checkbox"/>	9/25/2014 10:20	5 days	Present	<input type="checkbox"/>	
				1	1LA	<input type="checkbox"/>				<input type="checkbox"/>	
1409A53-002B	B2-W	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	9/25/2014 10:20	5 days	Present	<input type="checkbox"/>	
1409A53-002C	B2-W	Water	SW8270C (SVOCs)	1	1LA	<input type="checkbox"/>	9/25/2014 10:20	5 days	Present	<input type="checkbox"/>	
1409A53-003A	B3-W	Water	Multi-Range TPH(g,d,mo)	7	VOA w/ HCl & 2-AVOA	<input type="checkbox"/>	9/25/2014 12:45	5 days	Present	<input type="checkbox"/>	
				1	1LA	<input type="checkbox"/>				<input type="checkbox"/>	
1409A53-003B	B3-W	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	9/25/2014 12:45	5 days	Present	<input type="checkbox"/>	
1409A53-003C	B3-W	Water	SW8270C (SVOCs)	1	1LA	<input type="checkbox"/>	9/25/2014 12:45	5 days	Present	<input type="checkbox"/>	
1409A53-004A	B4-W	Water	Multi-Range TPH(g,d,mo)	7	VOA w/ HCl & 2-AVOA	<input type="checkbox"/>	9/25/2014 12:30	5 days	Present	<input type="checkbox"/>	
				1	1LA	<input type="checkbox"/>				<input type="checkbox"/>	
1409A53-004B	B4-W	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	9/25/2014 12:30	5 days	Present	<input type="checkbox"/>	
1409A53-004C	B4-W	Water	SW8270C (SVOCs)	1	1LA	<input type="checkbox"/>	9/25/2014 12:30	5 days	Present	<input type="checkbox"/>	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

1LA = 1L Amber Glass Jar, Unpreserved
 VOA w/ HCl = 43mL VOA w/ HCl
 VOA w/ HCl & 2-AVOA =

CHAIN OF CUSTODY RECORD 1409AS3

P&D ENVIRONMENTAL, INC.
 55 Santa Clara Ave., Suite 240
 Oakland, CA 94610
 (510) 658-6916

PROJECT NUMBER:

0594

PROJECT NAME:

260 30th Street
 Oakland, CA

NUMBER OF CONTAINERS

ANALYSIS(ES):

TPH (G, P, M)
 EPA 82100B

PRESERVATIVE

REMARKS

SAMPLED BY: (PRINTED & SIGNATURE)

Michael Bass-Deschenes

SAMPLE NUMBER

DATE

TIME

TYPE

SAMPLE LOCATION

B1-w

9/25/14

1440

H2O

11

X

X

ICE

NORMAL TAT

B2-w

↓

1020

11

X

X

B3-w

↓

1245

11

X

X

B4-w

↓

1230

11

X

X

ICE / 1° 5:0

GOOD CONDITION APPROPRIATE
 HEADSPACE ABSENT CONTAINERS
 DECHLORINATED IN LAB PRESERVED IN LAB
 PRESERVATION VOAS | O & G | METALS | OTHER |

RELINQUISHED BY: (SIGNATURE)

DATE

9/26

TIME

1435

RECEIVED BY: (SIGNATURE)

Total No. of Samples (This Shipment)

4

Total No. of Containers (This Shipment)

44

LABORATORY:

McCAMPBELL ANALYTICAL

RELINQUISHED BY: (SIGNATURE)

DATE

9/26

TIME

1648

RECEIVED BY: (SIGNATURE)

LABORATORY CONTACT:

ANGELA RYDELIUS (877) 252-9262

LABORATORY PHONE NUMBER:

RELINQUISHED BY: (SIGNATURE)

DATE

TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)

SAMPLE ANALYSIS REQUEST SHEET

ATTACHED: () YES () NO

Results and billing to:
 P&D Environmental, Inc.
 lab@pdenviro.com

REMARKS: 5 VOAS PRESERVED TO HCL
 4 AMBER VOAs (UNPRESERVED)
 2 1-LITER AMBERS (UNPRESERVED)



Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **9/26/2014 9:06:55 PM**
 Project Name: **#0594; 260 30th Street Oakland, CA.** LogIn Reviewed by: **Jena Alfaro**
 WorkOrder No: **1409A53** Matrix: Water Carrier: Daniel (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Container/Temp Blank temperature Cooler Temp: 5°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: pH<2; 522: pH<4)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)
 Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA

* NOTE: If the "No" box is checked, see comments below.

 Comments: