475 Lesser Street, LLC

RECEIVED
By Alameda County Environmental Health at 3:55 pm, Jun 23, 2014

June 11, 2014

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

SUBJECT: SUBSURFACE INVESTIGATION REPORT CERTIFICATION
County Case # RO 3135
Lesser Commercial Property
475 Lesser Street
Oakland, CA

Dear Mr. Wickham:

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

- Subsurface Investigation Report dated June 11, 2014 (document 0675.R2).

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 if you have any questions.

Sincerely,

Daniel Rabin
475 Lesser Street, LLC.

0675.L2

P&D ENVIRONMENTAL, INC.

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

June 11, 2014
Report 0675.R2

Ms. Kendra Marshall
475 Lesser Street, LLC
731 Sansome Street, 2nd Floor
San Francisco, CA 94111

SUBJECT: SUBSURFACE INVESTIGATION REPORT
(B1A, B5 THROUGH B8, AND SG1 THROUGH SG3)
Lesser Street Commercial Property
475 Lesser Street
Oakland, California

Dear Ms. Marshall:

P&D Environmental, Inc. (P&D) has prepared this report documenting the drilling of five boreholes designated as B1A, and B5 through B8 for collection of soil and groundwater samples, and installation and sampling of three soil gas wells designated as SG1 through SG3 at and near the subject site. Field activities were performed to further investigate the presence and extent of petroleum hydrocarbons in soil, groundwater, and soil gas at and near the subject site associated with a historically closed in-place diesel Underground Storage Tank (UST). Field activities for the drilling and sampling of boreholes B1A and B5 through B8 were performed on May 15, 2014; the soil gas wells were installed on May 16, 2014; and the soil gas wells were sampled on May 19, 2014. This work was performed in accordance with P&D's Subsurface Investigation Work Plan (document 0675.W1) dated May 7, 2014 which was approved in a letter from the Alameda County Department of Environmental Health (ACDEH) dated May 8, 2014.

A Site Location Map (Figure 1) and a Site Vicinity Aerial Photograph showing sample collection locations with Total Petroleum Hydrocarbons as Diesel (TPH-D) groundwater grab sample concentrations at and near the subject site (Figure 2) are attached with this report. All work was performed under the direct supervision of a California professional geologist.

BACKGROUND

Based on review of an AllWest Environmental, Inc. (AllWest) September 28, 2012 Environmental Site Assessment report, the subject site is a rectangular 20,000 square foot parcel developed with four 1-story slab-on-grade light industrial buildings, with the remaining portion of the property covered with a concrete-paved driveway and outdoor service area. The two buildings located closest to Lesser Street were constructed in 1967 and 1969 and were used for food product processing. The two buildings located farthest

from the Lesser Street were constructed in 1981 and 1983 and were used for food storage. The land was identified in the report as being undeveloped land from 1887 until construction of a Federal Housing Authority apartment complex throughout the area in the early-1940's. The apartment complex was demolished in 1965. The property was occupied from 1967 through 2011 by Tip Top Foods, Inc. for production of dairy-based and other food products. An unscaled site plan showing the different building locations obtained from the AllWest report is attached as Figure 3.

A detailed discussion of the findings of the September 28, 2012 AllWest Environmental Site Assessment, and an April 3, 2014 Phase I Environmental Site Assessment prepared by Basics Environmental, Inc. (Basics) is presented in P&D's May 7, 2014 Subsurface Investigation Work Plan (document 0675.W1). Based on the identification of a closed in-place 8,000-gallon diesel fuel UST, P&D oversaw the drilling of boreholes B1 through B4 on March 26, 2014 for collection of soil and groundwater grab samples. Based on the detected presence of petroleum hydrocarbons in groundwater samples, P&D recommended that a copy of the subsurface investigation report be provided to local regulatory agencies for review. Documentation of the subsurface investigation is provided in P&D's April 3, 2014 Subsurface Investigation Report (document 0675.R1).

FIELD ACTIVITIES

Prior to performing field activities, permits W2014-0484 and W2014-0485 were obtained from the Alameda County Public Works Agency (ACPWA), drilling locations were marked with white paint, Underground Service Alert was notified for underground utility location, a health and safety plan was prepared, permission was obtained for access to the property located at the nearby Tez Marble Facility to drill offsite borehole B8, and site access was arranged with the subject site property owner. Notification of the drilling dates was also provided to the ACPWA and the ACDEH.

Soil Coring and Sample Collection

On May 15, 2014, P&D personnel oversaw drilling at locations B1A and B5 through B8 shown on Figure 2 for the collection of soil and groundwater samples at and near the subject site. All drilling was performed by Vironex, Inc. of Concord, California (Vironex) by continuously coring using Geoprobe direct push technology to drive a 2.0-inch outside diameter Geoprobe macrocore barrel sampler lined with transparent PVC sleeves. Borehole B1A was continuously cored to a depth of 8.0 feet below the ground surface (bgs), and boreholes B5 through B8 were continuously cored to a total depth of 10.0 feet bgs.

The soil from each of the boreholes was logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System. All soil from the boreholes was evaluated with a Photoionization Detector (PID) equipped with a 10.6 eV bulb and calibrated using a 100 ppm isobutylene standard. No elevated PID values were measured and no odors, staining, or discoloration were observed in the soil from any of the boreholes. Field observations of the soil cores for each borehole related to lithology,

discoloration, moisture, density, odor and PID readings were recorded on boring logs that are attached with this report as Appendix A.

The subsurface materials encountered in boreholes B1A and B5 through B8 consisted predominantly of fill material from the depths of 0.5 to 4.0 feet bgs, and clay, sandy clay, and silty clay, with coarse-grained material encountered in the boreholes as follows.

- B1A: clayey sand between the depths of 4.5 to 5.5 feet bgs.
- B5: fine sand between the depths of 3.5 and 4.0 feet bgs, and gravelly clayey sand between the depths of 5.0 and 10.0 feet bgs.
- B6: fine sand between the depths of 3.5 and 6.5 feet bgs.
- B7: well graded sand between the depths of 4.0 and 5.0 feet bgs, and gravelly silty sand between the depths of 6.5 and 8.5 feet bgs.
- B8: well graded sand between the depths of 5.5 and 6.5 feet bgs.

Groundwater was encountered during drilling in borehole B1A at a depth of 6.0 feet bgs, in boreholes B5 and B8 at a depth of 5.5 feet bgs, and in boreholes B6 and B7 at a depth of 4.5 feet bgs.

Soil samples were collected at the 3-foot and 5.5-foot depths from borehole B1A for laboratory analysis in the following manner. A 6-inch long 2-inch diameter section of transparent PVC tube soil core was cut from the continuous core at the designated depths. The ends of the tube were evaluated with the PID, and then sequentially covered with aluminum foil and plastic endcaps. The sample was then labeled and placed into a cooler with ice pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling.

One groundwater grab sample was collected from each of boreholes B5, B6, B7, and B8 by placing a temporary 1-inch diameter slotted PVC pipe into the borehole, inserting a polypropylene tube into the PVC pipe, and using a peristaltic pump to withdraw water from the temporary pipe. Prior to groundwater sample collection, approximately 0.3-gallons of water was purged from each borehole. The groundwater samples were pumped directly into 40-milliliter VOAs that were supplied by the laboratory and contained hydrochloric acid preservative. The sample bottles were labeled and placed in a cooler with ice pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling. No odor or sheen were detected or observed for any of the groundwater grab samples. The measured depth to groundwater in boreholes B5 through B8 after drilling and before groundwater sample collection was 1.9, 3.7, 2.9 and 2.8 feet bgs, respectively.

Following collection of the borehole groundwater grab samples, the boreholes were filled with neat cement grout using the temporary PVC casing as a tremie pipe. Inspector Steve Miller of the ACPWA was present at the site to observe grouting of boreholes B5, B6, and B7, and gave verbal authorization to grout boreholes B1A and B8.

Soil Gas Well Construction and Sample Collection

On May 16, 2014 permanent soil gas wells were constructed at locations SG1 through SG3 (see Figure 2) to evaluate the presence of petroleum soil vapor concentrations and oxygen in the suspected vicinity of the former diesel UST. On May 19, 2014 the soil gas samples were collected in accordance with procedures recommended in the December 2013 San Francisco Bay Regional Water Quality Control Board User's Guide: Derivation and Application of Environmental Screening Levels, and the following Department of Toxic Substances Control (DTSC) documents:

- March 2013 – FAQ for the 2012 Advisory,
- April 2012 Advisory - Active Soil Gas Investigations,
- October 2011 – Vapor Intrusion Guidance,
- October 2011 – Vapor Intrusion Mitigation Advisory.

The soil gas wells were constructed by Vironex by driving a hollow 1-inch diameter Geoprobe steel rod with an expendable tip with a slide hammer to a depth of 3.0 feet bgs. The depth of 3.0 feet bgs was selected based on the depth to groundwater encountered in the boreholes at and near the site. The expendable tip was then dislodged and the lowermost 6 inches of the borehole was filled with #2/16 Lonestar sack sand as the steel rod was withdrawn from the ground. A 0.250-inch outside diameter (0.187-inch inside diameter) polyethylene tube with a HDPE filter at the bottom of the tube was inserted to the top of the sand (a depth of 6 inches above the bottom of the borehole), and additional #2/16 Lonestar sack sand was added to the annular space between the hollow rod and the polyethylene tube to one foot above the bottom of the borehole (the lowermost one foot of the borehole was filled with sand with the filter at the end of the tube in the middle of the sand interval).

Granular bentonite (measuring approximately 1 to 2 millimeters in diameter) was placed in the annular space above the sand to 6 inches above the sand, and the remaining borehole was filled with hydrated bentonite slurry as the steel rod was withdrawn from the ground. The tubing length was 4.5 feet for all three boreholes. The top of each soil gas well was enclosed in a well box with a lid that was secured with bolts. At the time of soil gas well construction a strong petroleum hydrocarbon diesel odor was detected on the drilling rod at location SG3. No odors were detected at soil gas wells SG1 and SG2.

Following construction, the soil gas wells were not sampled for a minimum of 48 hours. A soil gas sampling manifold with a 1-liter Summa canister as the sampling canister for each location (see Figure 4) was assembled in a shroud consisting of a 35-gallon Rubbermaid bin that had been modified by cutting viewing ports into the sides of the shroud and covering the viewing ports with transparent polycarbonate sheets. A hole measuring approximately two inches square in the bottom of the shroud allowed the shroud to cover the soil gas well while still allowing access to the temporary well through the bottom of the bin. At the time that the sampling manifold was assembled, the vacuum for the sample canister was verified with a vacuum gauge and recorded.

Prior to sampling the soil gas, a 10 minute shut-in test of the sampling manifold was performed by closing the valve located between the filter and the pressure gauge, opening the purge canister valve, and recording the manifold system vacuum (see Figure 4). No purge testing for purge volume determination was performed because the samples were collected using Summa canisters. Following successful verification of the manifold shut-in test, a default of three purge volumes was extracted prior to sample collection. The purge volume was calculated based on the void space surrounding the HDPE filter and the volume of the tube. The purge time was calculated using a nominal flow rate provided by the flow controller of 150 cubic centimeters per minute.

Following completion of the purging of three volumes, a lid was placed onto the shroud and a tracer gas 1,1-Difluoroethane (DFA) was sprayed into the shroud interior for one second through a tube connected to a hole in the side of the shroud. DFA was used as the tracer gas for EPA Method TO-15 sample analysis. Gloves in the lid of the shroud were used to open the sample canister valve. After verifying that low flow conditions were not present associated with the soil gas sample, an air sample was collected from the shroud atmosphere to quantify the shroud tracer gas concentration while the soil gas sample was being collected. The shroud atmosphere sample was collected into a Tedlar bag that was placed into a vacuum chamber with the Tedlar bag inlet connected to a new piece of Teflon or polyethylene tubing that was inserted into the shroud atmosphere through a hole in the side of the shroud. Groundwater was pulled into the sample tubing at soil gas wells SG1 and SG2.

Once the vacuum for the sample canister valve had decreased to 5 inches of mercury, the gloves in the lid of the bin were used to close the sample canister valve. The pressure gage on the inlet side of the flow controller (see Figure 4) was monitored during sample collection to ensure that the vacuum applied to the soil gas well did not exceed 100 inches of water. The manifold vacuum gage was determined to be defective during Summa canister sample collection and was replaced for soil gas collection. Although the Soil Gas Sampling Field Data Sheet identifies the SG3 manifold gage as defective, data provided in subsequent rows shows conditions observed during SG3 soil gas sample collection following replacement of the defective manifold.

One duplicate soil gas sample was collected into a 1-liter Summa canister at location SG3 using a stainless steel sampling tee for the Summa canisters, using methods described above. Following soil gas sample collection, a PID was connected to the Teflon tubing to obtain a preliminary field value for the sample collection location. A strong petroleum hydrocarbon diesel odor and a PID value of 175 ppm were detected at location SG3. The soil gas Summa canister samples were stored in a box and promptly shipped to the laboratory for extraction and analysis. Similarly, the shroud atmosphere Tedlar bag sample was stored in a cooler with the lid closed pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling.

In addition to collection of Summa canister samples as described above, a sorbent tube sample was collected at location SG3 as follows. The manifold was equipped with a tee located downstream from the flow controller. At the time that the manifold was assembled

(prior to the shut-in test) a sorbent tube was connected inside the shroud to the tee that was located downstream from the flow controller, with a valve located between the sorbent tube and the tee. The downstream side of the sorbent tube was connected with a polyethylene tube to a flow meter and a vacuum pump. In addition, a dish containing 2-Propanol was placed in the shroud and used as the tracer gas for EPA Method TO-17 sample analysis.

Following Summa canister sample collection, the valve between the manifold and the sorbent tube was opened. A vacuum pump was used to apply a vacuum to the sorbent tube and a flow meter was used to measure the soil gas flow rate at a nominal flow rate of 150 cubic centimeters per minute for collection of a 200 cubic centimeter sample. In addition to collection of one sample at each soil gas well location, a total of one replicate sample was collected. Following collection of the sorbent tube soil gas sample the ends of the sorbent tube were sealed. Following collection of the sorbent tube sample, a replicate sorbent tube sample identified as SG3-REP was also collected at location SG3 using methods as described above. Before and after connection of the sorbent tube to the manifold each sorbent tube was stored in a cooler with ice. Chain of custody procedures were observed for all sample handling.

Measurements of vacuums, purging and equilibration time intervals, and PID readings were recorded on Soil Gas Sampling Data Sheets. New Teflon tubing and filters were used at each sample collection location. Clean, unused vacuum gages and stainless steel sampling manifolds were used at each sample collection location. All soil and water generated during soil gas well construction were stored in 55-gallon drums at the site and labeled pending characterization and proper disposal. Copies of the purge volume calculation sheet and the Soil Gas Sampling Data Sheets are attached with this report as Appendix B.

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 Holocene Deposits, Bay mud (Qhbm), which is described as unconsolidated water-saturated dark plastic carbonaceous clay and silty clay. It may contain a few lenses of well-sorted fine sand and silt and a few shelly and peaty layers.

Review of the Geologic map and map database of the Oakland metropolitan area, Alameda, Contra Costa, and San Francisco Counties, California: A Digital Database that was compiled by R.W. Graymer (U. S. Geological Survey Miscellaneous Field Studies, MF-2342, Version 1.0 in 2000), shows the subject site as being underlain by artificial fill (af) which is described as consisting of Man-made deposits of various materials and ages. The materials are further described as some being compacted and quite firm, but fills made before 1965 are nearly everywhere not compacted and consist simply of dumped materials.

Based on the materials encountered in the borehole cores at drilling locations B1 through B4 to depths of 8.0 and 10.0 feet bgs the subsurface materials encountered at the site consisted of gravelly sand and gravelly clayey sand fill to a depth of 2.0 to 4.5 feet bgs, beneath which variable amounts of clay, silty sand, and sand were encountered. The maximum sand layer thickness encountered was 2.5 feet. Groundwater was encountered during drilling in borehole B1 at a depth of 6.5 feet bgs, and at a depth of 6.0 feet bgs in the remaining boreholes, and was subsequently measured in boreholes B1, B2, B3, and B4 at 2.8, 2.9, 3.2, and 4.0 feet bgs, respectively.

Based on the materials encountered in the borehole cores at drilling locations B1A and B5 through B8 to depths of 8.0 and 10.0 feet bgs the subsurface materials encountered consisted of gravelly clayey sand and gravelly silty sand fill to a depth of 3.5 to 4.5 feet bgs, beneath which variable amounts of clay, silt, clayey sand, silty sand, and fine sand were encountered. The maximum known coarse-grained layer thickness encountered was 3.0 feet at borehole B6. Although 5.0 feet of clayey sand is identified in borehole B5 between the depths of 5.0 and 10.0 feet bgs, there was no recovery in the sampler for this interval and the material identified for this interval is speculated based on material retrieved from the shoe do the drilling tools.

Groundwater was encountered during drilling in borehole B1A at a depth of 6.0 feet bgs, in boreholes B5 and B8 at a depth of 5.5 feet bgs, and in boreholes B6 and B7 at a depth of 4.5 feet bgs. The measured depth to groundwater in boreholes B5 through B8 after drilling and before groundwater sample collection was 1.9, 3.7, 2.9 and 2.8 feet bgs, respectively.

The nearest surface water body to the subject site is a tidal canal located approximately 1,450 feet to the south of the site that is connected to the San Leandro Bay estuary, and San Leandro Bay which is located approximately 1,450 feet to the south. An underground culvert or storm drain portion of Peralta Creek is approximately 630 feet west of the subject site and runs north-south along Coliseum Way. The groundwater flow direction at the site is unknown, but a presumed range of flow directions from westerly to southerly towards these nearby surface water bodies is shown on Figure 2. It is unknown if groundwater levels at the site are tidally influenced. Additionally, the conductivity of the water at the site is presently unknown.

WEATHER INFORMATION

No precipitation occurred during the week prior to the soil gas sampling event, and no precipitation occurred on the day of soil gas sampling (May 19, 2014). Weather data, including precipitation and barometric pressure for the two weeks preceding the sampling event, the day of sampling, and for the two weeks following the sampling event are provided with this report as Appendix C. The weather station used for this weather information is located at the intersection of Fernside Boulevard and High Street in Alameda at an elevation of 16 feet above mean sea level, approximately 0.4 miles to the west-southwest of the subject site. The subject site is located at an elevation of approximately 12 feet above mean sea level. An internet link to the weather station information is provided with this report in Appendix C.

LABORATORY ANALYSIS

All of the soil and groundwater samples were analyzed at McCampbell Analytical, Inc. (McCampbell) in Pittsburg, California. McCampbell is a State-accredited hazardous waste testing laboratory. The soil samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-G), using EPA Method 5030B in conjunction with EPA Method 8021B and modified EPA Method 8015B, for TPH-D and Total Petroleum Hydrocarbons as Motor Oil (TPH-MO) by EPA Method 3550B in conjunction with EPA Method 8015B: for Methyl-tert Butyl Ether (MTBE), benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 5030B in conjunction with EPA Method 8260B, and for Semi-Volatile Organic Compounds (SVOCs) using EPA Method 3550B in conjunction with EPA Method 8270C. All of the borehole groundwater grab samples were analyzed for TPH-G using EPA Method 5030B in conjunction with EPA Method 8021B and/or modified EPA Method 8015B, for TPH-D and TPH-MO using EPA Method 3510C in conjunction with EPA Method 8015B, for MTBE and BTEX using EPA Method 8260B, and for Volatile Organic Compounds (VOCs) including MBTEX using EPA Method 5030B in conjunction with EPA Method 8260B.

The Summa canister and sorbent tube soil gas samples were analyzed at Air Toxics Limited of Folsom California (Air Toxics). The samples were analyzed for TPH-G, MTBE, BTEX, and DFA (the tracer gas) using EPA Method TO-15, and for oxygen, methane and carbon dioxide using method ASTM D-1946. The samples collected using sorbent tubes were analyzed for naphthalene and 2-Propanol (the tracer gas) using EPA Method TO-17. The analyses were performed with detection limits that equal or are less than San Francisco Bay Regional Water Quality Control Board (RWQCB) December 2013 Table E-2 soil gas commercial/industrial Environmental Screening Levels (ESLs).

All of the Tedlar bags were analyzed at Air Toxics using EPA Method TO-15 for the tracer gas DFA for shroud air samples that were collected during Summa canister sample collection for TO-15 analysis, and for the tracer gas 2-Propanol for shroud atmosphere samples that were collected during sorbent tube sample collection for TO-17 analysis.

