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.....
Xtra Oil Company

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1:36 pm, Feb 05, 2008

Alameda County
Environmental Health

January 30, 2008

Mr. Steven Plunkett
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

**SUBJECT: GROUNDWATER MONITORING WELL INSTALLATION
REPORT (MWS THROUGH MW12) CERTIFICATION
County Case # RO 285
Xtra Oil Company
3495 Castro Valley Blvd.
Castro Valley, CA**

Dear Mr. Plunkett:

P&D Environmental, Inc. has prepared the following document:

- Groundwater Monitoring Well Installation Report (MW5 Through MW12) dated January 30, 2008 (document 0014.R68).

I declare under penalty of perjury that the contents and conclusions in the document are true and correct to the best of my knowledge.

Should you have any questions, please do not hesitate to contact me at (510) 865-9506.

Sincerely,

Xtra Oil Company



Keith Simas

0014.L147

P&D ENVIRONMENTAL, INC.

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

January 30, 2008
Report 0014.R68

Mr. Ted Simas
Mr. Keith Simas
Xtra Oil Company
2307 Pacific Ave.
Alameda, CA 94501

**SUBJECT: GROUNDWATER MONITORING WELL INSTALLATION REPORT
(MW5 THROUGH MW12)
County Case # RO 285
Xtra Oil Company
3495 Castro Valley Blvd.
Castro Valley, California**

Gentlemen:

P&D Environmental, Inc. (P&D) is pleased to present this report documenting the drilling and installation of eight offsite groundwater monitoring wells designated as MW5 through MW12. This work was performed in accordance with a February 6, 2007 letter request from the Alameda County Department of Environmental Health (ACDEH), P&D's Groundwater Monitoring Well Installation Work Plan (MW5 Through MW13) dated March 5, 2007 (document 0014.W10), a conditional approval of the work plan from the ACDEH dated April 4, 2007, and P&D's Groundwater Monitoring Well Installation Work Plan Amendment (MW5 Through MW12) dated May 3, 2007 (document 0014.W10A).

A Site Location Map (Figure 1) and Site Vicinity Map showing the monitoring well locations (Figure 2) are attached with this report. Please note that the Norbridge School shown on Figure 1 to the south of the subject site has been demolished and replaced with the Castro Valley BART station and associated parking lot.

All work will be performed under the direct supervision of an appropriately registered professional. This work plan is prepared in accordance with guidelines set forth in the document "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites" dated August 10, 1990 and "Appendix A - Workplan for Initial Subsurface Investigation" dated August 20, 1991 and California Code of Regulations Title 23 Sections 2720-2728.

BACKGROUND

The site is currently used as a gasoline station. Four 12,000 gallon underground fuel storage tanks are present at the site. Three of the tanks contain gasoline and the fourth tank contains diesel fuel. A 550 gallon waste oil tank was removed from the site in November 1988. The fuel tanks were replaced during August 1992.

Three monitoring wells, designated MW1, MW2 and MW3, were installed at the site on February 14 and 15, 1990 by Western Geo-Engineers. The subsurface materials encountered in the boreholes consisted primarily of silt and clay. The locations of the monitoring wells are shown on Figure 2. Soil samples collected during drilling of the boreholes for the monitoring wells revealed the presence of total petroleum hydrocarbons as gasoline (TPH-G) and total petroleum hydrocarbons as diesel (TPH-D). TPH-G was encountered in borehole MW1 at depths of 5 and 10 feet below grade at concentrations of 40 and 1,400 mg/kg, respectively; in borehole MW2 at depths of 10 and 15 feet below grade at concentrations of 230 and 95 mg/kg, respectively; and in borehole MW3 at depths of 5, 10, and 15 feet at concentrations of 140, 250 and 25 mg/kg, respectively. In addition, 120 mg/kg TPH-D was detected in borehole MW3 at a depth of 5 feet. Soil samples collected at a depth of 20 feet in borehole MW1 and at a depth of 18 feet in boreholes in MW2 and MW3 did not show any detectable concentration of TPH-G or TPH-D. Groundwater was encountered in the boreholes at depths of approximately 15 to 16 feet below grade.

On February 15, 1990 Western Geo-Engineers drilled three exploratory boreholes at the site designated as SB1, SB2 and SB3. The subsurface materials encountered in the boreholes consisted primarily of silt and clay. The approximate locations of the boreholes are shown on Figure 2. It is P&D's understanding that soil samples were collected from the exploratory boreholes at depths of 10 and 12 feet and evaluated in the field using a photoionization detector. In borehole SB1, TPH-G was detected at the depths of 10 and 12 feet at concentrations of 1,700 and 450 mg/kg, respectively. In boreholes SB2 and SB3, TPH-G was detected at the depths of 10 and 12 feet in both boreholes at concentrations of 800 mg/kg and greater than 2,000 mg/kg, respectively.