The laboratory analytical results for the borehole soil samples are summarized in Table 1, the laboratory analytical results for the borehole groundwater grab samples are summarized in Table 2, and the soil gas sample results are summarized in Tables 3A through 3C. Copies of the laboratory analytical reports are attached with this report as Appendix D.

DISCUSSION AND RECOMMENDATIONS

Based on the shallow depth to groundwater at the site, the soil gas wells were each constructed to a depth of 3.0 feet bgs. During soil gas sample collection groundwater was drawn into the tubing for soil gas wells SG1 and SG2, resulting in no sample collection at these locations. Based on petroleum hydrocarbon diesel odors and elevated PID readings at soil gas well SG3 at the time of well construction and at the time of soil

gas sample collection, soil gas well SG3 appears to be located in the immediate vicinity of the former UST.

Review of Table 1 shows that MBTEX and SVOCs were not detected in either of the soil samples collected from borehole B1A, that TPH-D was detected in soil sample B1A-3.0 and B1A-5.5 at concentrations of 1.2 and 7.5 mg/kg, respectively, and that TPH-MO was detected at concentrations of 17 and 78 mg/kg, respectively. Review of the laboratory analytical report shows that the laboratory described the TPH-D results for soil samples B1A-3.0 and B1A-5.5 as consisting of both oil-range compounds and diesel-range compounds with no recognizable pattern. Comparison of the soil sample results with their respective RWQCB December 2013 Table A-1 residential and Table A-2 commercial/industrial ESL values shows that none of the detected compounds exceed their respective ESL values. Similarly, no compounds were detected in soil for evaluation using the State Water Resources Control Board (SWRCB) 2012 Low Threat Closure Policy (LTCP) Table 1 criteria for concentrations of petroleum constituents in soil that will have no significant risk of adversely affecting human health for residential and utility worker exposure scenarios.

Review of Table 2 shows that TPH-G, MTBE and BTEX compounds were not detected in any of the borehole groundwater grab samples, and that TPH-D, and TPH-MO were not detected in the groundwater samples collected from boreholes B5, B6, and B7. TPH-D and TPH-MO were detected in groundwater grab sample B8-W at concentrations of 290, and 4,600 µg/L, respectively. The only other analytes detected in any of the groundwater grab samples were chloroform in sample B5-W at a concentration of 7.9 ug/L, and carbon disulfide in sample B6-W at a concentration of 2.0 ug/L. Review of the laboratory analytical report shows that the laboratory described the TPH-D and TPH-MO results for groundwater sample B8-W as consisting of both oil-range compounds and diesel-range compounds with no recognizable pattern. Based on the presumed southwesterly to easterly groundwater flow direction, borehole B8 is assumed to be located upgradient of the subject site, and the downgradient extent of petroleum hydrocarbons in groundwater is defined. Based on the absence of BTEX in the B8 groundwater grab sample, the TPH-D and TPH-MO detected in B8 do not appear to be related to the source of the TPH-D and BTEX detected in borehole B3 at the subject site. Based on the absence of petroleum hydrocarbons in presumed downgradient boreholes B5, B6, and B7 the petroleum hydrocarbons in groundwater at the subject site has been defined, and no further investigation of the extent of petroleum in groundwater is recommended.

Comparison of the groundwater grab sample results with their respective RWQCB December 2013 Table F-1a groundwater ESL values shows that all of the detected petroleum concentrations exceed their respective ESL values with the exception of TPH-D at B1 and toluene and ethylbenzene at B3. Comparison of the groundwater grab sample results with their respective RWQCB December 2013 Table E-1 groundwater screening levels for evaluation of potential vapor intrusion for a fine-coarse mix for residential land use shows that none of the detected compounds exceed their respective ESL values.

Review of Tables 3A and 3B shows that none of the tracer gases were detected at concentrations exceeding 5 percent of the shroud vapor concentrations, indicating that the samples were valid. Review of Table 3A also shows that MTBE, ethylbenzene, o-xylenes, and naphthalene were not detected in soil gas sample SG3 or field duplicate SG3-DUP or field replicate SG3-REP. TPH-G was detected in SG3 and SG3-DUP at concentrations of 3,600,000 and 3,500,000 micrograms per cubic meter (ug/m^3), respectively, and benzene was detected at a concentration of 1,200 ug/m^3 in both the sample and the duplicate. Review of Table 3C shows that oxygen was detected in sample SG3 and SG3-DUP at concentrations of 2.1 and 2.6 percent, respectively.

Comparison of the groundwater grab sample results with their respective RWQCB December 2013 Table F-1a groundwater ESL values shows that all of the detected petroleum concentrations exceed their respective ESL values with the exception of TPH-D at B1 and toluene and ethylbenzene at B3. Comparison of the groundwater grab sample results with their respective RWQCB December 2013 Table E-1 groundwater screening levels for evaluation of potential vapor intrusion for a fine-coarse mix for residential land use shows that none of the detected compounds exceed their respective ESL values.

Comparison of the soil sample results with their respective RWQCB December 2013 Table E-2 residential and Table E-2 commercial/industrial ESL soil gas screening levels for evaluation of potential vapor intrusion shows that TPH-G and benzene were detected in each of SG3 and SG3-DUP at concentrations exceeding their respective residential and commercial/industrial ESL values. Similarly, benzene was detected in SG3 and SG3-DUP at concentrations exceeding the SWRCB LTCP no bioattenuation zone soil gas residential and the commercial exposure levels.

Based on the detected TPH-D, benzene and total xylenes groundwater concentrations and the TPH-G and benzene soil gas concentrations, P&D recommends that a copy of this report be provided to the ACDEH for review and comment.

DISTRIBUTION

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

LIMITATIONS

This report was prepared solely for the use of 475 Lesser Street, LLC. 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 the 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 borings 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.

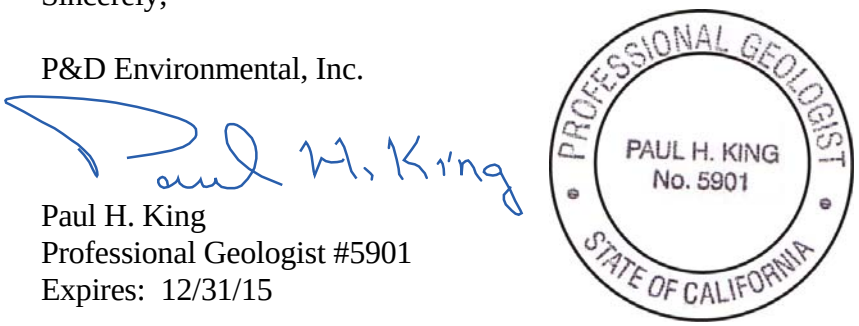
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the 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.

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 Grab Sample Analytical Results
Table 3A - Summary of Soil Gas Sample Analytical Results - TPH-G and VOCs
Table 3B - Summary of Soil Gas Shroud Sample Analytical Results - 1,1-Difluoroethane and 2-Propanol
Table 3C - Summary of Soil Gas Sample Analytical Results - Oxygen, Methane, and Carbon Dioxide

Figure 1 - Site Location Map
Figure 2 - Site Vicinity Aerial Photograph Showing Proposed Sample Collection Locations
Figure 3 - AllWest Site Plan
Figure 4 - Typical Soil Gas Sample Collection Manifold

Appendix A - Soil Boring Logs
Appendix B - Purge Volume Calculation Sheet and Soil Gas Sampling Field Data Sheet
Appendix C - Weather Information
Appendix D - Laboratory Analytical Results and Chain of Custody Documentation

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TABLES

Table 1
Summary of Borehole Soil Sample Analytical Results

Sample ID	Sample Date	Sample Depth (Ft bgs)	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	SVOCs using EPA Method 8270C
B1A-3.0	5/15/2014	3.0	ND<1.0	1.2, a,b	17, a,b	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	All ND
B1A-5.5	5/15/2014	5.5	ND<1.0	7.5, a,b	78, a,b	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	All ND
B1-5.0	3/26/2014	5.0	NA	6.0, a,b	NA	NA	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	NA
B2-5.0	3/26/2014	5.0	NA	ND<1.0	NA	NA	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	NA
B3-5.0	3/26/2014	5.0	NA	ND<1.0	NA	NA	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	NA
B4-5.0	3/26/2014	5.0	NA	2.4, a,b	NA	NA	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	NA
LTCP	Residential						0-5' = 1.9		0-5' = 21		
	Residential						5-10' = 2.8		5-10' = 32		
ESL [1]			*100*	*100*	*100*	*0.023*	*0.044*	*2.9*	*3.3*	*2.3*	*Various*
ESL [2]			*500*	*110*	*500*	*0.023*	*0.044*	*2.9*	*3.3*	*2.3*	*Various*

NOTES

Ft bgs = Feet Below Ground Surface.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-MO = Total Petroleum Hydrocarbons as Motor Oil.

MTBE = Methyl-tert-Butyl Ether

SVOCs = Semi-Volatile Organic Compounds.

ND = Not Detected.

NA = Not Analyzed.

a = Laboratory note: oil range compounds are significant.

b = 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 Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health. Residential and Utility Worker.

ESL [1] = 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.

ESL [2] = 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.

Results and ESLs reported in milligrams per kilogram (mg/kg) unless otherwise indicated.

Table 2
Summary of Borehole Groundwater Grab Sample Analytical Results

Sample ID	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	VOCs using EPA Method 8260B
B1-W	3/26/2014	NA	67, a,b	NA	NA	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA
B2-W	3/26/2014	NA	**450, a,b**	NA	NA	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA
B3-W	3/26/2014	NA	**790, a,b,c**	NA	NA	**2.6**	0.64	4.3	**20**	NA
B4-W	3/26/2014	NA	**240, a,b**	NA	NA	ND<0.50	ND<0.50	ND<0.50	0.50	NA
B5-W	5/15/2014	ND<50	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND, except Chloroform = 7.9
B6-W	5/15/2014	ND<50	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND, except Carbon disulfide = 2.0
B7-W	5/15/2014	ND<50	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND
B8-W	5/15/2014	ND<50	**290, a,b**	**4,600, a,b**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND
LTCP Groundwater Specific Criteria	Scenario 2 Scenario 4		None None	None None	1,000 1,000	3,000 1,000	None None	None None	None None	None None
ESL [1]		*100*	*100*	*100*	*5.0*	*1.0*	*40*	*30*	*20*	*Chloroform = 80, Carbon disulfide = No Value*
ESL [2]		*No Value*	*No Value*	*No Value*	*9,900*	*27*	*95,000*	*310*	*37,000*	*Chloroform = 170, Carbon disulfide = No Value*

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-MO = Total Petroleum Hydrocarbons as Motor Oil.

MTBE = Methyl-tert-Butyl Ether

VOCs = Volatile Organic Compounds.

ND = Not Detected.

NA = Not Analyzed.

a = Laboratory note: oil range compounds are significant.

b = Laboratory note: diesel range compounds are significant; no recognizable pattern

c = Laboratory note: gasoline range compounds are significant.

LTCP = Low Threat Closure Policy, developed 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.

Results in bold indicate a concentration equal or exceeding the respective ESL[1] value.

Results and ESLs reported in micrograms per liter (µg/L) unless otherwise indicated.

Table 3A

Summary of Soil Gas Sample Analytical Results - TPH-G and VOCs

Sample ID	Sample Date	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	m,p-Xylenes	o-Xylenes	Naphthalene	1,1-DFA	Percent Shroud	2-Propanol	Percent Shroud
SG3	5/19/2014	**3,600,000**	ND<430	***1,200***	2,800	ND<520	790	ND<520	ND<25	1,500	0.04	ND<2,400	0
SG3-DUP	5/19/2014	**3,500,000**	ND<430	***1,200***	2,800	ND<520	640	ND<520	NA	1,400	0.04	NA	NA
SG3-REP	5/19/2014	NA	NA	NA	NA	NA	NA	NA	ND<25	NA	NA	ND<2,400	0
LTCP													
with No Bioattenuation Zone (residential)				85		1,100			93				
(commercial)				280		3,600			310				
ESL[1]		300,000	4,700	42	160,000	490	Combined = 52,000		36	No Value	No Value	No Value	No Value
ESL[2]		2,500,000	47,000	420	1,300,000	4,900	Combined = 440,000		360	No Value	No Value	No Value	No Value

Notes:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl-tert-Butyl Ether.

1,1-DFA = 1,1-Difluoroethane.

ND = Not Detected.

NA = Not Analyzed.

LTCP = Low Threat Closure Policy, developed by State Water Resources Control Board , effective August 17, 2012, from Appendix 4 Direct Measurement of Soil Gas Concentrations. Soil Gas Criteria with no bioattenuation zone.

ESL[1] = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board , updated December 2013 from Table E2 – Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion for Residential Land Use.

ESL[2] = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board , updated December 2013 from Table E2 – Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion for Commercial/Industrial Land Use.

Italicized values exceed their respective LTCP values.

Values in bold exceed their respective ESL[1] values.

Underlined values exceed their respective ESL[2] values.

Results in micrograms per cubic meter (µg/m3), unless otherwise indicated.

Table 3B

Summary of Soil Gas Shroud Sample Analytical Results - 1,1-Difluoroethane and 2-Propanol

Sample ID	Sample Date	1,1-DFA, #	2-Propanol, ##
SG3_DFA	5/19/2014	22,000,000	NA
SG3 ISOPROPYL	5/19/2014	NA	3,100,000
SG3-REP ISOPROPYL	5/19/2014	NA	1,700,000
Notes:			
ND = Not Detected.			
NA = Not Analyzed.			
# = 1,1-DFA used as leak detection compound			
for TO-15 analysis.			
## = 2-Propanol used as leak detection compound			
for TO-17 analysis.			
Results in micrograms per cubic meter (µg/m3),			
unless otherwise indicated.			

Table 3C

Summary of Soil Gas Sample Analytical Results - Oxygen, Methane, and Carbon Dioxide

Sample ID	Sample Date	Oxygen (%)	Methane (%)	Carbon Dioxide (%)
SG3	5/19/2014	2.1	0.18	10
SG3-DUP	5/19/2014	2.6	0.18	10
NOTES:				
ND = Not Detected.				
Results in percentage (%), unless otherwise indicated.				

FIGURES

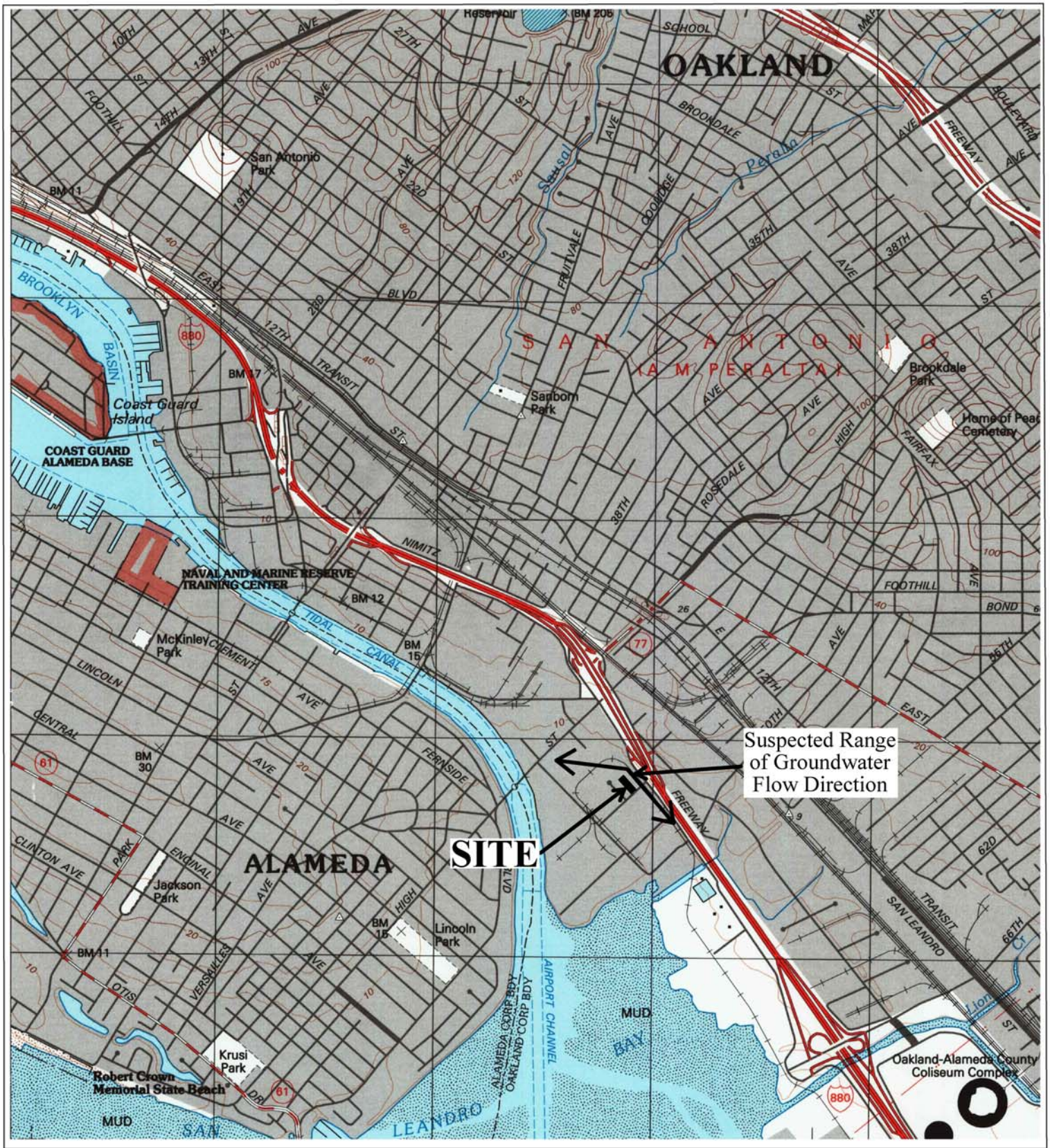

Figure 1
Site Location Map
475 Lesser Street
Oakland, California

Basemap from:
U.S. Geological Survey
Oakland East, California
7.5-Minute Quadrangle, Map edited 1996

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

0 1,000 2,000
Approximate Scale in Feet

N

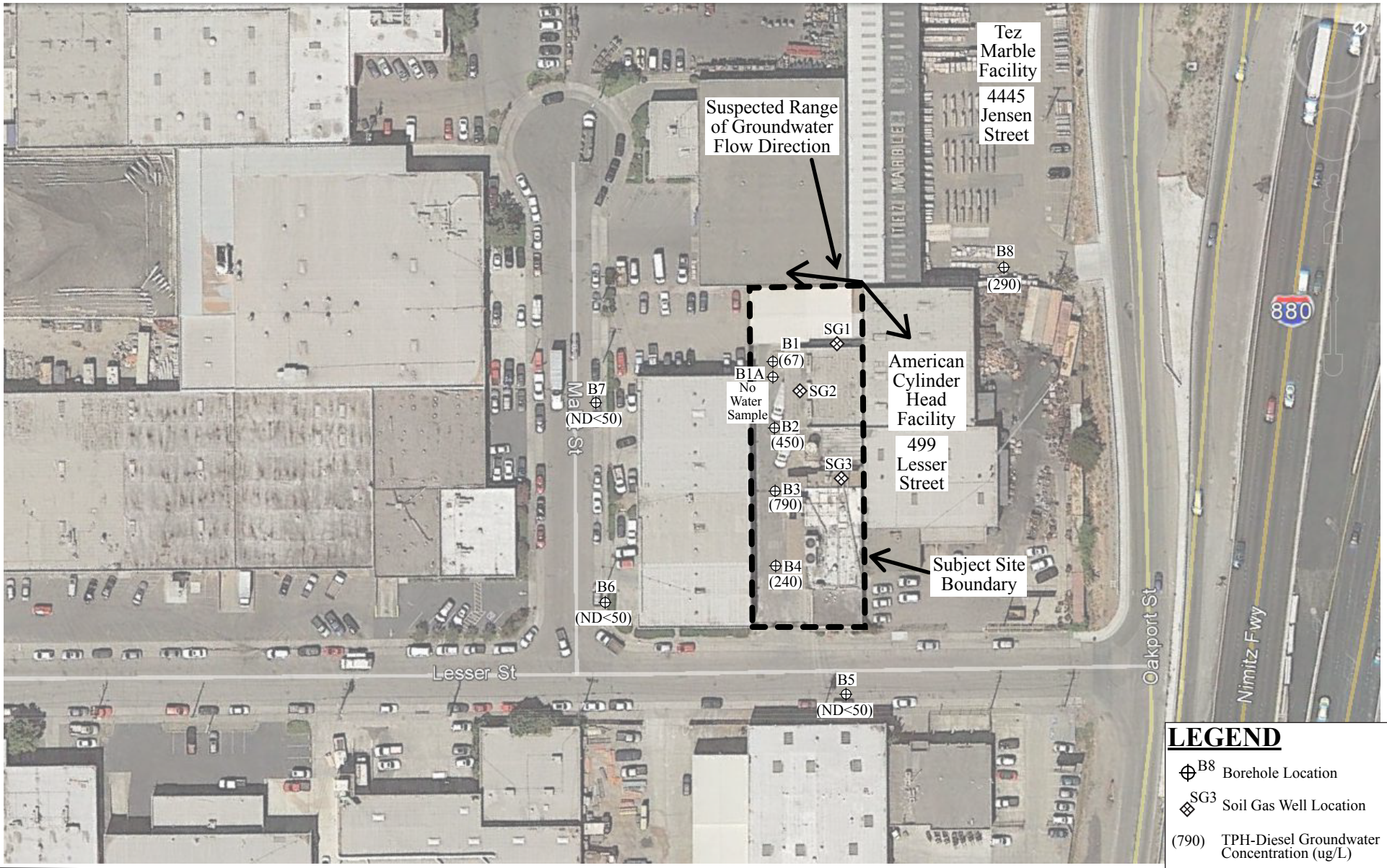

Figure 2
Site Vicinity Aerial Photograph Showing
Sample Collection Locations
475 Lesser Street
Oakland, California

Base Map From:
Basics Environmental, Inc., dated April 3, 2014, and
Google Earth, 8/28/2012

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

0 50 100
Approximate Scale in Feet

N

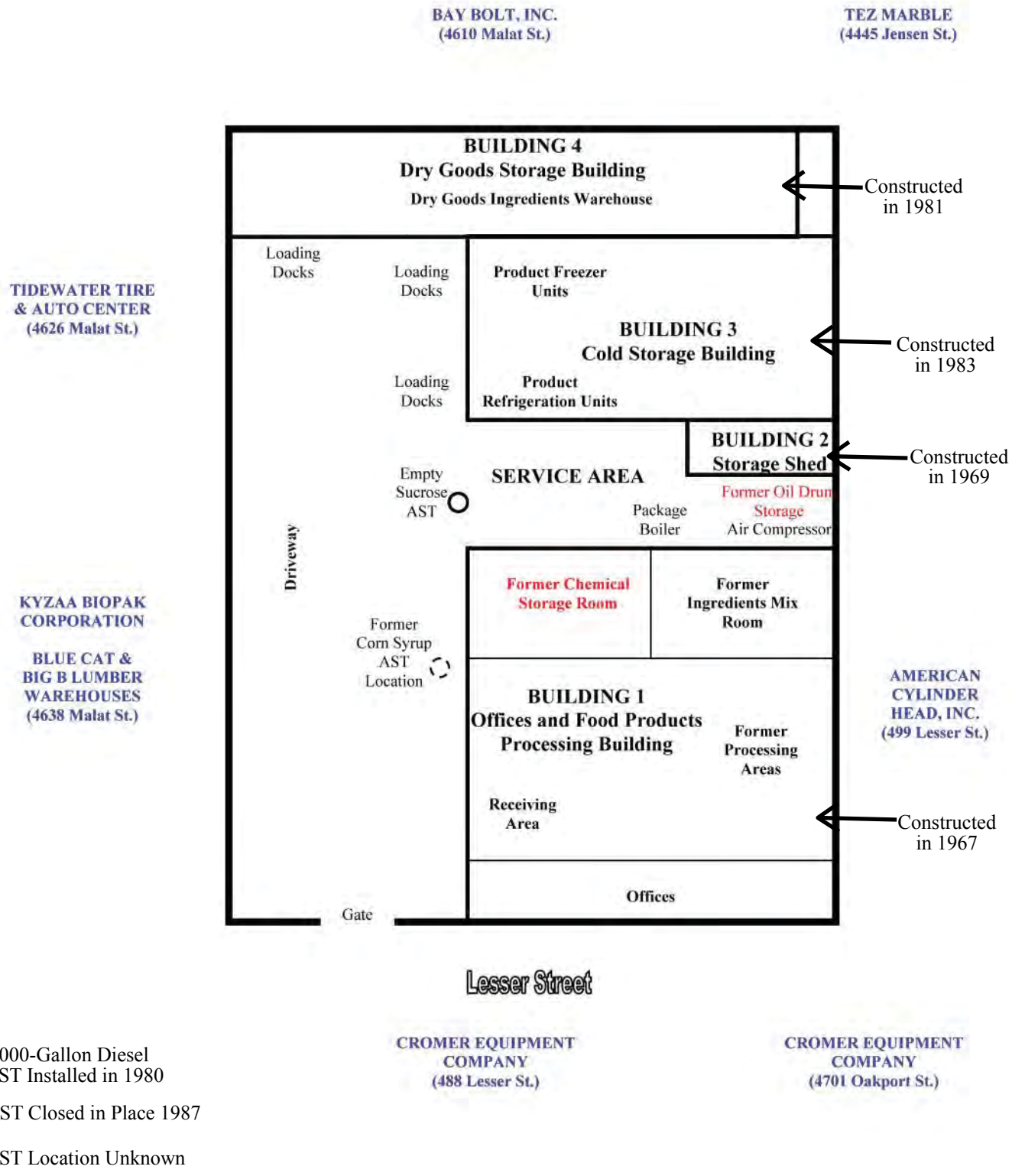

Figure 3
AllWest Site Plan
475 Lesser Street
Oakland, California

Basemap from:
AllWest Environmental, Inc.
Environmental Site Assessment dated
September 28, 2012

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

Not To Scale

N

Figure 4
Typical Soil Gas Sampling Manifold
475 Lesser Street
Oakland, California

APPENDIX A

Soil Boring Logs

P&D ENVIRONMENTAL, INC.

BORING NO.: B1A	PROJECT NO.: 0675	PROJECT NAME: 475 Lesser Street, Oakland	
BORING LOCATION: Approximately 183 ft. north and 12 ft. east of southwest corner of subject site property		ELEVATION AND DATUM: None	
DRILLING AGENCY: Vironex, Inc.	DRILLER: Scott	DATE & TIME STARTED: 05/15/14 1400	DATE & TIME FINISHED: 05/15/14 1500
DRILLING EQUIPMENT: Geoprobe 6600			
COMPLETION DEPTH: 8.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLBD	CHECKED BY:
FIRST WATER DEPTH: 6.0 Feet	NO. OF SAMPLES: 2 Soil		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Concrete (3-inches) and base rock.			No Well Constructed		Borehole was continuously cored from 0.5 to 8.0 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 4.5 ft. Orange-brown gravelly clayey sand (FILL); medium dense, moist, with abundant coarse angular gravel to 0.5-inch diameter. No Petroleum Hydrocarbon (PHC) odor. (25,55,20) X	FILL		B1A-3.0	0	0.0 to 5.0 ft. 4.1 ft. recovery
5	4.5 to 5.5 ft. Olive-brown clayey sand (SC); loose, wet to saturated. No PHC odor. (0,65,35) Wet at 5.5 ft. Saturated at 6.0 ft. X	SC		▽ B1A-5.5	0	5.0 to 8.0 ft. 3.0 ft. recovery Water encountered during drilling at 6.0 ft. at 1423.
	5.5 to 8.0 ft. Olive-gray sandy clay (CL); medium stiff, wet. No PHC odor. (0,40,60) 7.5 to 8.0 ft. No sand	CL			0	
10						Borehole grouted on 05/15/14 using neat cement grout and a tremie pipe. Mr. Steve Miller with Alameda County Public Works Agency gave verbal permission to grout the borehole. Drilling Notes: 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.
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P&D ENVIRONMENTAL, INC.

BORING NO.: B5	PROJECT NO.: 0675	PROJECT NAME: 475 Lesser Street, Oakland	
BORING LOCATION: Approximately 160 ft. west of Oakport Street on south side of Lesser Street		ELEVATION AND DATUM: None	
DRILLING AGENCY: Vironex, Inc.	DRILLER: Scott	DATE & TIME STARTED: 05/15/14 0730	DATE & TIME FINISHED: 05/15/14 1200
DRILLING EQUIPMENT: Geoprobe 6600			
COMPLETION DEPTH: 10.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLBD	CHECKED BY: PMK
FIRST WATER DEPTH: 5.5 Feet	NO. OF SAMPLES: 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 1.5 ft. Concrete (12-inches) and base rock.			No Well Constructed		Borehole was continuously cored from 1.5 to 10.0 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.
	1.5 to 3.5 ft. Brown gravelly silty sand (FILL); medium dense, moist, with few coarse angular gravel to 0.5-inch diameter. No Petroleum Hydrocarbon (PHC) odor. (15,70,15)	FILL		▼	0	
	3.5 to 4.0 ft. Gray fine sand (SP); medium dense, moist. No PHC odor. (0,95,5)	SP				0.0 to 5.0 ft. 3.8 ft. recovery
	4.0 to 5.0 ft. Black clay (CL); medium stiff, moist, with olive-gray mottling. No PHC odor. (0,0,100)	CL			0	5.0 to 10.0 ft. No recovery
5				▽		Water encountered during drilling at 5.5 ft. at 0755. Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 2.1 ft. at 0802 and at 1.9 ft. at 0812.
	5.0 to 10.0 ft. No recovery. Gray gravelly clayey sand in shoe (SC); loose, saturated, large coarse angular gravel to 1.0-inch diameter. No PHC odor. (0,0,100) Wet at 5.0 ft. Saturated at 5.5 ft.	SC			0	Approximately 0.3-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing attached to a peristaltic pump. Water sample B5-W collected at 0810 directly from the discharge tubing. No odor or sheen on sample. Water level subsequently measured at 2.1 ft. at 0837.
10						Borehole grouted on 05/15/14 using neat cement grout and a tremie pipe.
15						Mr. Steve Miller with Alameda County Public Works Agency onsite to observe and document grouting of the borehole.
20						Drilling Notes:
						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.
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P&D ENVIRONMENTAL, INC.

BORING NO.: B6	PROJECT NO.: 0675	PROJECT NAME: 475 Lesser Street, Oakland	
BORING LOCATION: Approximately 20 ft. north of Lesser Street on the east side of Malat Street		ELEVATION AND DATUM: None	
DRILLING AGENCY: Vironex, Inc.	DRILLER: Scott	DATE & TIME STARTED: 05/15/14 0900	DATE & TIME FINISHED: 05/15/14 1200
DRILLING EQUIPMENT: Geoprobe 6600			
COMPLETION DEPTH: 10.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLBD	CHECKED BY:
FIRST WATER DEPTH: 4.5 Feet	NO. OF SAMPLES: 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 1.5 ft. Concrete (12-inches) and base rock.			No Well Constructed		Borehole was continuously cored from 1.5 to 10.0 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.
	1.5 to 3.5 ft. Brown gravelly silty sand (FILL); medium dense, moist, with few coarse angular gravel to 0.5-inch diameter. No Petroleum Hydrocarbon (PHC) odor. (15,70,15)	FILL			0	
	3.5 to 6.5 ft. Gray fine sand (SP); loose to medium dense, wet to saturated. No PHC odor. (0,90,10) Wet at 4.0 ft. Saturated at 4.5 ft.	SP		▼ ▽	0	0.0 to 5.0 ft. 4.2 ft. recovery 5.0 to 10.0 ft. 4.8 ft. recovery Water encountered during drilling at 4.5 ft. at 0920. Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 4.7 ft. at 0930 and at 3.7 ft. at 0940.
5	6.5 to 9.0 ft. Gray clay (CL); medium stiff, moist. No PHC odor. (0,0,100)	CL			0	
	9.0 to 10.0 ft. Grayish-brown clay (CL); medium stiff, moist, with abundant roots. No PHC odor. (0,0,100)					
10						Approximately 0.3-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing attached to a peristaltic pump. Water sample B6-W collected at 0945 directly from the discharge tubing. No odor or sheen on sample. Water level subsequently measured at 5.6 ft. at 1002. Borehole grouted on 05/15/14 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. <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.
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P&D ENVIRONMENTAL, INC.

BORING NO.: B7	PROJECT NO.: 0675	PROJECT NAME: 475 Lesser Street, Oakland	
BORING LOCATION: Approximately 160 ft. north of Lesser Street on the east side of Malat Street		ELEVATION AND DATUM: None	
DRILLING AGENCY: Vironex, Inc.	DRILLER: Scott	DATE & TIME STARTED: 05/15/14 1015	DATE & TIME FINISHED: 05/15/14 1200
DRILLING EQUIPMENT: Geoprobe 6600			
COMPLETION DEPTH: 10.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLBD	CHECKED BY: PMK
FIRST WATER DEPTH: 4.5 Feet	NO. OF SAMPLES: 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 1.5 ft. Concrete (12-inches) and base rock.			No Well Constructed		Borehole was continuously cored from 1.5 to 10.0 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.
	1.5 to 4.0 ft. Brown gravelly silty sand (FILL); medium dense, moist to wet, with few coarse angular gravel to 0.5-inch diameter. No Petroleum Hydrocarbon (PHC) odor. (10,75,15)	FILL		▼	0	
	4.0 to 5.0 ft. Gray sand (SW); loose, saturated. No PHC odor. (0,90,10) Wet at 4.0 ft. Saturated at 4.5 ft.	SW		▽	0	0.0 to 5.0 ft. 4.3 ft. recovery 5.0 to 10.0 ft. 4.8 ft. recovery
5	5.0 to 5.5 ft. Gray silt (ML); medium stiff, moist. No PHC odor. (0,0,100)	ML				Water encountered during drilling at 4.5 ft. at 1045. Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 3.1 ft. at 1055 and at 2.9 ft. at 1105.
	5.5 to 6.5 ft. Gray clay (CL); medium stiff, moist. No PHC odor. (0,0,100)	CL				
	6.5 to 8.5 ft. Grayish-brown gravelly silty sand (SM); loose, saturated, with few coarse angular gravel to 0.5-inch diameter. No PHC odor. (5,80,15)	SM			0	
	8.5 to 9.0 ft. Gray silty clay (CL); medium stiff, moist. No PHC odor. (0,0,100)	CL				
10	9.0 to 10.0 ft. Grayish-brown clay (CL); medium stiff, moist, with abundant roots. No PHC odor. (0,0,100)					Approximately 0.3-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing attached to a peristaltic pump. Water sample B7-W collected at 1115 directly from the discharge tubing. No odor or sheen on sample. Water level subsequently measured at 2.5 ft. at 1122. Borehole grouted on 05/15/14 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. <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.
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P&D ENVIRONMENTAL, INC.

BORING NO.: B8	**PROJECT NO.:** 0675	**PROJECT NAME:** 475 Lesser Street, Oakland	
BORING LOCATION: Approximately 10 ft. north and 70 ft. west of southeast corner of Tez Marble property		**ELEVATION AND DATUM:** None	
DRILLING AGENCY: Vironex, Inc.	**DRILLER:** Scott	**DATE & TIME STARTED:** 05/15/14 1230	**DATE & TIME FINISHED:** 05/15/14 1345
DRILLING EQUIPMENT: Geoprobe 6600			
COMPLETION DEPTH: 10.0 Feet	**BEDROCK DEPTH:** Not Encountered	**LOGGED BY:** MLBD	**CHECKED BY:** PMK
FIRST WATER DEPTH: 5.5 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.			No Well Constructed		Borehole was continuously cored from 0.5 to 10.0 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 3.5 ft. Brown gravelly silty sand (FILL); medium dense, moist to wet, with few coarse angular gravel to 0.5-inch diameter. No Petroleum Hydrocarbon (PHC) odor. (5,80,15)	FILL		▼	0	
	3.5 to 4.0 ft. Dark brown sandy clay (CL); medium stiff, moist. No PHC odor. (0,30,70)	CL				0.0 to 5.0 ft. 4.3 ft. recovery
	4.0 to 5.0 ft. Grayish-brown silt (ML); medium stiff, moist to wet. No PHC odor. (0,0,100)	ML			0	5.0 to 10.0 ft. 4.8 ft. recovery
5	5.0 to 5.5 ft. Dark brown sandy clay (CL); soft, saturated. No PHC odor. (0,25,75) Wet at 5.0 ft. Saturated at 5.5 ft.	CL		▽		Water encountered during drilling at 5.5 ft. at 1250. Temporary 1.0-inch diameter slotted PVC casing placed in borehole. Water level was measured at 3.2 ft. at 1255 and at 2.8 ft. at 1305.
	5.5 to 6.5 ft. Brown sand (SW); loose, saturated. No PHC odor. (0,85,15)	SW				
	6.5 to 7.5 ft. Olive-gray silty clay (CL); medium stiff, moist. No PHC odor. (0,0,100)	CL			0	
	7.5 to 8.5 ft. Grayish-black clay (CL); medium stiff, moist, with olive-brown mottling. No PHC odor. (0,0,100)					
10	8.5 to 10.0 ft. Olive-brown clay (CL); medium stiff, moist, with abundant roots. No PHC odor. (0,0,100)					Approximately 0.3-gallon purged from borehole prior to groundwater sample collection using new unused disposable polyethylene tubing attached to a peristaltic pump. Water sample B8-W collected at 1315 directly from the discharge tubing. No odor or sheen on sample. Water level subsequently measured at 2.8 ft. at 1327.
15						Borehole grouted on 05/15/14 using neat cement grout and a tremie pipe.
						Mr. Steve Miller with Alameda County Public Works Agency gave verbal authorization to grout the borehole.
20						Drilling Notes:
						1) Field estimates of percent gravel, sand, and fines are shown in parentheses.
25						2) Density determinations are qualitative and are not based on quantitative evaluation.
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APPENDIX B

Purge Volume Calculation Sheet and Soil Gas Sampling Field Data Sheet

Report 0675.R2
4.5 feet tubing, 12 inch sand interval, 6 inch non-hydrated bentonite interval

Soil Gas Purge Volume Calculations

One Purge Volume is calculated as the volume of the tubing interior plus the volume of the sand interval of the borehole.

The tubing interior volume is calculated as follows:

V tubing = pi x (r x r) x h, where pi = 3.14, r = 0.187 in./2, and h = 4.5 ft.

V tubing = 3.14 x (0.0935 x 0.0935) x (4.5 ft. x 12 in./ft.) = 1.48 cubic inches.

The sand interval volume is calculated as follows:

V sand interval = pi x (r x r) x h x porosity, where pi = 3.14, r = 1.75 in./2, h = 18 in., and porosity = 0.35

V sand interval = 3.14 x (0.875 x 0.875) x 18 x 0.35 = 15.15 cubic inches.

The total volume for one purge volume is V tubing + V sand interval, where

V total = 1.48 cubic inches + 15.15 cubic inches = 16.63 cubic inches.

To convert to cubic centimeters:

V total = 16.63 cubic inches x 16.39 cubic centimeters/cubic inches = 272.5 cubic centimeters.

The total volume to be purged is 3 purge volumes.

V purge total = 272.5 cubic centimeters x 3 = 818 cubic centimeters.

The flow controller has a nominal flow rate of 150 cubic centimeters per minute.

The purge time is calculated as follows:

T purge = 818 cubic centimeters/ 150 cubic centimeters per minute = 5.45 minutes.

Converting the purge time to seconds, 5.45 minutes x 60seconds/ minute = 327 seconds.