A groundwater monitoring and sampling program was initiated at the site on February 20, 1990. Historic water level measurements and historic water quality data are summarized in the quarterly groundwater monitoring and sampling reports for the site.

It is P&D's understanding that during fuel tank replacement activities in August, 1992 soil surrounding the tank pit was removed and disposed of offsite. An extraction well, designated as EW1, was designed and constructed in one corner of the new tank pit by K&B Environmental at the time of installation of the new tanks. The location of EW1 is shown on Figure 2.

On February 7, 1996 well MW2 was destroyed associated with the widening of Redwood Road. The destruction was overseen by ACC Environmental Consultants of Oakland, California.

On August 15, 1997 P&D personnel oversaw the installation of one groundwater monitoring well, designated as MW4, at the subject site. The location of the monitoring well is shown on the attached Site Plan, Figure 2. This work was performed in accordance with P&D's work plan 0014.W4 dated June 27, 1997. The work plan was approved by the Alameda County Department of Environmental Health (ACDEH) in a telephone conversation with Mr. Scott Seery on August 14, 1997. During the conversation, Mr. Seery indicated that he would record his approval of the work plan in the county file for the site.

In accordance with an October 25, 2002 letter from Mr. Seery, groundwater samples are to be analyzed for fuel oxygenates methyl tertiary-butyl ether (MTBE), tertiary amyl methyl ether (TAME), ethyl tertiary-butyl ether (ETBE), diisopropyl ether (DIPE), and tertiary-butyl alcohol (TBA), and lead scavengers ethylene dibromide (EDB), 1,2-dichloroethane (1,2-DCA) using EPA Method 8260; and data for observation wells OW1 and OW2, located in Redwood Road, are to be incorporated into monitoring and sampling reports for the subject site.

On May 31, 2005, P&D submitted an Interim Source Area Remediation Plan (ISARP) to the ACDEH proposing free product removal at the site (document 0014.W9). P&D proposed using existing extraction well EW1 in the existing UST pit to dewater the existing pit and the previous UST pit. Monitoring of existing wells MW1, MW3, and MW4 to evaluate the effectiveness of water table drawdown at the site for plume control and associated free product recovery was also proposed. In January 2007, P&D installed a groundwater extraction system consisting of a pump in well EW1, associated piping for discharge of water from the well, and a carbon filtration system. System operation began March 27, 2007.

In response to a February 6, 2007 letter request from the ACDEH, P&D submitted a Groundwater Monitoring Well Installation Work Plan (MW5 Through MW13) dated March 5, 2007 (document 0014.W10) to the ACDEH proposing the installation of nine offsite groundwater monitoring wells in the vicinity of the subject site designated as MW5 through MW13. The ACDEH conditionally approved the work plan in an April 4, 2007 letter. In accordance with the ACDEH conditional approval, P&D subsequently submitted a Groundwater Monitoring Well Installation Work Plan Amendment (MW5 Through MW12) dated May 3, 2007 (document 0014.W10A) to the ACDEH proposing the installation of eight offsite groundwater monitoring wells in the vicinity of the subject site designated as MW5 through MW12.

FIELD ACTIVITIES

Field activities consisted of drilling and installation of wells MW5 through MW12 on November 27, 28, and December 5, 2007, development of the wells on December 11 and 12, 2007, purging and sampling of the wells on December 13 and 14, 2007, temporarily removing the well plugs on December 14, 2007 and monitoring of the wells for depth to water on December 17, 2007, and surveying of the wells horizontally and vertically by a State-licensed contractor on January 7, 2008. Details of the field activities completed since submittal of the March 5, 2007 work plan are presented below.

Prior to performing field work, Alameda County Public Works Agency (ACPWA) permits W2007-1168 through W2007-1175 were obtained, notification was provided to the ACPWA and ACDEH of the scheduled drilling dates, the drilling locations were marked with white paint, Underground Safety Alert was notified for buried utility location, and a health and safety plan was prepared. P&D personnel oversaw the installation of monitoring wells MW5, MW7, MW10 and MW11 at the subject site on November 27, 2007, and monitoring wells MW6 and MW9 on November 28, 2007. However, because of buried underground utilities, it was necessary to obtain encroachment permits for monitoring wells MW8 and MW12, which were installed on December 5, 2007. Exploration Geoservices, Inc. of San Jose, California performed the well installation. The locations of the wells at the site are shown in Figure 2.