SOIL GAS SAMPLING DATA SHEET

Address 475 LEIBSER ST., OAKLAND
Job # 0645
Date 5/19/14
Sampler Name MLOD
Drilling Company VIRACON, INC

Probe Method (check one)
o PRT
o Temp Well
X Permanent Well
o Vapor Pin

Soil Gas Location Designation	Probe Depth (Ft.)	Time Probe Installation Completed	Canister #	Sample Canister Initial Vacuum Check (In. Hg) and time	Start leak check vacuum (In. Hg) and time	End leak check vacuum (In. Hg) and time	ADDITIONAL leak check vacuum (In. Hg) and time	Start PURGE time	End PURGE time	Start of tracer gas injection time	Begin sample collection vacuum (In. Hg) and time	End sample collection vacuum (In. Hg) and time	PID value in Teflon tube after sample collection	NOTES
SG 1	3	5/16/14	24402	vac -29	vac -22	vac -22	vac				vac -29	vac -29	ppm	WATER PULLED IN TUBING
				time 1010	time 1020	time 1030	time	time 105500	time 110027	time ~~1104~~	time 110200	time 113012	time	
SG 2	3	5/16/14	31783	vac -29	vac	vac	vac				vac	vac	ppm	
				time 1130	time	time	time	time 114800	time 114939	time	time	time	time	WATER PULLED IN TUBING
SG 3	3	5/16/14	31783	vac -29	vac	vac	vac				vac -30	vac -30	ppm	
				time 1130	time	time	time	time 120300	time 120837	time	time 122300	time 123020	time	MANIFOLD GAGE DEFECTIVE
SG 3 DUP	3	5/16/14	22105	vac -29	vac	vac	vac				vac	vac	ppm	
				time 1140	time	time	time	time	time	time	time	time	time	
SG 3				vac	vac -20	vac -20	vac				vac -29	vac ~~-30~~ -29	ppm 175	TEDLAR DFA 133200
				time	time 131100	time 132100	time	time 132600	time 133137	time 1338	time 133400	time 135445	time 1430	
SG 3 DUP				vac	vac	vac	vac				vac	vac	ppm	
				time	time	time	time	time	time	time	time	time	time	
SG 3 SORBENT				vac	vac	vac	vac				vac	vac	ppm	
				time	time	time	time	time	time	time 1403	time 141300	time 141918	time	TEDLAR ISOPROPYL 140504
SG 3 SORBENT REP				vac	vac	vac	vac				vac	vac	ppm 175	
				time	time	time	time	time	time	time 1424	time 142600	time 143718	time 1430	TEDLAR ISOPROPYL 142416
SG				vac	vac	vac	vac				vac	vac	ppm	SORBENT SAMPLES
				time	time	time	time	time	time	time	time	time	time	COLLECTED AT 150 cc/MIN
SG				vac	vac	vac	vac				vac	vac	ppm	
				time	time	time	time	time	time	time	time	time	time	
SG				vac	vac	vac	vac				vac	vac	ppm	
				time	time	time	time	time	time	time	time	time	time	
SG				vac	vac	vac	vac				vac	vac	ppm	
				time	time	time	time	time	time	time	time	time	time	
SG				vac	vac	vac	vac				vac	vac	ppm	
				time	time	time	time	time	time	time	time	time	time	

APPENDIX C

Weather Information

http://www.wunderground.com/weatherstation/WXDailyHistory.asp?ID=KCAALAME7&graphspan=custom&month=5&day=5&year=2014&monthend=5&dayend=19&yearend=2014

Weather History for KCAALAME7

High St Bridge, Alameda, CA

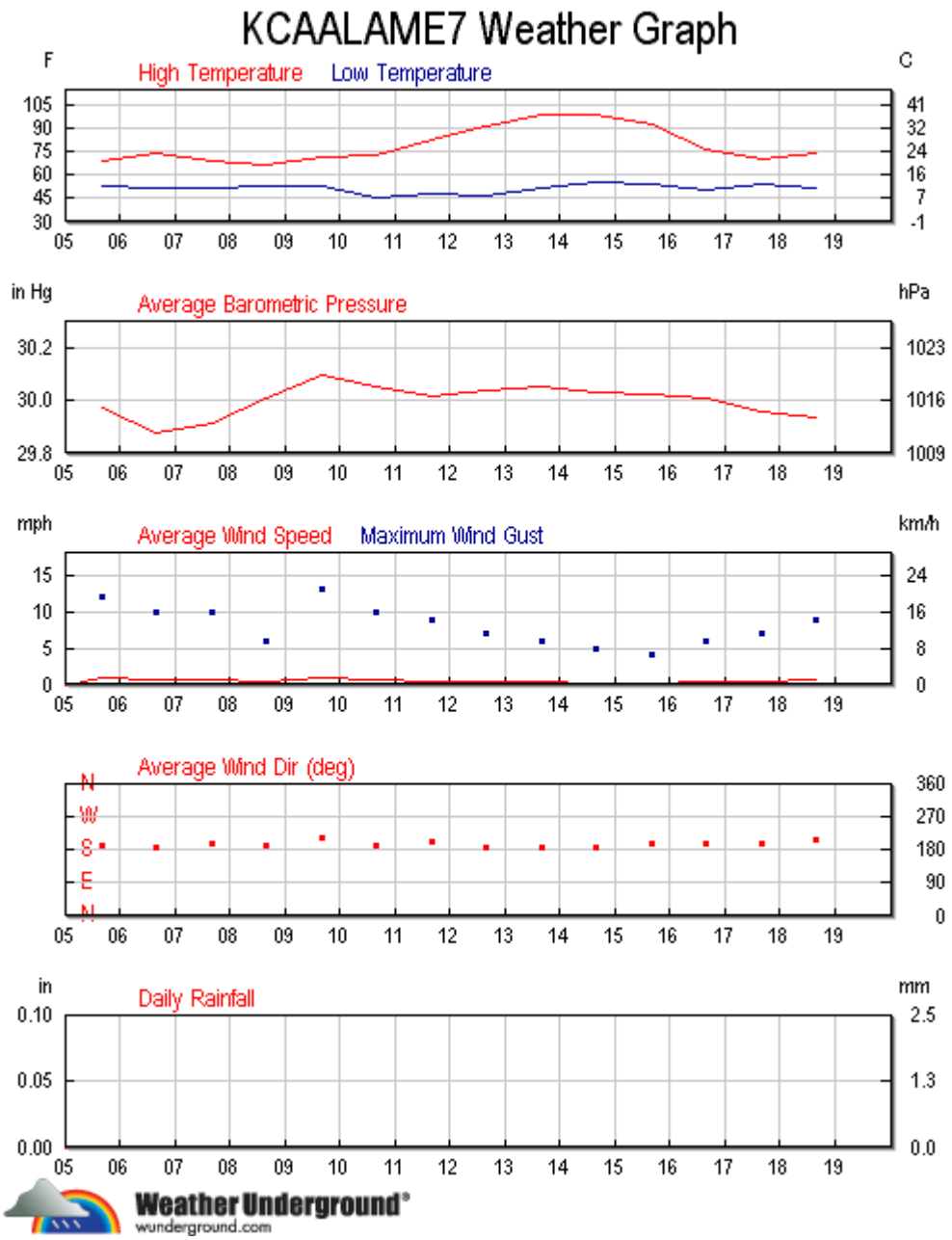
About This Weather Station

Lat: N 37 ° 45 ' 48 " (37.763 °)
Lon: W 122 ° 13 ' 33 " (-122.226 °)
Elevation (ft): 16
Hardware: Davis Vantage VUE
Weather Station Software:

May 5 2014 - TO - May 19 2014 Go

Daily Weekly Monthly Yearly **Custom**

	High:	Low:	Average:
Temperature:	**98.7** °F	**46.0** °F	**63.9** °F
Dew Point:	**58.2** °F	**34.3** °F	**50.5** °F
Humidity:	96.0%	14.0%	66.8%
Wind Speed:	**4.0**mph from the West	-	**0.6**mph
Wind Gust:	**13.0**mph from the SW	-	-
Wind:	-	-	SSW
Pressure:	**30.13**in	**29.83**in	-
Precipitation:	**0.00**in		


KCAALAME7 Weather Graph
F
High Temperature
Low Temperature
C
105
90
75
60
45
30
41
32
24
16
7
-1
05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
in Hg
Average Barometric Pressure
hPa
30.2
30.0
29.8
1023
1016
1009
05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
mph
Average Wind Speed
Maximum Wind Gust
km/h
15
10
5
0
24
16
8
0
05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
Average Wind Dir (deg)
N
W
S
E
N
360
270
180
90
0
05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
in
Daily Rainfall
mm
0.10
0.05
0.00
2.5
1.3
0.0
05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
Weather Underground
wunderground.com

http://www.wunderground.com/weatherstation/WXDailyHistory.asp?ID=KCAALAME7&graphspan=day&month=5&day=19&year=2014

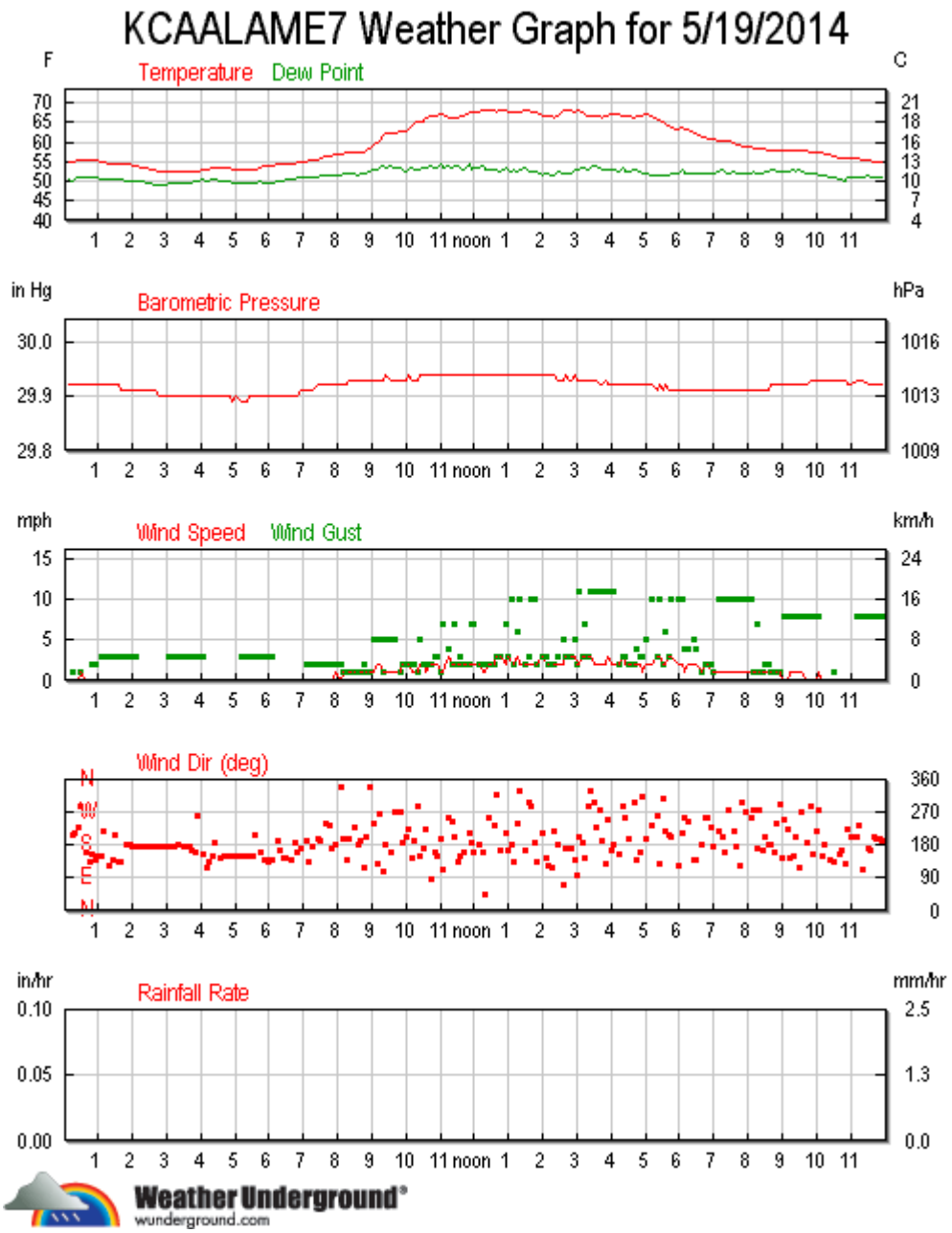
« Previous Day | May 19 2014 View | Next Day »

Daily Weekly Monthly Yearly Custom

	Current:	High:	Low:	Average:
Temperature:	**66.1** °F	**69.1** °F	**53.2** °F	**60.7** °F
Dew Point:	**53.6** °F	**55.2** °F	**49.9** °F	**52.6** °F
Humidity:	64%	91%	56%	76%
Wind Speed:	**2.0**mph	**3.0**mph	-	**1.0**mph
Wind Gust:	**2.0**mph	**11.0**mph	-	-
Wind:	South	-	-	SSW
Pressure:	**29.94**in	**29.94**in	**29.89**in	-
Precipitation:	**0.00**in			

Weather History for the Rest of This Month

	High:	Low:	Average:
Temperature:	**98.7** °F	**46.0** °F	**63.8** °F
Dew Point:	**59.4** °F	**34.3** °F	**51.6** °F
Humidity:	97.0%	14.0%	68.9%
Wind Speed:	**4.0**mph from the West	-	**0.5**mph
Wind Gust:	**192.0**mph from the West	-	-
Wind:	-	-	SSW
Pressure:	**30.13**in	**29.83**in	-
Precipitation:	**0.00**in		

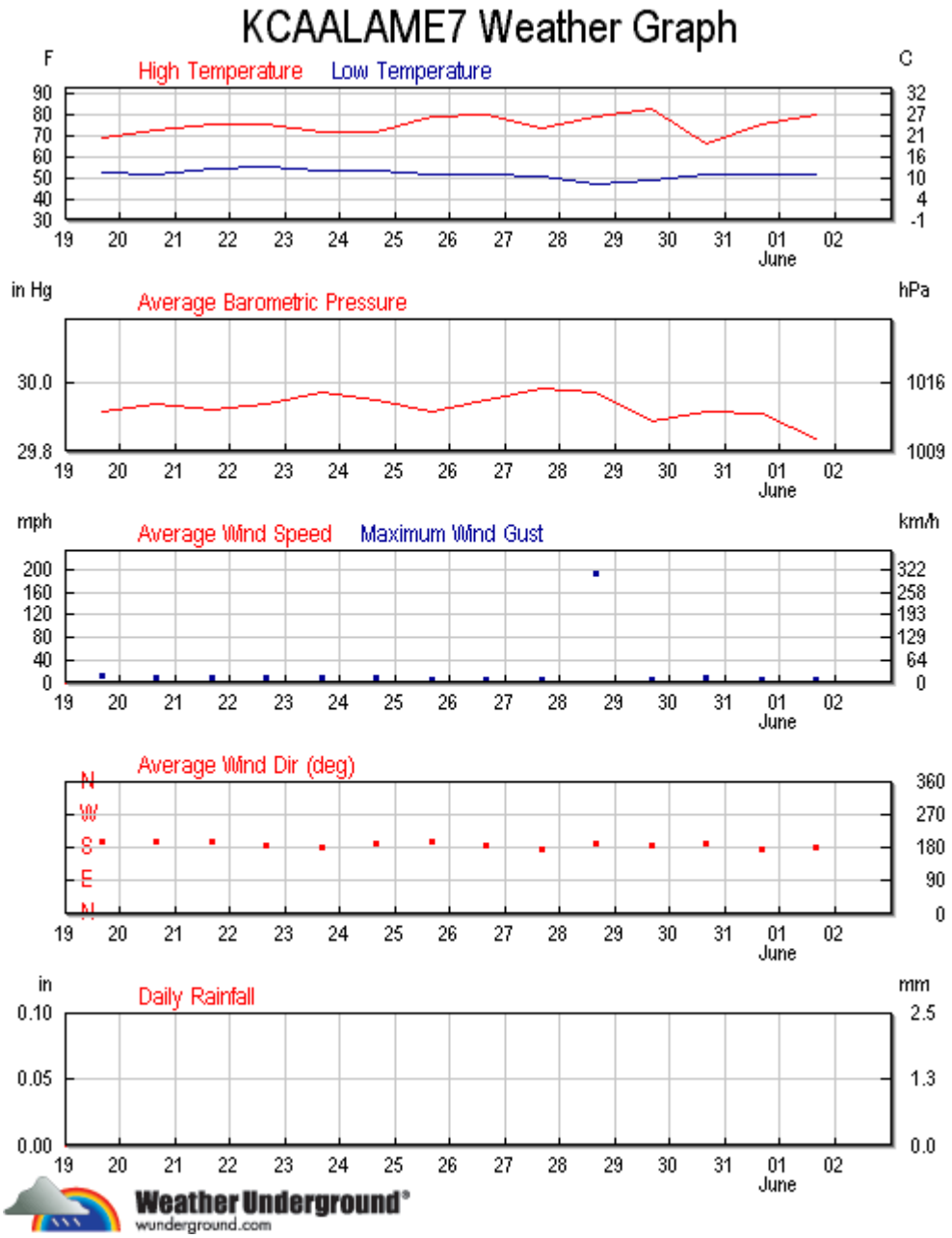

KCAALAME7 Weather Graph for 5/19/2014
F
Temperature
Dew Point
C
70 65 60 55 50 45 40
21 18 16 13 10 7 4
1 2 3 4 5 6 7 8 9 10 11 noon 1 2 3 4 5 6 7 8 9 10 11
in Hg
Barometric Pressure
hPa
30.0 29.9 29.8
1016 1013 1009
mph
Wind Speed
Wind Gust
km/h
15 10 5 0
24 16 8 0
Wind Dir (deg)
N W S E N
360 270 180 90 0
in/hr
Rainfall Rate
mm/hr
0.10 0.05 0.00
2.5 1.3 0.0
Weather Underground
wunderground.com

http://www.wunderground.com/weatherstation/WXDailyHistory.asp?ID=KCAALAME7&graphspan=custom&month=5&day=19&year=2014&monthend=6&dayend=2&yearend=2014

May 19 2014 - TO - June 2 2014 Go

Daily Weekly Monthly Yearly **Custom**

	High:	Low:	Average:
Temperature:	**82.8** °F	**47.7** °F	**62.2** °F
Dew Point:	**59.4** °F	**40.2** °F	**52.7** °F
Humidity:	96.0%	24.0%	73.7%
Wind Speed:	**3.0**mph from the West	-	**0.5**mph
Wind Gust:	**192.0**mph from the West	-	-
Wind:	-	-	South
Pressure:	**30.04**in	**29.77**in	-
Precipitation:	**0.00**in		


KCAALAME7 Weather Graph
F
High Temperature
Low Temperature
C
90 80 70 60 50 40 30
32 27 21 16 10 4 -1
19 20 21 22 23 24 25 26 27 28 29 30 31 01 02
June
in Hg
Average Barometric Pressure
hPa
30.0
29.8
1016
1009
19 20 21 22 23 24 25 26 27 28 29 30 31 01 02
June
mph
Average Wind Speed
Maximum Wind Gust
km/h
200 160 120 80 40 0
322 258 193 129 64 0
19 20 21 22 23 24 25 26 27 28 29 30 31 01 02
June
Average Wind Dir (deg)
N W S E N
360 270 180 90 0
19 20 21 22 23 24 25 26 27 28 29 30 31 01 02
June
in
Daily Rainfall
mm
0.10 0.05 0.00
2.5 1.3 0.0
19 20 21 22 23 24 25 26 27 28 29 30 31 01 02
June
Weather Underground
wunderground.com

APPENDIX D

Laboratory Analytical Reports and Chain of Custody Documentation

- **McCampbell Work Order # 1405698: Soil Samples B1A-3.0 and B1A-5.5 TPH-G, TPH-D, TPH-MO, MBTEX and SVOC Results**
- **McCampbell Work Order # 1405703: Water Samples B5-W, B6-W, B7-W, and B8-W TPH-G, TPH-D, TPH-MO, and VOC Results**
- **Air Toxics Work Order # 1405390A: Soil Gas Samples SG3 and SG3-DUP TPH-G, MBTEX, and 1,1-DFA Results**
- **Air Toxics Work Order # 1405369: Soil Gas Samples SG3 and SG3-DUP Naphthalene and 2-Propanol Results**
- **Air Toxics Work Order # 1405390B: Soil Gas Samples SG3 and SG3-DUP Oxygen, Methane, and Carbon Dioxide Results**
- **Air Toxics Work Order # 1405368: Soil Gas Sampling Shroud Samples SG3 DFA, SG3 ISOPROPYL, and SG3 REP ISOPROPYL 1,1-DFA and 2-Propanol Results**

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1405698

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

Project Contact: Paul King
Project P.O.:
Project Name: #0675; 475 Lesser St. Oakland

Project Received: 05/16/2014

Analytical Report reviewed & approved for release on 05/27/2014 by:

Question about your data?

Click here to email McCampbell

Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3

McCampbell Analytical, Inc.
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0675; 475 Lesser St. Oakland
WorkOrder: 1405698

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.
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

a3	sample diluted due to high organic content.
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW3550B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8270C
Date Prepared:	5/17/14	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-3.0	**1405698-001A**	**Soil**	**05/15/2014 14:15**	**GC21**	**90528**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	05/19/2014 16:57
Acenaphthylene	ND	0.25	1	05/19/2014 16:57
Acetochlor	ND	0.25	1	05/19/2014 16:57
Anthracene	ND	0.25	1	05/19/2014 16:57
Benzidine	ND	1.3	1	05/19/2014 16:57
Benzo (a) anthracene	ND	0.25	1	05/19/2014 16:57
Benzo (b) fluoranthene	ND	0.25	1	05/19/2014 16:57
Benzo (k) fluoranthene	ND	0.25	1	05/19/2014 16:57
Benzo (g,h,i) perylene	ND	0.25	1	05/19/2014 16:57
Benzo (a) pyrene	ND	0.25	1	05/19/2014 16:57
Benzyl Alcohol	ND	1.3	1	05/19/2014 16:57
1,1-Biphenyl	ND	0.25	1	05/19/2014 16:57
Bis (2-chloroethoxy) Methane	ND	0.25	1	05/19/2014 16:57
Bis (2-chloroethyl) Ether	ND	0.25	1	05/19/2014 16:57
Bis (2-chloroisopropyl) Ether	ND	0.25	1	05/19/2014 16:57
Bis (2-ethylhexyl) Adipate	ND	0.25	1	05/19/2014 16:57
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	05/19/2014 16:57
4-Bromophenyl Phenyl Ether	ND	0.25	1	05/19/2014 16:57
Butylbenzyl Phthalate	ND	0.25	1	05/19/2014 16:57
4-Chloroaniline	ND	0.25	1	05/19/2014 16:57
4-Chloro-3-methylphenol	ND	0.25	1	05/19/2014 16:57
2-Chloronaphthalene	ND	0.25	1	05/19/2014 16:57
2-Chlorophenol	ND	0.25	1	05/19/2014 16:57
4-Chlorophenyl Phenyl Ether	ND	0.25	1	05/19/2014 16:57
Chrysene	ND	0.25	1	05/19/2014 16:57
Dibenzo (a,h) anthracene	ND	0.25	1	05/19/2014 16:57
Dibenzofuran	ND	0.25	1	05/19/2014 16:57
Di-n-butyl Phthalate	ND	0.25	1	05/19/2014 16:57
1,2-Dichlorobenzene	ND	0.25	1	05/19/2014 16:57
1,3-Dichlorobenzene	ND	0.25	1	05/19/2014 16:57
1,4-Dichlorobenzene	ND	0.25	1	05/19/2014 16:57
3,3-Dichlorobenzidine	ND	0.50	1	05/19/2014 16:57
2,4-Dichlorophenol	ND	0.25	1	05/19/2014 16:57
Diethyl Phthalate	ND	0.25	1	05/19/2014 16:57
2,4-Dimethylphenol	ND	0.25	1	05/19/2014 16:57
Dimethyl Phthalate	ND	0.25	1	05/19/2014 16:57
4,6-Dinitro-2-methylphenol	ND	1.3	1	05/19/2014 16:57
2,4-Dinitrophenol	ND	6.3	1	05/19/2014 16:57

(Cont.)

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW3550B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8270C
Date Prepared:	5/17/14	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-3.0	**1405698-001A**	**Soil**	**05/15/2014 14:15**	**GC21**	**90528**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	0.25	1	05/19/2014 16:57
2,6-Dinitrotoluene	ND	0.25	1	05/19/2014 16:57
Di-n-octyl Phthalate	ND	0.50	1	05/19/2014 16:57
1,2-Diphenylhydrazine	ND	0.25	1	05/19/2014 16:57
Fluoranthene	ND	0.25	1	05/19/2014 16:57
Fluorene	ND	0.25	1	05/19/2014 16:57
Hexachlorobenzene	ND	0.25	1	05/19/2014 16:57
Hexachlorobutadiene	ND	0.25	1	05/19/2014 16:57
Hexachlorocyclopentadiene	ND	1.3	1	05/19/2014 16:57
Hexachloroethane	ND	0.25	1	05/19/2014 16:57
Indeno (1,2,3-cd) pyrene	ND	0.25	1	05/19/2014 16:57
Isophorone	ND	0.25	1	05/19/2014 16:57
2-Methylnaphthalene	ND	0.25	1	05/19/2014 16:57
2-Methylphenol (o-Cresol)	ND	0.25	1	05/19/2014 16:57
3 &/or 4-Methylphenol (m,p-Cresol)	ND	0.25	1	05/19/2014 16:57
Naphthalene	ND	0.25	1	05/19/2014 16:57
2-Nitroaniline	ND	1.3	1	05/19/2014 16:57
3-Nitroaniline	ND	1.3	1	05/19/2014 16:57
4-Nitroaniline	ND	1.3	1	05/19/2014 16:57
Nitrobenzene	ND	0.25	1	05/19/2014 16:57
2-Nitrophenol	ND	1.3	1	05/19/2014 16:57
4-Nitrophenol	ND	1.3	1	05/19/2014 16:57
N-Nitrosodiphenylamine	ND	0.25	1	05/19/2014 16:57
N-Nitrosodi-n-propylamine	ND	0.25	1	05/19/2014 16:57
Pentachlorophenol	ND	1.3	1	05/19/2014 16:57
Phenanthrene	ND	0.25	1	05/19/2014 16:57
Phenol	ND	0.25	1	05/19/2014 16:57
Pyrene	ND	0.25	1	05/19/2014 16:57
1,2,4-Trichlorobenzene	ND	0.25	1	05/19/2014 16:57
2,4,5-Trichlorophenol	ND	0.25	1	05/19/2014 16:57
2,4,6-Trichlorophenol	ND	0.25	1	05/19/2014 16:57

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP HK Analyst's Initial Angela Rydelius, Lab Manager

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW3550B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8270C
Date Prepared:	5/17/14	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-3.0	**1405698-001A**	**Soil**	**05/15/2014 14:15**	**GC21**	**90528**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
2-Fluorophenol	103	30-130		05/19/2014 16:57
Phenol-d5	100	30-130		05/19/2014 16:57
Nitrobenzene-d5	89	30-130		05/19/2014 16:57
2-Fluorobiphenyl	89	30-130		05/19/2014 16:57
2,4,6-Tribromophenol	83	16-130		05/19/2014 16:57
4-Terphenyl-d14	110	30-130		05/19/2014 16:57

(Cont.)

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW3550B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8270C
Date Prepared:	5/17/14	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-5.5	**1405698-002A**	**Soil**	**05/15/2014 14:20**	**GC21**	**90528**

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	1.2	5	05/19/2014 17:25
Acenaphthylene	ND	1.2	5	05/19/2014 17:25
Acetochlor	ND	1.2	5	05/19/2014 17:25
Anthracene	ND	1.2	5	05/19/2014 17:25
Benzidine	ND	6.5	5	05/19/2014 17:25
Benzo (a) anthracene	ND	1.2	5	05/19/2014 17:25
Benzo (b) fluoranthene	ND	1.2	5	05/19/2014 17:25
Benzo (k) fluoranthene	ND	1.2	5	05/19/2014 17:25
Benzo (g,h,i) perylene	ND	1.2	5	05/19/2014 17:25
Benzo (a) pyrene	ND	1.2	5	05/19/2014 17:25
Benzyl Alcohol	ND	6.5	5	05/19/2014 17:25
1,1-Biphenyl	ND	1.2	5	05/19/2014 17:25
Bis (2-chloroethoxy) Methane	ND	1.2	5	05/19/2014 17:25
Bis (2-chloroethyl) Ether	ND	1.2	5	05/19/2014 17:25
Bis (2-chloroisopropyl) Ether	ND	1.2	5	05/19/2014 17:25
Bis (2-ethylhexyl) Adipate	ND	1.2	5	05/19/2014 17:25
Bis (2-ethylhexyl) Phthalate	ND	1.2	5	05/19/2014 17:25
4-Bromophenyl Phenyl Ether	ND	1.2	5	05/19/2014 17:25
Butylbenzyl Phthalate	ND	1.2	5	05/19/2014 17:25
4-Chloroaniline	ND	1.2	5	05/19/2014 17:25
4-Chloro-3-methylphenol	ND	1.2	5	05/19/2014 17:25
2-Chloronaphthalene	ND	1.2	5	05/19/2014 17:25
2-Chlorophenol	ND	1.2	5	05/19/2014 17:25
4-Chlorophenyl Phenyl Ether	ND	1.2	5	05/19/2014 17:25
Chrysene	ND	1.2	5	05/19/2014 17:25
Dibenzo (a,h) anthracene	ND	1.2	5	05/19/2014 17:25
Dibenzofuran	ND	1.2	5	05/19/2014 17:25
Di-n-butyl Phthalate	ND	1.2	5	05/19/2014 17:25
1,2-Dichlorobenzene	ND	1.2	5	05/19/2014 17:25
1,3-Dichlorobenzene	ND	1.2	5	05/19/2014 17:25
1,4-Dichlorobenzene	ND	1.2	5	05/19/2014 17:25
3,3-Dichlorobenzidine	ND	2.5	5	05/19/2014 17:25
2,4-Dichlorophenol	ND	1.2	5	05/19/2014 17:25
Diethyl Phthalate	ND	1.2	5	05/19/2014 17:25
2,4-Dimethylphenol	ND	1.2	5	05/19/2014 17:25
Dimethyl Phthalate	ND	1.2	5	05/19/2014 17:25
4,6-Dinitro-2-methylphenol	ND	6.5	5	05/19/2014 17:25
2,4-Dinitrophenol	ND	32	5	05/19/2014 17:25

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW3550B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8270C
Date Prepared:	5/17/14	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-5.5	**1405698-002A**	**Soil**	**05/15/2014 14:20**	**GC21**	**90528**

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrotoluene	ND	1.2	5	05/19/2014 17:25
2,6-Dinitrotoluene	ND	1.2	5	05/19/2014 17:25
Di-n-octyl Phthalate	ND	2.5	5	05/19/2014 17:25
1,2-Diphenylhydrazine	ND	1.2	5	05/19/2014 17:25
Fluoranthene	ND	1.2	5	05/19/2014 17:25
Fluorene	ND	1.2	5	05/19/2014 17:25
Hexachlorobenzene	ND	1.2	5	05/19/2014 17:25
Hexachlorobutadiene	ND	1.2	5	05/19/2014 17:25
Hexachlorocyclopentadiene	ND	6.5	5	05/19/2014 17:25
Hexachloroethane	ND	1.2	5	05/19/2014 17:25
Indeno (1,2,3-cd) pyrene	ND	1.2	5	05/19/2014 17:25
Isophorone	ND	1.2	5	05/19/2014 17:25
2-Methylnaphthalene	ND	1.2	5	05/19/2014 17:25
2-Methylphenol (o-Cresol)	ND	1.2	5	05/19/2014 17:25
3 &/or 4-Methylphenol (m,p-Cresol)	ND	1.2	5	05/19/2014 17:25
Naphthalene	ND	1.2	5	05/19/2014 17:25
2-Nitroaniline	ND	6.5	5	05/19/2014 17:25
3-Nitroaniline	ND	6.5	5	05/19/2014 17:25
4-Nitroaniline	ND	6.5	5	05/19/2014 17:25
Nitrobenzene	ND	1.2	5	05/19/2014 17:25
2-Nitrophenol	ND	6.5	5	05/19/2014 17:25
4-Nitrophenol	ND	6.5	5	05/19/2014 17:25
N-Nitrosodiphenylamine	ND	1.2	5	05/19/2014 17:25
N-Nitrosodi-n-propylamine	ND	1.2	5	05/19/2014 17:25
Pentachlorophenol	ND	6.5	5	05/19/2014 17:25
Phenanthrene	ND	1.2	5	05/19/2014 17:25
Phenol	ND	1.2	5	05/19/2014 17:25
Pyrene	ND	1.2	5	05/19/2014 17:25
1,2,4-Trichlorobenzene	ND	1.2	5	05/19/2014 17:25
2,4,5-Trichlorophenol	ND	1.2	5	05/19/2014 17:25
2,4,6-Trichlorophenol	ND	1.2	5	05/19/2014 17:25

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW3550B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8270C
Date Prepared:	5/17/14	**Unit:**	mg/Kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-5.5	**1405698-002A**	**Soil**	**05/15/2014 14:20**	**GC21**	**90528**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits	Analytical Comments: a3	
2-Fluorophenol	98	30-130		05/19/2014 17:25
Phenol-d5	94	30-130		05/19/2014 17:25
Nitrobenzene-d5	83	30-130		05/19/2014 17:25
2-Fluorobiphenyl	89	30-130		05/19/2014 17:25
2,4,6-Tribromophenol	68	16-130		05/19/2014 17:25
4-Terphenyl-d14	111	30-130		05/19/2014 17:25

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	5/16/14	**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
B1A-3.0	**1405698-001A**	**Soil**	**05/15/2014 14:15**	**GC19**	**90548**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2014 20:30
MTBE	---	0.050	1	05/19/2014 20:30
Benzene	---	0.0050	1	05/19/2014 20:30
Toluene	---	0.0050	1	05/19/2014 20:30
Ethylbenzene	---	0.0050	1	05/19/2014 20:30
Xylenes	---	0.0050	1	05/19/2014 20:30

Surrogates	REC (%)	Limits	
2-Fluorotoluene	97	70-130	05/19/2014 20:30

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-5.5	**1405698-002A**	**Soil**	**05/15/2014 14:20**	**GC19**	**90548**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	05/19/2014 21:00
MTBE	---	0.050	1	05/19/2014 21:00
Benzene	---	0.0050	1	05/19/2014 21:00
Toluene	---	0.0050	1	05/19/2014 21:00
Ethylbenzene	---	0.0050	1	05/19/2014 21:00
Xylenes	---	0.0050	1	05/19/2014 21:00

Surrogates	REC (%)	Limits	
2-Fluorotoluene	94	70-130	05/19/2014 21:00

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8260B
Date Prepared:	5/16/14	**Unit:**	mg/kg

MTBE and BTEX by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-3.0	**1405698-001A**	**Soil**	**05/15/2014 14:15**	**GC10**	**90545**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/22/2014 12:07
Ethylbenzene	ND	0.0050	1	05/22/2014 12:07
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/22/2014 12:07
Toluene	ND	0.0050	1	05/22/2014 12:07
Xylenes, Total	ND	0.0050	1	05/22/2014 12:07
Surrogates	REC (%)	Limits		
Dibromofluoromethane	108	70-130		05/22/2014 12:07
Toluene-d8	109	70-130		05/22/2014 12:07

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-5.5	**1405698-002A**	**Soil**	**05/15/2014 14:20**	**GC10**	**90545**

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	05/22/2014 12:49
Ethylbenzene	ND	0.0050	1	05/22/2014 12:49
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/22/2014 12:49
Toluene	ND	0.0050	1	05/22/2014 12:49
Xylenes, Total	ND	0.0050	1	05/22/2014 12:49
Surrogates	REC (%)	Limits		
Dibromofluoromethane	107	70-130		05/22/2014 12:49
Toluene-d8	109	70-130		05/22/2014 12:49

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Project:	#0675; 475 Lesser St. Oakland	**Extraction Method:**	SW3550B
Date Received:	5/16/14 20:10	**Analytical Method:**	SW8015B
Date Prepared:	5/16/14	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-3.0	**1405698-001A**	**Soil**	**05/15/2014 14:15**	**GC2A**	**90550**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.2**	1.0	1	05/27/2014 13:45
TPH-Motor Oil (C18-C36)	**17**	5.0	1	05/27/2014 13:45

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2	
C9	100	70-130		05/27/2014 13:45

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B1A-5.5	**1405698-002A**	**Soil**	**05/15/2014 14:20**	**GC11A**	**90550**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**7.5**	1.0	1	05/24/2014 18:34
TPH-Motor Oil (C18-C36)	**78**	5.0	1	05/24/2014 18:34

Surrogates	REC (%)	Limits	Analytical Comments: e7,e2	
C9	96	70-130		05/24/2014 18:34

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90528
Date Analyzed:	5/16/14	**Extraction Method:**	SW3550B
Instrument:	GC21	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90528 1405574-003AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.21	0.25	5	-	84.1	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	5.31	0.25	5	-	106	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.05	0.25	5	-	101	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	4.44	0.25	5	-	88.9	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	4.72	0.25	5	-	94.5	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90528
Date Analyzed:	5/16/14	**Extraction Method:**	SW3550B
Instrument:	GC21	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90528 1405574-003AMS/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	3.95	1.3	5	-	79	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	5.12	0.25	5	-	102	30-130
Pentachlorophenol	ND	4.16	1.3	5	-	83.2	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.91	0.25	5	-	98.1	30-130
Pyrene	ND	4.84	0.25	5	-	96.8	30-130
1,2,4-Trichlorobenzene	ND	4.77	0.25	5	-	95.4	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-
Surrogate Recovery							
2-Fluorophenol	4.33	4.54		5	87	91	30-130
Phenol-d5	4.29	4.43		5	86	89	30-130
Nitrobenzene-d5	3.98	4.21		5	80	84	30-130
2-Fluorobiphenyl	4.03	4.21		5	81	84	30-130
2,4,6-Tribromophenol	3.58	4.00		5	72	80	16-130
4-Terphenyl-d14	4.91	5.44		5	98	109	30-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90528
Date Analyzed:	5/16/14	**Extraction Method:**	SW3550B
Instrument:	GC21	**Analytical Method:**	SW8270C
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90528 1405574-003AMS/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	NR	NR	0	ND<10	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR	0	ND<10	NR	NR	-	NR	
2-Chlorophenol	NR	NR	0	ND<10	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR	0	ND<10	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR	0	ND<10	NR	NR	-	NR	
4-Nitrophenol	NR	NR	0	ND<52	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR	0	ND<10	NR	NR	-	NR	
Pentachlorophenol	NR	NR	0	ND<52	NR	NR	-	NR	
Phenol	NR	NR	0	ND<10	NR	NR	-	NR	
Pyrene	NR	NR	0	ND<10	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR	0	ND<10	NR	NR	-	NR	
Surrogate Recovery									
2-Fluorophenol	NR	NR	0		NR	NR	-	NR	
Phenol-d5	NR	NR	0		NR	NR	-	NR	
Nitrobenzene-d5	NR	NR	0		NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR	0		NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR	0		NR	NR	-	NR	
4-Terphenyl-d14	NR	NR	0		NR	NR	-	NR	

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90548
Date Analyzed:	5/16/14	**Extraction Method:**	SW5030B
Instrument:	GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90548 1405695-009AMS/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	0.658	0.40	0.60	-	110	70-130
MTBE	ND	0.0821	0.050	0.10	-	82.1	70-130
Benzene	ND	0.106	0.0050	0.10	-	106	70-130
Toluene	ND	0.105	0.0050	0.10	-	105	70-130
Ethylbenzene	ND	0.111	0.0050	0.10	-	111	70-130
Xylenes	ND	0.338	0.0050	0.30	-	113	70-130
Surrogate Recovery							
2-Fluorotoluene	0.106	0.108		0.10	106	108	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.607	0.604	0.60	ND	101	101	70-130	0	20
MTBE	0.0789	0.0791	0.10	ND	78.9	79.1	70-130	0.243	20
Benzene	0.105	0.104	0.10	ND	105	104	70-130	0.760	20
Toluene	0.102	0.102	0.10	ND	103	102	70-130	0.282	20
Ethylbenzene	0.108	0.108	0.10	ND	107	108	70-130	0.120	20
Xylenes	0.328	0.327	0.30	ND	109	109	70-130	0	20
Surrogate Recovery									
2-Fluorotoluene	0.106	0.105	0.10		106	105	70-130	0.687	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90545
Date Analyzed:	5/16/14 - 5/17/14	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90545 1405693-001AMS/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	-	0.0050	-	-	-	-
Benzene	ND	0.0432	0.0050	0.050	-	86.3	70-130
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	-	0.050	-	-	-	-
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	-	0.0050	-	-	-	-
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	-	0.0040	-	-	-	-
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	-	0.0040	-	-	-	-
1,1-Dichloroethene	ND	-	0.0050	-	-	-	-
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.)

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90545
Date Analyzed:	5/16/14 - 5/17/14	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90545 1405693-001AMS/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	-	0.0050	-	-	-	-
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	0.0050	-	-	-	-
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	0.0457	0.0050	0.050	-	91.3	70-130
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	0.0475	0.0050	0.050	-	94.9	70-130
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	-	0.0050	-	-	-	-
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	0.130	0.183		0.18	104	105	70-130
Toluene-d8	0.138	0.191		0.18	111	109	70-130
4-BFB	0.0111	-		0.0125	89	-	-

(Cont.)

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90545
Date Analyzed:	5/16/14 - 5/17/14	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90545 1405693-001AMS/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
Benzene	0.0393	0.0399	0.050	ND	78.7	79.7	70-130	1.35	30
Methyl-t-butyl ether (MTBE)	0.0416	0.0423	0.050	ND	83.1	84.5	70-130	1.69	30
Toluene	0.0409	0.0420	0.050	ND	81.9	83.9	70-130	2.47	30
Surrogate Recovery									
Dibromofluoromethane	0.181	0.180	0.18		104	103	70-130	0.577	30
Toluene-d8	0.182	0.183	0.18		104	104	70-130	0	30

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405698
Date Prepared:	5/16/14	**BatchID:**	90550
Date Analyzed:	5/18/14 - 5/19/14	**Extraction Method:**	SW3550B
Instrument:	GC11A, GC6A	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	#0675; 475 Lesser St. Oakland	**Sample ID:**	MB/LCS-90550 1405695-008AMS/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	40.3	1.0	40	-	101	70-130
Surrogate Recovery							
C9	23.4	29.4		25	93	118	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)	NR	NR	0	170	NR	NR	-	NR	
Surrogate Recovery									
C9	NR	NR	0		NR	NR	-	NR	

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1405698 **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: #0675; 475 Lesser St. Oakland

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

Requested TAT: 5 days

Date Received: 05/16/2014
Date Printed: 05/19/2014

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
1405698-001	B1A-3.0	Soil	5/15/2014 14:15	☐	A	A	A									
1405698-002	B1A-5.5	Soil	5/15/2014 14:20	☐	A	A	A									

Test Legend:

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

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

Prepared by: Ana Venegas

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.

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0675; 475 Lesser St. Oakland
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1405698
Date Received: 5/16/2014

☐ 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
1405698-001A	B1A-3.0	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	☐	5/15/2014 14:15	5 days		☐	
			SW8260B (MTBE & BTEX)			☐		5 days		☐	
			SW8270C (SVOCs)			☐		5 days		☐	
1405698-002A	B1A-5.5	Soil	Multi-Range TPH(g,d,mo)	1	Acetate Liner	☐	5/15/2014 14:20	5 days		☐	
			SW8260B (MTBE & BTEX)			☐		5 days		☐	
			SW8270C (SVOCs)			☐		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

1405698

PAGE 1 OF 1

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

PROJECT NUMBER: 0675

PROJECT NAME: 475 LESSER ST. OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE)
MICHAEL BASS-DESCHENES Michael Bass-Deschenes

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-(G,D,MO)	MTBE & BTEX via EPA 8260B	SVOCs via EPA 8270C	PRESERVATIVE	REMARKS
B1A-3.0	5/15/14	1415	Soil		1	X	X	X	ICE	NORMAL TAT
B1A-5.5	"	1420	"		1	X	X	X	ICE	" "

ICE/t° 2.7 WET lab
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB
PRESERVATION: VOAS | O&G | METALS | OTHER

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment)	LABORATORY:
Michael Bass-Deschenes	5/16	14:25		2	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	Total No. of Containers (This Shipment) 2	MC CAMPBELL ANALYTICAL, INC.
	5/16	18:20		LABORATORY CONTACT: ANGELA RYDELIUS	LABORATORY PHONE NUMBER: (877) 252-9262
RELINQUISHED BY: (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:

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Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **5/16/2014 8:10:02 PM**

Project Name: **#0675; 475 Lesser St. Oakland**

LogIn Reviewed by: Ana Venegas

WorkOrder N°: **1405698** Matrix: Soil

Carrier: Brian STANFORD (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: 3.3°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)

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

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1405703

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

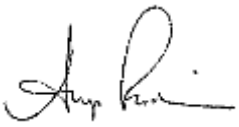
Project Contact: Paul King
Project P.O.:
Project Name: #0675; 475 Lesser St Oakland,Ca

Project Received: 05/16/2014

Analytical Report reviewed & approved for release on 05/27/2014 by:

Question about your data?

Click here to email McCampbell



Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3

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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0675; 475 Lesser St Oakland,Ca
WorkOrder: 1405703

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.
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

e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B5-W	**1405703-001B**	**Water**	**05/15/2014 08:20**	**GC28**	**90662**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	05/22/2014 01:14
tert-Amyl methyl ether (TAME)	ND	0.50	1	05/22/2014 01:14
Benzene	ND	0.50	1	05/22/2014 01:14
Bromobenzene	ND	0.50	1	05/22/2014 01:14
Bromochloromethane	ND	0.50	1	05/22/2014 01:14
Bromodichloromethane	ND	0.50	1	05/22/2014 01:14
Bromoform	ND	0.50	1	05/22/2014 01:14
Bromomethane	ND	0.50	1	05/22/2014 01:14
2-Butanone (MEK)	ND	2.0	1	05/22/2014 01:14
t-Butyl alcohol (TBA)	ND	2.0	1	05/22/2014 01:14
n-Butyl benzene	ND	0.50	1	05/22/2014 01:14
sec-Butyl benzene	ND	0.50	1	05/22/2014 01:14
tert-Butyl benzene	ND	0.50	1	05/22/2014 01:14
Carbon Disulfide	ND	0.50	1	05/22/2014 01:14
Carbon Tetrachloride	ND	0.50	1	05/22/2014 01:14
Chlorobenzene	ND	0.50	1	05/22/2014 01:14
Chloroethane	ND	0.50	1	05/22/2014 01:14
Chloroform	**7.9**	0.50	1	05/22/2014 01:14
Chloromethane	ND	0.50	1	05/22/2014 01:14
2-Chlorotoluene	ND	0.50	1	05/22/2014 01:14
4-Chlorotoluene	ND	0.50	1	05/22/2014 01:14
Dibromochloromethane	ND	0.50	1	05/22/2014 01:14
1,2-Dibromo-3-chloropropane	ND	0.20	1	05/22/2014 01:14
1,2-Dibromoethane (EDB)	ND	0.50	1	05/22/2014 01:14
Dibromomethane	ND	0.50	1	05/22/2014 01:14
1,2-Dichlorobenzene	ND	0.50	1	05/22/2014 01:14
1,3-Dichlorobenzene	ND	0.50	1	05/22/2014 01:14
1,4-Dichlorobenzene	ND	0.50	1	05/22/2014 01:14
Dichlorodifluoromethane	ND	0.50	1	05/22/2014 01:14
1,1-Dichloroethane	ND	0.50	1	05/22/2014 01:14
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/22/2014 01:14
1,1-Dichloroethene	ND	0.50	1	05/22/2014 01:14
cis-1,2-Dichloroethene	ND	0.50	1	05/22/2014 01:14
trans-1,2-Dichloroethene	ND	0.50	1	05/22/2014 01:14
1,2-Dichloropropane	ND	0.50	1	05/22/2014 01:14
1,3-Dichloropropane	ND	0.50	1	05/22/2014 01:14
2,2-Dichloropropane	ND	0.50	1	05/22/2014 01:14
1,1-Dichloropropene	ND	0.50	1	05/22/2014 01:14

(Cont.)

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B5-W	**1405703-001B**	**Water**	**05/15/2014 08:20**	**GC28**	**90662**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	05/22/2014 01:14
trans-1,3-Dichloropropene	ND	0.50	1	05/22/2014 01:14
Diisopropyl ether (DIPE)	ND	0.50	1	05/22/2014 01:14
Ethylbenzene	ND	0.50	1	05/22/2014 01:14
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	05/22/2014 01:14
Freon 113	ND	0.50	1	05/22/2014 01:14
Hexachlorobutadiene	ND	0.50	1	05/22/2014 01:14
Hexachloroethane	ND	0.50	1	05/22/2014 01:14
2-Hexanone	ND	0.50	1	05/22/2014 01:14
Isopropylbenzene	ND	0.50	1	05/22/2014 01:14
4-Isopropyl toluene	ND	0.50	1	05/22/2014 01:14
Methyl-t-butyl ether (MTBE)	ND	0.50	1	05/22/2014 01:14
Methylene chloride	ND	0.50	1	05/22/2014 01:14
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	05/22/2014 01:14
Naphthalene	ND	0.50	1	05/22/2014 01:14
n-Propyl benzene	ND	0.50	1	05/22/2014 01:14
Styrene	ND	0.50	1	05/22/2014 01:14
1,1,1,2-Tetrachloroethane	ND	0.50	1	05/22/2014 01:14
1,1,2,2-Tetrachloroethane	ND	0.50	1	05/22/2014 01:14
Tetrachloroethene	ND	0.50	1	05/22/2014 01:14
Toluene	ND	0.50	1	05/22/2014 01:14
1,2,3-Trichlorobenzene	ND	0.50	1	05/22/2014 01:14
1,2,4-Trichlorobenzene	ND	0.50	1	05/22/2014 01:14
1,1,1-Trichloroethane	ND	0.50	1	05/22/2014 01:14
1,1,2-Trichloroethane	ND	0.50	1	05/22/2014 01:14
Trichloroethene	ND	0.50	1	05/22/2014 01:14
Trichlorofluoromethane	ND	0.50	1	05/22/2014 01:14
1,2,3-Trichloropropane	ND	0.50	1	05/22/2014 01:14
1,2,4-Trimethylbenzene	ND	0.50	1	05/22/2014 01:14
1,3,5-Trimethylbenzene	ND	0.50	1	05/22/2014 01:14
Vinyl Chloride	ND	0.50	1	05/22/2014 01:14
Xylenes, Total	ND	0.50	1	05/22/2014 01:14

Surrogates	REC (%)	Limits	
Dibromofluoromethane	110	70-130	05/22/2014 01:14
Toluene-d8	115	70-130	05/22/2014 01:14
4-BFB	99	70-130	05/22/2014 01:14

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B6-W	**1405703-002B**	**Water**	**05/15/2014 09:45**	**GC28**	**90662**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	05/22/2014 01:52
tert-Amyl methyl ether (TAME)	ND	0.50	1	05/22/2014 01:52
Benzene	ND	0.50	1	05/22/2014 01:52
Bromobenzene	ND	0.50	1	05/22/2014 01:52
Bromochloromethane	ND	0.50	1	05/22/2014 01:52
Bromodichloromethane	ND	0.50	1	05/22/2014 01:52
Bromoform	ND	0.50	1	05/22/2014 01:52
Bromomethane	ND	0.50	1	05/22/2014 01:52
2-Butanone (MEK)	ND	2.0	1	05/22/2014 01:52
t-Butyl alcohol (TBA)	ND	2.0	1	05/22/2014 01:52
n-Butyl benzene	ND	0.50	1	05/22/2014 01:52
sec-Butyl benzene	ND	0.50	1	05/22/2014 01:52
tert-Butyl benzene	ND	0.50	1	05/22/2014 01:52
Carbon Disulfide	**2.0**	0.50	1	05/22/2014 01:52
Carbon Tetrachloride	ND	0.50	1	05/22/2014 01:52
Chlorobenzene	ND	0.50	1	05/22/2014 01:52
Chloroethane	ND	0.50	1	05/22/2014 01:52
Chloroform	ND	0.50	1	05/22/2014 01:52
Chloromethane	ND	0.50	1	05/22/2014 01:52
2-Chlorotoluene	ND	0.50	1	05/22/2014 01:52
4-Chlorotoluene	ND	0.50	1	05/22/2014 01:52
Dibromochloromethane	ND	0.50	1	05/22/2014 01:52
1,2-Dibromo-3-chloropropane	ND	0.20	1	05/22/2014 01:52
1,2-Dibromoethane (EDB)	ND	0.50	1	05/22/2014 01:52
Dibromomethane	ND	0.50	1	05/22/2014 01:52
1,2-Dichlorobenzene	ND	0.50	1	05/22/2014 01:52
1,3-Dichlorobenzene	ND	0.50	1	05/22/2014 01:52
1,4-Dichlorobenzene	ND	0.50	1	05/22/2014 01:52
Dichlorodifluoromethane	ND	0.50	1	05/22/2014 01:52
1,1-Dichloroethane	ND	0.50	1	05/22/2014 01:52
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/22/2014 01:52
1,1-Dichloroethene	ND	0.50	1	05/22/2014 01:52
cis-1,2-Dichloroethene	ND	0.50	1	05/22/2014 01:52
trans-1,2-Dichloroethene	ND	0.50	1	05/22/2014 01:52
1,2-Dichloropropane	ND	0.50	1	05/22/2014 01:52
1,3-Dichloropropane	ND	0.50	1	05/22/2014 01:52
2,2-Dichloropropane	ND	0.50	1	05/22/2014 01:52
1,1-Dichloropropene	ND	0.50	1	05/22/2014 01:52

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B6-W	**1405703-002B**	**Water**	**05/15/2014 09:45**	**GC28**	**90662**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	05/22/2014 01:52
trans-1,3-Dichloropropene	ND	0.50	1	05/22/2014 01:52
Diisopropyl ether (DIPE)	ND	0.50	1	05/22/2014 01:52
Ethylbenzene	ND	0.50	1	05/22/2014 01:52
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	05/22/2014 01:52
Freon 113	ND	0.50	1	05/22/2014 01:52
Hexachlorobutadiene	ND	0.50	1	05/22/2014 01:52
Hexachloroethane	ND	0.50	1	05/22/2014 01:52
2-Hexanone	ND	0.50	1	05/22/2014 01:52
Isopropylbenzene	ND	0.50	1	05/22/2014 01:52
4-Isopropyl toluene	ND	0.50	1	05/22/2014 01:52
Methyl-t-butyl ether (MTBE)	ND	0.50	1	05/22/2014 01:52
Methylene chloride	ND	0.50	1	05/22/2014 01:52
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	05/22/2014 01:52
Naphthalene	ND	0.50	1	05/22/2014 01:52
n-Propyl benzene	ND	0.50	1	05/22/2014 01:52
Styrene	ND	0.50	1	05/22/2014 01:52
1,1,1,2-Tetrachloroethane	ND	0.50	1	05/22/2014 01:52
1,1,2,2-Tetrachloroethane	ND	0.50	1	05/22/2014 01:52
Tetrachloroethene	ND	0.50	1	05/22/2014 01:52
Toluene	ND	0.50	1	05/22/2014 01:52
1,2,3-Trichlorobenzene	ND	0.50	1	05/22/2014 01:52
1,2,4-Trichlorobenzene	ND	0.50	1	05/22/2014 01:52
1,1,1-Trichloroethane	ND	0.50	1	05/22/2014 01:52
1,1,2-Trichloroethane	ND	0.50	1	05/22/2014 01:52
Trichloroethene	ND	0.50	1	05/22/2014 01:52
Trichlorofluoromethane	ND	0.50	1	05/22/2014 01:52
1,2,3-Trichloropropane	ND	0.50	1	05/22/2014 01:52
1,2,4-Trimethylbenzene	ND	0.50	1	05/22/2014 01:52
1,3,5-Trimethylbenzene	ND	0.50	1	05/22/2014 01:52
Vinyl Chloride	ND	0.50	1	05/22/2014 01:52
Xylenes, Total	ND	0.50	1	05/22/2014 01:52

Surrogates	REC (%)	Limits	
Dibromofluoromethane	108	70-130	05/22/2014 01:52
Toluene-d8	117	70-130	05/22/2014 01:52
4-BFB	99	70-130	05/22/2014 01:52

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B7-W	**1405703-003B**	**Water**	**05/15/2014 11:15**	**GC16**	**90662**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	05/21/2014 04:24
tert-Amyl methyl ether (TAME)	ND	0.50	1	05/21/2014 04:24
Benzene	ND	0.50	1	05/21/2014 04:24
Bromobenzene	ND	0.50	1	05/21/2014 04:24
Bromochloromethane	ND	0.50	1	05/21/2014 04:24
Bromodichloromethane	ND	0.50	1	05/21/2014 04:24
Bromoform	ND	0.50	1	05/21/2014 04:24
Bromomethane	ND	0.50	1	05/21/2014 04:24
2-Butanone (MEK)	ND	2.0	1	05/21/2014 04:24
t-Butyl alcohol (TBA)	ND	2.0	1	05/21/2014 04:24
n-Butyl benzene	ND	0.50	1	05/21/2014 04:24
sec-Butyl benzene	ND	0.50	1	05/21/2014 04:24
tert-Butyl benzene	ND	0.50	1	05/21/2014 04:24
Carbon Disulfide	ND	0.50	1	05/21/2014 04:24
Carbon Tetrachloride	ND	0.50	1	05/21/2014 04:24
Chlorobenzene	ND	0.50	1	05/21/2014 04:24
Chloroethane	ND	0.50	1	05/21/2014 04:24
Chloroform	ND	0.50	1	05/21/2014 04:24
Chloromethane	ND	0.50	1	05/21/2014 04:24
2-Chlorotoluene	ND	0.50	1	05/21/2014 04:24
4-Chlorotoluene	ND	0.50	1	05/21/2014 04:24
Dibromochloromethane	ND	0.50	1	05/21/2014 04:24
1,2-Dibromo-3-chloropropane	ND	0.20	1	05/21/2014 04:24
1,2-Dibromoethane (EDB)	ND	0.50	1	05/21/2014 04:24
Dibromomethane	ND	0.50	1	05/21/2014 04:24
1,2-Dichlorobenzene	ND	0.50	1	05/21/2014 04:24
1,3-Dichlorobenzene	ND	0.50	1	05/21/2014 04:24
1,4-Dichlorobenzene	ND	0.50	1	05/21/2014 04:24
Dichlorodifluoromethane	ND	0.50	1	05/21/2014 04:24
1,1-Dichloroethane	ND	0.50	1	05/21/2014 04:24
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/21/2014 04:24
1,1-Dichloroethene	ND	0.50	1	05/21/2014 04:24
cis-1,2-Dichloroethene	ND	0.50	1	05/21/2014 04:24
trans-1,2-Dichloroethene	ND	0.50	1	05/21/2014 04:24
1,2-Dichloropropane	ND	0.50	1	05/21/2014 04:24
1,3-Dichloropropane	ND	0.50	1	05/21/2014 04:24
2,2-Dichloropropane	ND	0.50	1	05/21/2014 04:24
1,1-Dichloropropene	ND	0.50	1	05/21/2014 04:24

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B7-W	**1405703-003B**	**Water**	**05/15/2014 11:15**	**GC16**	**90662**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	05/21/2014 04:24
trans-1,3-Dichloropropene	ND	0.50	1	05/21/2014 04:24
Diisopropyl ether (DIPE)	ND	0.50	1	05/21/2014 04:24
Ethylbenzene	ND	0.50	1	05/21/2014 04:24
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	05/21/2014 04:24
Freon 113	ND	0.50	1	05/21/2014 04:24
Hexachlorobutadiene	ND	0.50	1	05/21/2014 04:24
Hexachloroethane	ND	0.50	1	05/21/2014 04:24
2-Hexanone	ND	0.50	1	05/21/2014 04:24
Isopropylbenzene	ND	0.50	1	05/21/2014 04:24
4-Isopropyl toluene	ND	0.50	1	05/21/2014 04:24
Methyl-t-butyl ether (MTBE)	ND	0.50	1	05/21/2014 04:24
Methylene chloride	ND	0.50	1	05/21/2014 04:24
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	05/21/2014 04:24
Naphthalene	ND	0.50	1	05/21/2014 04:24
n-Propyl benzene	ND	0.50	1	05/21/2014 04:24
Styrene	ND	0.50	1	05/21/2014 04:24
1,1,1,2-Tetrachloroethane	ND	0.50	1	05/21/2014 04:24
1,1,2,2-Tetrachloroethane	ND	0.50	1	05/21/2014 04:24
Tetrachloroethene	ND	0.50	1	05/21/2014 04:24
Toluene	ND	0.50	1	05/21/2014 04:24
1,2,3-Trichlorobenzene	ND	0.50	1	05/21/2014 04:24
1,2,4-Trichlorobenzene	ND	0.50	1	05/21/2014 04:24
1,1,1-Trichloroethane	ND	0.50	1	05/21/2014 04:24
1,1,2-Trichloroethane	ND	0.50	1	05/21/2014 04:24
Trichloroethene	ND	0.50	1	05/21/2014 04:24
Trichlorofluoromethane	ND	0.50	1	05/21/2014 04:24
1,2,3-Trichloropropane	ND	0.50	1	05/21/2014 04:24
1,2,4-Trimethylbenzene	ND	0.50	1	05/21/2014 04:24
1,3,5-Trimethylbenzene	ND	0.50	1	05/21/2014 04:24
Vinyl Chloride	ND	0.50	1	05/21/2014 04:24
Xylenes, Total	ND	0.50	1	05/21/2014 04:24

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	05/21/2014 04:24
Toluene-d8	98	70-130	05/21/2014 04:24
4-BFB	114	70-130	05/21/2014 04:24

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B8-W	**1405703-004B**	**Water**	**05/15/2014 13:15**	**GC16**	**90662**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	05/21/2014 05:07
tert-Amyl methyl ether (TAME)	ND	0.50	1	05/21/2014 05:07
Benzene	ND	0.50	1	05/21/2014 05:07
Bromobenzene	ND	0.50	1	05/21/2014 05:07
Bromochloromethane	ND	0.50	1	05/21/2014 05:07
Bromodichloromethane	ND	0.50	1	05/21/2014 05:07
Bromoform	ND	0.50	1	05/21/2014 05:07
Bromomethane	ND	0.50	1	05/21/2014 05:07
2-Butanone (MEK)	ND	2.0	1	05/21/2014 05:07
t-Butyl alcohol (TBA)	ND	2.0	1	05/21/2014 05:07
n-Butyl benzene	ND	0.50	1	05/21/2014 05:07
sec-Butyl benzene	ND	0.50	1	05/21/2014 05:07
tert-Butyl benzene	ND	0.50	1	05/21/2014 05:07
Carbon Disulfide	ND	0.50	1	05/21/2014 05:07
Carbon Tetrachloride	ND	0.50	1	05/21/2014 05:07
Chlorobenzene	ND	0.50	1	05/21/2014 05:07
Chloroethane	ND	0.50	1	05/21/2014 05:07
Chloroform	ND	0.50	1	05/21/2014 05:07
Chloromethane	ND	0.50	1	05/21/2014 05:07
2-Chlorotoluene	ND	0.50	1	05/21/2014 05:07
4-Chlorotoluene	ND	0.50	1	05/21/2014 05:07
Dibromochloromethane	ND	0.50	1	05/21/2014 05:07
1,2-Dibromo-3-chloropropane	ND	0.20	1	05/21/2014 05:07
1,2-Dibromoethane (EDB)	ND	0.50	1	05/21/2014 05:07
Dibromomethane	ND	0.50	1	05/21/2014 05:07
1,2-Dichlorobenzene	ND	0.50	1	05/21/2014 05:07
1,3-Dichlorobenzene	ND	0.50	1	05/21/2014 05:07
1,4-Dichlorobenzene	ND	0.50	1	05/21/2014 05:07
Dichlorodifluoromethane	ND	0.50	1	05/21/2014 05:07
1,1-Dichloroethane	ND	0.50	1	05/21/2014 05:07
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/21/2014 05:07
1,1-Dichloroethene	ND	0.50	1	05/21/2014 05:07
cis-1,2-Dichloroethene	ND	0.50	1	05/21/2014 05:07
trans-1,2-Dichloroethene	ND	0.50	1	05/21/2014 05:07
1,2-Dichloropropane	ND	0.50	1	05/21/2014 05:07
1,3-Dichloropropane	ND	0.50	1	05/21/2014 05:07
2,2-Dichloropropane	ND	0.50	1	05/21/2014 05:07
1,1-Dichloropropene	ND	0.50	1	05/21/2014 05:07

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8260B
Date Prepared:	5/21/14-5/22/14	**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
B8-W	**1405703-004B**	**Water**	**05/15/2014 13:15**	**GC16**	**90662**

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	05/21/2014 05:07
trans-1,3-Dichloropropene	ND	0.50	1	05/21/2014 05:07
Diisopropyl ether (DIPE)	ND	0.50	1	05/21/2014 05:07
Ethylbenzene	ND	0.50	1	05/21/2014 05:07
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	05/21/2014 05:07
Freon 113	ND	0.50	1	05/21/2014 05:07
Hexachlorobutadiene	ND	0.50	1	05/21/2014 05:07
Hexachloroethane	ND	0.50	1	05/21/2014 05:07
2-Hexanone	ND	0.50	1	05/21/2014 05:07
Isopropylbenzene	ND	0.50	1	05/21/2014 05:07
4-Isopropyl toluene	ND	0.50	1	05/21/2014 05:07
Methyl-t-butyl ether (MTBE)	ND	0.50	1	05/21/2014 05:07
Methylene chloride	ND	0.50	1	05/21/2014 05:07
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	05/21/2014 05:07
Naphthalene	ND	0.50	1	05/21/2014 05:07
n-Propyl benzene	ND	0.50	1	05/21/2014 05:07
Styrene	ND	0.50	1	05/21/2014 05:07
1,1,1,2-Tetrachloroethane	ND	0.50	1	05/21/2014 05:07
1,1,2,2-Tetrachloroethane	ND	0.50	1	05/21/2014 05:07
Tetrachloroethene	ND	0.50	1	05/21/2014 05:07
Toluene	ND	0.50	1	05/21/2014 05:07
1,2,3-Trichlorobenzene	ND	0.50	1	05/21/2014 05:07
1,2,4-Trichlorobenzene	ND	0.50	1	05/21/2014 05:07
1,1,1-Trichloroethane	ND	0.50	1	05/21/2014 05:07
1,1,2-Trichloroethane	ND	0.50	1	05/21/2014 05:07
Trichloroethene	ND	0.50	1	05/21/2014 05:07
Trichlorofluoromethane	ND	0.50	1	05/21/2014 05:07
1,2,3-Trichloropropane	ND	0.50	1	05/21/2014 05:07
1,2,4-Trimethylbenzene	ND	0.50	1	05/21/2014 05:07
1,3,5-Trimethylbenzene	ND	0.50	1	05/21/2014 05:07
Vinyl Chloride	ND	0.50	1	05/21/2014 05:07
Xylenes, Total	ND	0.50	1	05/21/2014 05:07

Surrogates	REC (%)	Limits	
Dibromofluoromethane	105	70-130	05/21/2014 05:07
Toluene-d8	98	70-130	05/21/2014 05:07
4-BFB	113	70-130	05/21/2014 05:07

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	5/19/14-5/21/14	**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
B5-W	**1405703-001A**	**Water**	**05/15/2014 08:20**	**GC3**	**90609**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/19/2014 17:05
MTBE	---	5.0	1	05/19/2014 17:05
Benzene	---	0.50	1	05/19/2014 17:05
Toluene	---	0.50	1	05/19/2014 17:05
Ethylbenzene	---	0.50	1	05/19/2014 17:05
Xylenes	---	0.50	1	05/19/2014 17:05
Surrogates	REC (%)	Limits		
aaa-TFT	105	70-130		05/19/2014 17:05

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B6-W	**1405703-002A**	**Water**	**05/15/2014 09:45**	**GC3**	**90639**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/21/2014 01:57
MTBE	---	5.0	1	05/21/2014 01:57
Benzene	---	0.50	1	05/21/2014 01:57
Toluene	---	0.50	1	05/21/2014 01:57
Ethylbenzene	---	0.50	1	05/21/2014 01:57
Xylenes	---	0.50	1	05/21/2014 01:57
Surrogates	REC (%)	Limits		
aaa-TFT	104	70-130		05/21/2014 01:57

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B7-W	**1405703-003A**	**Water**	**05/15/2014 11:15**	**GC3**	**90609**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/19/2014 17:35
MTBE	---	5.0	1	05/19/2014 17:35
Benzene	---	0.50	1	05/19/2014 17:35
Toluene	---	0.50	1	05/19/2014 17:35
Ethylbenzene	---	0.50	1	05/19/2014 17:35
Xylenes	---	0.50	1	05/19/2014 17:35
Surrogates	REC (%)	Limits		
aaa-TFT	98	70-130		05/19/2014 17:35

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW5030B
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	5/19/14-5/21/14	**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
B8-W	**1405703-004A**	**Water**	**05/15/2014 13:15**	**GC3**	**90609**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/19/2014 18:05
MTBE	---	5.0	1	05/19/2014 18:05
Benzene	---	0.50	1	05/19/2014 18:05
Toluene	---	0.50	1	05/19/2014 18:05
Ethylbenzene	---	0.50	1	05/19/2014 18:05
Xylenes	---	0.50	1	05/19/2014 18:05
Surrogates	REC (%)	Limits		
aaa-TFT	102	70-130		05/19/2014 18:05

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Project:	#0675; 475 Lesser St Oakland,Ca	**Extraction Method:**	SW3510C
Date Received:	5/16/14 20:49	**Analytical Method:**	SW8015B
Date Prepared:	5/20/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B5-W	**1405703-001A**	**Water**	**05/15/2014 08:20**	**GC6B**	**90595**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	05/23/2014 05:40
TPH-Motor Oil (C18-C36)	ND	250	1	05/23/2014 05:40
Surrogates	REC (%)	Limits		
C9	100	70-130		05/23/2014 05:40

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B6-W	**1405703-002A**	**Water**	**05/15/2014 09:45**	**GC6B**	**90595**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	05/24/2014 10:51
TPH-Motor Oil (C18-C36)	ND	250	1	05/24/2014 10:51
Surrogates	REC (%)	Limits		
C9	101	70-130		05/24/2014 10:51

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B7-W	**1405703-003A**	**Water**	**05/15/2014 11:15**	**GC6B**	**90595**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	05/24/2014 07:10
TPH-Motor Oil (C18-C36)	ND	250	1	05/24/2014 07:10
Surrogates	REC (%)	Limits		
C9	101	70-130		05/24/2014 07:10

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
B8-W	**1405703-004A**	**Water**	**05/15/2014 13:15**	**GC11A**	**90595**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**290**	50	1	05/24/2014 10:21
TPH-Motor Oil (C18-C36)	**4600**	250	1	05/24/2014 10:21
Surrogates	REC (%)	Limits	Analytical Comments: e7,e2	
C9	96	70-130		05/24/2014 10:21

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Date Prepared:	5/21/14	**BatchID:**	90662
Date Analyzed:	5/20/14	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0675; 475 Lesser St Oakland,Ca	**Sample ID:**	MB/LCS-90662 1405704-027AMS/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	18.1	0.50	20	-	90.6	70-130
Benzene	ND	19.8	0.50	20	-	99	70-130
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	76.7	2.0	80	-	95.8	70-130
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	19.1	0.50	20	-	95.3	70-130
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	19.9	0.50	20	-	99.4	70-130
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	19.4	0.50	20	-	97.1	70-130
1,1-Dichloroethene	ND	19.8	0.50	20	-	99.1	70-130
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	-	-	-	-

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Date Prepared:	5/21/14	**BatchID:**	90662
Date Analyzed:	5/20/14	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0675; 475 Lesser St Oakland,Ca	**Sample ID:**	MB/LCS-90662 1405704-027AMS/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	19.4	0.50	20	-	97.1	70-130
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	18.8	0.50	20	-	94.2	70-130
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	18.8	0.50	20	-	93.9	70-130
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	19.0	0.50	20	-	95	70-130
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	20.4	0.50	20	-	102	70-130
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	26.1	46.5		45	105	103	70-130
Toluene-d8	24.6	43.0		45	98	96	70-130
4-BFB	2.85	4.83		4.5	114	107	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Date Prepared:	5/21/14	**BatchID:**	90662
Date Analyzed:	5/20/14	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0675; 475 Lesser St Oakland,Ca	**Sample ID:**	MB/LCS-90662 1405704-027AMS/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)	19.4	19.9	20	ND	96.7	99.4	70-130	2.75	20
Benzene	20.2	20.5	20	ND	101	103	70-130	1.58	20
t-Butyl alcohol (TBA)	99.5	98.9	80	ND	124	124	70-130	0	20
Chlorobenzene	19.2	19.2	20	ND	95.9	96.2	70-130	0.320	20
1,2-Dibromoethane (EDB)	21.2	21.4	20	ND	106	107	70-130	0.902	20
1,2-Dichloroethane (1,2-DCA)	20.6	20.8	20	ND	103	104	70-130	1.07	20
1,1-Dichloroethene	19.8	20.2	20	ND	99.2	101	70-130	1.66	20
Diisopropyl ether (DIPE)	20.2	20.7	20	ND	101	103	70-130	2.56	20
Ethyl tert-butyl ether (ETBE)	20.0	20.6	20	ND	100	103	70-130	2.67	20
Methyl-t-butyl ether (MTBE)	20.2	20.8	20	ND	101	104	70-130	2.89	20
Toluene	19.0	19.1	20	ND	95	95.4	70-130	0.519	20
Trichloroethene	20.6	20.9	20	ND	103	104	70-130	1.22	20
Surrogate Recovery									
Dibromofluoromethane	48.1	47.7	45		107	106	70-130	0.920	20
Toluene-d8	42.6	42.5	45		95	94	70-130	0.284	20
4-BFB	4.74	4.76	4.5		105	106	70-130	0.404	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Date Prepared:	5/20/14	**BatchID:**	90609
Date Analyzed:	5/19/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#0675; 475 Lesser St Oakland,Ca	**Sample ID:**	MB/LCS-90609 1405647-001AMS/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	58.2	40	60	-	97.1	70-130
MTBE	ND	9.12	5.0	10	-	91.2	70-130
Benzene	ND	9.26	0.50	10	-	92.6	70-130
Toluene	ND	9.23	0.50	10	-	92.3	70-130
Ethylbenzene	ND	9.27	0.50	10	-	92.7	70-130
Xylenes	ND	27.9	0.50	30	-	93.1	70-130
Surrogate Recovery							
aaa-TFT	9.88	9.97		10	99	100	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	58.8	59.1	60	ND	98.1	98.6	70-130	0.519	20
MTBE	11.8	12.8	10	ND	117	128	70-130	8.73	20
Benzene	8.76	10.2	10	ND	87.6	102	70-130	15.3	20
Toluene	8.74	10.2	10	ND	87.4	102	70-130	15.3	20
Ethylbenzene	8.84	10.1	10	ND	88.4	101	70-130	13.5	20
Xylenes	26.8	30.3	30	ND	89.3	101	70-130	12.2	20
Surrogate Recovery									
aaa-TFT	9.39	10.4	10		94	104	70-130	9.73	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Date Prepared:	5/20/14	**BatchID:**	90639
Date Analyzed:	5/20/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#0675; 475 Lesser St Oakland,Ca	**Sample ID:**	MB/LCS-90639 1405730-003AMS/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	61.1	40	60	-	102	70-130
MTBE	ND	11.1	5.0	10	-	111	70-130
Benzene	ND	9.05	0.50	10	-	90.5	70-130
Toluene	ND	9.07	0.50	10	-	90.7	70-130
Ethylbenzene	ND	9.11	0.50	10	-	91.1	70-130
Xylenes	ND	27.5	0.50	30	-	91.7	70-130
Surrogate Recovery							
aaa-TFT	9.66	9.39		10	97	94	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	58.0	63.2	60	ND	96.7	105	70-130	8.47	20
MTBE	9.34	9.25	10	ND	93.4	92.5	70-130	0.961	20
Benzene	8.85	9.22	10	ND	88.5	92.2	70-130	4.16	20
Toluene	8.84	9.24	10	ND	88.4	92.4	70-130	4.37	20
Ethylbenzene	9.02	9.24	10	ND	90.2	92.4	70-130	2.37	20
Xylenes	27.1	28.4	30	ND	90.3	94.6	70-130	4.64	20
Surrogate Recovery									
aaa-TFT	9.48	9.35	10		95	94	70-130	1.34	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1405703
Date Prepared:	5/19/14	**BatchID:**	90595
Date Analyzed:	5/20/14	**Extraction Method:**	SW3510C
Instrument:	GC6A, GC6B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	#0675; 475 Lesser St Oakland,Ca	**Sample ID:**	MB/LCS-90595

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	765	50	1000	-	76.5	70-130
Surrogate Recovery							
C9	599	622		625	96	100	70-130

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1405703 **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: #0675; 475 Lesser St Oakland,Ca

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

Requested TAT: **5 days**

Date Received: **05/16/2014**
Date Printed: **05/19/2014**

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
1405703-001	B5-W	Water	5/15/2014 8:20	☐	B	A										
1405703-002	B6-W	Water	5/15/2014 9:45	☐	B	A										
1405703-003	B7-W	Water	5/15/2014 11:15	☐	B	A										
1405703-004	B8-W	Water	5/15/2014 13:15	☐	B	A										

Test Legend:

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

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

Prepared by: Shana Carter

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.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0675;475 Lesser St Oakland,Ca
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1405703
Date Received: 5/16/2014

☐ 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
1405703-001A	B5-W	Water	Multi-Range TPH(g,d,mo)	4	VOA w/ HCl	☐	5/15/2014 8:20	5 days	Present	☐	
1405703-001B	B5-W	Water	SW8260B (VOCs)	3	VOA w/ HCl	☐	5/15/2014 8:20	5 days	Present	☐	
1405703-002A	B6-W	Water	Multi-Range TPH(g,d,mo)	4	VOA w/ HCl	☐	5/15/2014 9:45	5 days	Present	☐	
1405703-002B	B6-W	Water	SW8260B (VOCs)	3	VOA w/ HCl	☐	5/15/2014 9:45	5 days	Present	☐	
1405703-003A	B7-W	Water	Multi-Range TPH(g,d,mo)	4	VOA w/ HCl	☐	5/15/2014 11:15	5 days	Present	☐	
1405703-003B	B7-W	Water	SW8260B (VOCs)	3	VOA w/ HCl	☐	5/15/2014 11:15	5 days	Present	☐	
1405703-004A	B8-W	Water	Multi-Range TPH(g,d,mo)	4	VOA w/ HCl	☐	5/15/2014 13:15	5 days	Present	☐	
1405703-004B	B8-W	Water	SW8260B (VOCs)	3	VOA w/ HCl	☐	5/15/2014 13:15	5 days	Present	☐	

*** 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:
VOA w/ HCl = 43mL VOA w/ HCl

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

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

140.5703

PROJECT NUMBER: 0675

PROJECT NAME: 475 LESSER ST. OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE)
MICHAEL BASS-DESCHENES

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-(G,D,MO)	VOCs BY EPA 8260B	PRESERVATIVE	REMARKS
B5-W	5/15/14	0820	H2O		7	X	X	ICE	NORMAL TAT
B6-W	"	0945	"		7	X	X	"	"
B7-W	"	1115	"		7	X	X	"	"
B8-W	"	1315	"		7	X	X	"	"

TTTT

ICE/tº 4.6
GOOD CONDITION
HEAD SPACE ABSENT
APPROPRIATE CONTAINERS
PRESERVED IN LAB
VOAS | O&G | METALS | OTHER
PRESERVATION

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment): 4	LABORATORY:
	5/16	14:25		Total No. of Containers (This Shipment): 28	MCCAMPBELL ANALYTICAL, INC.
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT:	LABORATORY PHONE NUMBER:
	5/16	18:30	Shana Carter	ANGELA RYDELINS	(877) 252-9262
RELINQUISHED BY: (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: ALL VOA's PRESERVED WITH HCL.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **5/16/2014 8:49:00 PM**

Project Name: **#0675;475 Lesser St Oakland,Ca**

LogIn Reviewed by: Shana Carter

WorkOrder N°: **1405703** Matrix: Water

Carrier: Brian STANFORD (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: 4.6°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)

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

Comments:

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6/4/2014
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: 475 LESSER ST. OAKLAND, CA
Project #: 0675
Workorder #: 1405390A

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 5/20/2014 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

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WORK ORDER #: 1405390A

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	**BILL TO:**	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	**P.O. #**	
FAX:	510-834-0772	**PROJECT #**	0675 475 LESSER ST. OAKLAND, CA
DATE RECEIVED:	05/20/2014	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	06/04/2014		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG3	TO-15	4.7 "Hg	14.9 psi
02A	SG3-DUP	TO-15	4.7 "Hg	14.9 psi
03A	Lab Blank	TO-15	NA	NA
04A	CCV	TO-15	NA	NA
05A	LCS	TO-15	NA	NA
05AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/04/14

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
P & D Environmental
Workorder# 1405390A

Two 1 Liter Summa Canister samples were received on May 20, 2014. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds. Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Dilution was performed on samples SG3 and SG3-DUP due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG3

Lab ID#: 1405390A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	120	370	380	1200
Toluene	120	750	450	2800
m,p-Xylene	120	180	520	790
TPH ref. to Gasoline (MW=100)	6000	870000	24000	3600000
1,1-Difluoroethane	480	560	1300	1500

Client Sample ID: SG3-DUP

Lab ID#: 1405390A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	120	380	380	1200
Toluene	120	740	450	2800
m,p-Xylene	120	150	520	640
TPH ref. to Gasoline (MW=100)	6000	850000	24000	3500000
1,1-Difluoroethane	480	510	1300	1400

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Client Sample ID: SG3

Lab ID#: 1405390A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060231**	**Date of Collection: 5/19/14 1:54:00 PM**	
Dil. Factor:	**239**	**Date of Analysis: 6/2/14 10:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	120	Not Detected	430	Not Detected
Benzene	120	370	380	1200
Toluene	120	750	450	2800
Ethyl Benzene	120	Not Detected	520	Not Detected
m,p-Xylene	120	180	520	790
o-Xylene	120	Not Detected	520	Not Detected
TPH ref. to Gasoline (MW=100)	6000	870000	24000	3600000
1,1-Difluoroethane	480	560	1300	1500

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	116	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SG3-DUP

Lab ID#: 1405390A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060232**	**Date of Collection:**	**5/19/14 1:54:00 PM**
Dil. Factor:	**239**	**Date of Analysis:**	**6/2/14 11:21 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	120	Not Detected	430	Not Detected
Benzene	120	380	380	1200
Toluene	120	740	450	2800
Ethyl Benzene	120	Not Detected	520	Not Detected
m,p-Xylene	120	150	520	640
o-Xylene	120	Not Detected	520	Not Detected
TPH ref. to Gasoline (MW=100)	6000	850000	24000	3500000
1,1-Difluoroethane	480	510	1300	1400

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	124	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1405390A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060208**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/2/14 10:45 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TPH ref. to Gasoline (MW=100)	25	Not Detected	100	Not Detected
1,1-Difluoroethane	2.0	Not Detected	5.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: CCV

Lab ID#: 1405390A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/2/14 07:59 AM**	

Compound	%Recovery
Methyl tert-butyl ether	102
Benzene	97
Toluene	96
Ethyl Benzene	98
m,p-Xylene	99
o-Xylene	102
TPH ref. to Gasoline (MW=100)	100
1,1-Difluoroethane	121

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCS

Lab ID#: 1405390A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/2/14 08:21 AM**	

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	114	70-130
Benzene	108	70-130
Toluene	103	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	104	70-130
o-Xylene	106	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
1,1-Difluoroethane	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: LCSD

Lab ID#: 1405390A-05AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17060204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/2/14 08:42 AM**	

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	114	70-130
Benzene	105	70-130
Toluene	100	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	105	70-130
o-Xylene	104	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
1,1-Difluoroethane	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	104	70-130

CHAIN OF CUSTODY RECORD

~~1405370~~ DM 5/21/14 PAGE 1 OF 1

P&D ENVIRONMENTAL, INC.

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

PROJECT NUMBER: 0675

PROJECT NAME: 475 LESSER ST. OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE) MICHAEL BASS-DESCHENES [signature]

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION (START / END / PID (ppm))	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-G, MTBE, BTEX, DFA by EPA TO-15	O_2, CH_4, CO_2 by ASTM D-1946						PRESERVATIVE	REMARKS
01A SG3	5/19/14	133400 135445	Soil Gas	-29 -5 175	1	X	X						NONE	NORMAL TAT
02A SG3-DUP	"	"	"		1	X	X						"	" "

Custody Seal Intact? Y N (None) Temp NA
EAT ~~Approx~~

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)		
[signature]	5-20-14	1106	[signature]	Total No. of Samples (This Shipment): 2 / Total No. of Containers (This Shipment): 2	LABORATORY: AIR TOXICS.
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT: KYLE VAGADORI	LABORATORY PHONE NUMBER: (916) 605-3339
RELINQUISHED BY: (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: SUMMA CANISTERS (1 LITER)

1405390

eurofins | Air Toxics

6/5/2014
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: 475 LESSER st. OAKLAND, CA
Project #: 0675
Workorder #: 1405369

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 5/20/2014 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 VI are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1405369

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	**BILL TO:**	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	**P.O. #**	
FAX:	510-834-0772	**PROJECT #**	0675 475 LESSER st. OAKLAND, CA
DATE RECEIVED:	05/20/2014	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	06/05/2014		

FRACTION #	NAME	TEST
01A	SG3	Modified TO-17 VI
02A	SG3-REP	Modified TO-17 VI
03A	Lab Blank	Modified TO-17 VI
03B	Lab Blank	Modified TO-17 VI
04A	CCV	Modified TO-17 VI
04B	CCV	Modified TO-17 VI
05A	LCS	Modified TO-17 VI
05AA	LCSD	Modified TO-17 VI
05B	LCS	Modified TO-17 VI
05BB	LCSD	Modified TO-17 VI

CERTIFIED BY:  DATE: 06/05/14

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
P & D Environmental
Workorder# 1405369

Two TO-17 VI Tube samples were received on May 21, 2014. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Initial Calibration	%RSD</=30% with 2 allowed out up to 40%	VOC list: %RSD</=30% with 2 allowed out up to 40% SVOC list: %RSD</=30% with 2 allowed out up to 40%
Daily Calibration	%D for each target compound within +/-30%.	Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene within +/-40%D
Audit Accuracy	70-130%	Second source recovery limits for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene = 60-140%.
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A sampling volume of 0.200 L was used to convert ng to ug/m3 for the associated Lab Blanks.

Field surrogate, 1,2-Dichloroethane-d4, in sample SG3 exceeded the laboratory limits of 50-150% due to high level hydrocarbon matrix interference.

Field surrogates, 1,2-Dichloroethane-d4 and Toluene-d8, in sample SG3-REP exceeded the laboratory limits of 50-150% due to high level hydrocarbon matrix interference.

Samples SG3 and SG3-REP had mass concentrations for non-target compounds well above the standard calibration range. In order to analyze the samples effectively and maintain instrument performance, the samples were analyzed at a higher split than the initial calibration. The split used resulted in a dilution of 10, and the reporting limit and calibration range were raised accordingly.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in blank (subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

eurofins | Air Toxics

Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SG3

Lab ID#: 1405369-01A

No Detections Were Found.

Client Sample ID: SG3-REP

Lab ID#: 1405369-02A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: SG3
Lab ID#: 1405369-01A
EPA METHOD TO-17

File Name:	**18060329**	**Date of Extraction: NA**	**Date of Collection: 5/19/14 2:14:00 PM**
Dil. Factor:	**10.0**		**Date of Analysis: 6/4/14 08:40 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
2-Propanol	490	2400	Not Detected	Not Detected
Naphthalene	5.0	25	Not Detected	Not Detected

Air Sample Volume(L): 0.200
Q = Exceeds Quality Control limits.
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	270 Q	50-150
Toluene-d8	80	50-150
Naphthalene-d8	84	50-150

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Client Sample ID: SG3-REP

Lab ID#: 1405369-02A

EPA METHOD TO-17

File Name:	**18060429**	**Date of Extraction: NA**	**Date of Collection: 5/19/14 2:27:00 PM**
Dil. Factor:	**10.0**		**Date of Analysis: 6/5/14 11:39 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
2-Propanol	490	2400	Not Detected	Not Detected
Naphthalene	5.0	25	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Q = Exceeds Quality Control limits.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	311 Q	50-150
Toluene-d8	228 Q	50-150
Naphthalene-d8	94	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1405369-03A

EPA METHOD TO-17

File Name:	**18060308**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/3/14 03:33 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
2-Propanol	49	240	Not Detected	Not Detected
Naphthalene	0.50	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	50-150
Toluene-d8	95	50-150
Naphthalene-d8	87	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1405369-03B

EPA METHOD TO-17

File Name:	**18060410**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/4/14 07:50 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
2-Propanol	49	240	Not Detected	Not Detected
Naphthalene	0.50	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	50-150
Toluene-d8	95	50-150
Naphthalene-d8	85	50-150

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Client Sample ID: CCV
Lab ID#: 1405369-04A
EPA METHOD TO-17

File Name:	**18060307**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/3/14 02:37 PM**

Compound	%Recovery
2-Propanol	96
Naphthalene	81

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	50-150
Toluene-d8	101	50-150
Naphthalene-d8	102	50-150

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Client Sample ID: CCV
Lab ID#: 1405369-04B
EPA METHOD TO-17

File Name:	**18060409**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/4/14 07:07 PM**

Compound	%Recovery
2-Propanol	97
Naphthalene	74

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	50-150
Toluene-d8	96	50-150
Naphthalene-d8	86	50-150

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Client Sample ID: LCS
Lab ID#: 1405369-05A
EPA METHOD TO-17

File Name:	**18060304**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/3/14 12:27 PM**

Compound	%Recovery	Method Limits
2-Propanol	81	70-130
Naphthalene	85	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	121	50-150
Toluene-d8	112	50-150
Naphthalene-d8	107	50-150

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Client Sample ID: LCSD
Lab ID#: 1405369-05AA
EPA METHOD TO-17

File Name:	**18060305**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/3/14 01:10 PM**

Compound	%Recovery	Method Limits
2-Propanol	79	70-130
Naphthalene	90	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	50-150
Toluene-d8	113	50-150
Naphthalene-d8	108	50-150

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Client Sample ID: LCS
Lab ID#: 1405369-05B
EPA METHOD TO-17

File Name:	**18060406**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/4/14 04:55 PM**

Compound	%Recovery	Method Limits
2-Propanol	79	70-130
Naphthalene	82	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	50-150
Toluene-d8	95	50-150
Naphthalene-d8	82	50-150

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Client Sample ID: LCSD
Lab ID#: 1405369-05BB
EPA METHOD TO-17

File Name:	**18060407**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 6/4/14 05:39 PM**

Compound	%Recovery	Method Limits
2-Propanol	76	70-130
Naphthalene	83	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	50-150
Toluene-d8	89	50-150
Naphthalene-d8	79	50-150

CHAIN OF CUSTODY RECORD

1405369

PAGE 1 OF 1

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

PROJECT NUMBER: 0675

PROJECT NAME: 475 LESSER St. OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE) Michael Bass DESCHENES

	SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION START	SAMPLE LOCATION END	NUMBER OF CONTAINERS	ANALYSIS(ES): 1-NAPHTHALENE By TO-17	2-PROPANOL By	PRESERVATIVE	REMARKS
01A	SG3	5/19/14		Soil Gas	141300	141418	1	X	X	ICE	NORMAL TAT
02A	SG3-REP.	"		"	142600	142718	1	X	X	"	" "
											SAMPLED AT 150cc/min

RELINQUISHED BY: (SIGNATURE) Michael Bass-Desch	DATE 5-20-14	TIME 11:06	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment) 2	LABORATORY: AIR Toxics
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	Total No. of Containers (This Shipment) 2	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	LABORATORY CONTACT: Kyle Vacarelli	LABORATORY PHONE NUMBER: (916) 985-3339
				SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( ) YES (X) NO	

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

REMARKS: SORBENT TUBES

Custody Seal Intact? Y N None Temp 2.2

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6/4/2014
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: 475 LESSER ST. OAKLAND, CA
Project #: 0675
Workorder #: 1405390B

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 5/20/2014 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1405390B

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	**BILL TO:**	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	**P.O. #**	NA
FAX:	510-834-0772	**PROJECT #**	0675 475 LESSER ST. OAKLAND, CA
DATE RECEIVED:	05/20/2014	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	06/04/2014		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG3	Modified ASTM D-1946	4.7 "Hg	14.9 psi
02A	SG3-DUP	Modified ASTM D-1946	4.7 "Hg	14.9 psi
03A	Lab Blank	Modified ASTM D-1946	NA	NA
04A	LCS	Modified ASTM D-1946	NA	NA
04AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Mayo DATE: 06/04/14

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
P & D Environmental
Workorder# 1405390B

Two 1 Liter Summa Canister samples were received on May 20, 2014. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Client Sample ID: SG3

Lab ID#: 1405390B-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	2.1
Methane	0.00024	0.18
Carbon Dioxide	0.024	10

Client Sample ID: SG3-DUP

Lab ID#: 1405390B-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	2.6
Methane	0.00024	0.18
Carbon Dioxide	0.024	10

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Client Sample ID: SG3

Lab ID#: 1405390B-01A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10052406**	**Date of Collection: 5/19/14 1:54:00 PM**	
Dil. Factor:	**2.39**	**Date of Analysis: 5/23/14 08:40 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.24	2.1
Methane	0.00024	0.18
Carbon Dioxide	0.024	10

Container Type: 1 Liter Summa Canister

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Client Sample ID: SG3-DUP

Lab ID#: 1405390B-02A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10052407**	**Date of Collection: 5/19/14 1:54:00 PM**	
Dil. Factor:	**2.39**	**Date of Analysis: 5/23/14 09:01 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	2.6
Methane	0.00024	0.18
Carbon Dioxide	0.024	10

Container Type: 1 Liter Summa Canister

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Client Sample ID: Lab Blank

Lab ID#: 1405390B-03A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10052405**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/23/14 07:48 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 1405390B-04A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10052402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/23/14 06:24 PM**	

Compound	%Recovery	Method Limits
Oxygen	100	85-115
Methane	105	85-115
Carbon Dioxide	99	85-115

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 1405390B-04AA

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10052430a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/24/14 02:06 PM**	

Compound	%Recovery	Method Limits
Oxygen	100	85-115
Methane	106	85-115
Carbon Dioxide	99	85-115

Container Type: NA - Not Applicable

CHAIN OF CUSTODY RECORD

~~1405370~~ DM 5/21/14 PAGE 1 OF 1

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

PROJECT NUMBER: 0675

PROJECT NAME: 475 LESSER ST. OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE) MICHAEL BASS-DESCHENES [signature]

ANALYSIS(ES): TPH-G, MTBE, BTEX, DFA by EPA TO-15; O_2, CH_4, CO_2 by ASTM D-1946

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION (START / END / PID (ppm))	NUMBER OF CONTAINERS	TPH-G, MTBE, BTEX, DFA by EPA TO-15	O_2, CH_4, CO_2 by ASTM D-1946	PRESERVATIVE	REMARKS
01A SG3	5/19/14	1334/00 1354/45	Soil Gas	-29 -5 175	1	X	X	NONE	NORMAL TAT
02A SG3-DUP	"	"	"		1	X	X	"	" "

~~Custody Seal Intact?~~
~~Y N (None) Temp NA~~
~~EAT Dropoff~~

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)		
[signature]	5-20-14	1106	[signature]	Total No. of Samples (This Shipment): 2; Total No. of Containers (This Shipment): 2	LABORATORY: AIR TOXICS
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT: KYLE VAGADORI	LABORATORY PHONE NUMBER: (916) 605-3339
RELINQUISHED BY: (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: SUMMA CANISTERS (1 LITER)

1405390

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6/9/2014
Mr. Paul King
P & D Environmental
55 Santa Clara
Suite 240
Oakland CA 94610

Project Name: 475 Lesser St, Oakland
Project #: 0675
Workorder #: 1405368

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 5/20/2014 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 (5&20 ppbv) are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1405368

Work Order Summary

CLIENT:	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	**BILL TO:**	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
PHONE:	510-658-6916	**P.O. #**	
FAX:	510-834-0772	**PROJECT #**	0675 475 Lesser St, Oakland
DATE RECEIVED:	05/20/2014	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	06/04/2014		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG3 _DFA	Modified TO-15 (5&20 ppbv)	Tedlar Bag	Tedlar Bag
02A	SG3 ISOPROPYL	Modified TO-15 (5&20 ppbv)	Tedlar Bag	Tedlar Bag
03A	SG3-REP ISOPROPYL	Modified TO-15 (5&20 ppbv)	Tedlar Bag	Tedlar Bag
04A	Lab Blank	Modified TO-15 (5&20 ppbv)	NA	NA
04B	Lab Blank	Modified TO-15 (5&20 ppbv)	NA	NA
05A	CCV	Modified TO-15 (5&20 ppbv)	NA	NA
05B	CCV	Modified TO-15 (5&20 ppbv)	NA	NA
06A	LCS	Modified TO-15 (5&20 ppbv)	NA	NA
06AA	LCSD	Modified TO-15 (5&20 ppbv)	NA	NA

CERTIFIED BY: Heidi Rayos DATE: 06/09/14

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 956
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15 Soil Gas
P & D Environmental
Workorder# 1405368

Three 1 Liter Tedlar Bag samples were received on May 20, 2014. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 50 mLs of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody was missing method information or contained incorrect method information. Eurofins Air Toxics proceeded with the analysis as per the original contract.

Analytical Notes

All of the samples were transferred from Tedlar bags into summa canisters to extend the hold time from 72 hours to 30 days. Canister pressurization resulted in a dilution factor which was applied to all analytical results.

Dilution was performed on all of the samples due to the presence of high level target species.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds. Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Method TO-15 is validated for samples collected in specially treated canisters. As such, the use of Tedlar bags for sample collection is outside the scope of the method and not recommended for ambient or indoor air samples. It is the responsibility of the data user to determine the usability of TO-15 results generated from Tedlar bags.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS

Client Sample ID: SG3 _DFA

Lab ID#: 1405368-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	1000000	8000000	2800000	22000000

Client Sample ID: SG3 ISOPROPYL

Lab ID#: 1405368-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	8200	1300000	20000	3100000

Client Sample ID: SG3-REP ISOPROPYL

Lab ID#: 1405368-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4100	680000	10000	1700000

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Client Sample ID: SG3 _DFA

Lab ID#: 1405368-01A

EPA METHOD TO-15 GC/MS

File Name:	**14052933**	**Date of Collection: 5/19/14**	
Dil. Factor:	**51200**	**Date of Analysis: 5/29/14 07:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	1000000	8000000	2800000	22000000

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: SG3 ISOPROPYL

Lab ID#: 1405368-02A

EPA METHOD TO-15 GC/MS

File Name:	**14052938**	**Date of Collection: 5/19/14**	
Dil. Factor:	**410**	**Date of Analysis: 5/29/14 10:18 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	8200	1300000	20000	3100000

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	100	70-130

eurofins | Air Toxics

Client Sample ID: SG3-REP ISOPROPYL

Lab ID#: 1405368-03A

EPA METHOD TO-15 GC/MS

File Name:	**14052935**	**Date of Collection: 5/19/14**	
Dil. Factor:	**205**	**Date of Analysis: 5/29/14 08:06 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	4100	680000	10000	1700000

Container Type: 1 Liter Tedlar Bag

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1405368-04A

EPA METHOD TO-15 GC/MS

File Name:	**14052932**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/29/14 06:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	20	Not Detected	49	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1405368-04B

EPA METHOD TO-15 GC/MS

File Name:	**14052932a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/29/14 06:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Difluoroethane	20	Not Detected	54	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	104	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1405368-05A

EPA METHOD TO-15 GC/MS

File Name:	**14052907c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/29/14 07:56 AM**	

Compound	%Recovery
2-Propanol	96

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	101	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1405368-05B

EPA METHOD TO-15 GC/MS

File Name:	**14052930a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/29/14 05:47 PM**	

Compound	%Recovery
1,1-Difluoroethane	99

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1405368-06A

EPA METHOD TO-15 GC/MS

File Name:	**14052908c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/29/14 08:24 AM**	

Compound	%Recovery	Method Limits
2-Propanol	111	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	103	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1405368-06AA

EPA METHOD TO-15 GC/MS

File Name:	**14052909c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 5/29/14 08:47 AM**	

Compound	%Recovery	Method Limits
2-Propanol	110	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	103	70-130

CHAIN OF CUSTODY RECORD

1405368

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

PROJECT NUMBER: 0675

PROJECT NAME: 475 LESSER ST. OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE) Michael Bassdeschenes [signature]

	SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): DEA by EPA 8260B	2-Propanol by EPA 8260B	PRESERVATIVE	REMARKS
01A	SG3 DEA	5/19/14	1338	AIR		1			NONE	NORMAL TAT
02A	SG3 ISOPROPYL	"	1405	"		1			"	" "
03A	SG3 REP ISOPROPYL	"	1424	"		1			"	" "

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment)	3	LABORATORY:
[signature]	5/20/14	1106	[signature]	Total No. of Containers (This Shipment)	3	AIR TOXICS
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT: KYLE VAGADORI		LABORATORY PHONE NUMBER: (916) 605-3339
RELINQUISHED BY: (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: TEDLAR BAGS SAMPLES