Mr. Steven Plunkett of the ACDEH was onsite to observe drilling procedures on November 27, 2007. Ms. Vicki Hamlin of the ACPWA was onsite to observe grouting procedures on November 27 and 28, 2007.

Monitoring Well Installation

The boreholes for monitoring wells MW5, MW9 and MW10 were drilled to a total depth of 22.0 feet below the ground surface; for monitoring wells MW8 and MW11 to a total depth of 15.0 feet below ground surface; for monitoring well MW12 to a total depth of 13.0 feet below ground surface; and for monitoring wells MW6 and MW7 to 11.0 feet below ground surface. Each borehole was drilled using a truck-mounted 8-inch outside diameter hollow stem auger drill rig. Soil samples were collected at five-foot intervals for lithologic logging purposes using a California-modified split-spoon sampler lined with brass tubes driven by a 140-pound hammer falling 30 inches. Blow counts were recorded every six inches. The soil in the brass tubes and the soil cuttings from drilling were classified lithologically in the field in accordance with standard geologic field techniques and the Unified Soil Classification System. Copies of the boring logs are attached with this report.

The soil samples were evaluated with a photoionization detector (PID) quipped with a 10.6 eV bulb and calibrated with a 100 ppm isobutylene standard for boreholes MW6, MW8, MW9 and MW12. The PID was not operating properly during drilling of the other boreholes. In addition to organic vapor concentrations recorded with the PID, petroleum hydrocarbon odors were recorded for soil from all of the boreholes. No odors were detected in boreholes MW5 and MW10. Slight petroleum hydrocarbon odors were detected in borehole MW9 between the depths of 1.5 and 16.5 feet, with a maximum PID value of 5 ppm at a depth of 5.5 feet, and slight petroleum hydrocarbon odors were detected in borehole MW11 at a depth of 4.5 feet. Slight to moderate petroleum hydrocarbon odors were detected in borehole MW8 below a depth of 8.5 feet, with a maximum PID value of 123 ppm at a depth of 9.5 feet. Moderate to strong petroleum hydrocarbon odors were detected in boreholes MW6, MW7 and MW12, with a maximum PID value of 296 ppm at a depth of 9.5 feet in borehole MW6, and odors limited to the depths of 9 to 10 feet in borehole MW12 with a maximum PID value of 23 ppm at a depth of 9.5 feet.

Groundwater was not encountered while drilling in boreholes MW6, MW7 and MW11. Groundwater was encountered during drilling in boreholes MW5 and MW9 at a depth of 19 feet, in borehole MW10 at a depth of 18 feet, in borehole MW8 between the depths of 14 and 15 feet, and in borehole MW12 at a depth of 12.5 feet.

All of the wells were constructed using a 2-inch diameter Schedule 40 PVC pipe with 5.0 feet of 0.010-inch factory slotted pipe placed in the bottom of the borehole. A cap was placed on the bottom of each well. The annular space surrounding the PVC pipe was filled with #2/12 RMC Pacific Materials sack sand from the bottom of the borehole to a height of one foot above the top of the slotted interval. A one-foot thick layer of bentonite pellets was placed above the sand and hydrated. Neat cement grout was placed in the remaining annular space to approximately one foot below the ground surface. The top of each of the PVC well pipes was secured with a watertight locking plug and enclosed in a watertight traffic-rated well box which was secured in the borehole with concrete. Well construction specifications for wells MW5 through MW12 are provided in Table 1, and in the Well Construction Diagrams for each of the wells attached with this report.

Soil and water generated during drilling activities were stored in drums onsite, pending analysis and appropriate disposal.

Well Development

On December 11 and 12, 2007, wells MW5 through MW12 were developed by surging and over-pumping. Prior to development, the monitoring wells were monitored for depth to water to the nearest 0.01 feet using an electric water level indicator. The measured depth to groundwater prior to development on December 11 and 12, 2007 in wells MW5, MW6, MW7, MW8, MW9, MW10, MW11, and MW12 was 5.98, 6.17, 5.98, 6.56, 11.21, 5.70, 11.94, and 7.67 feet, respectively. The depth to water measurements are summarized in Table 2.

During development of the wells, P&D personnel did not detect petroleum hydrocarbon odors or sheen on the water purged from the wells, with the exception of MW6 and MW8 which both had petroleum hydrocarbon odors and sheen. As a result of relatively low recharge rates for the wells, approximately 6 and 3 gallons of water were removed during development of wells MW7 and MW11, respectively. Water removed from the wells during development was stored in drums onsite, and subsequently discharged through the onsite groundwater treatment system to the sanitary sewer.

Well Monitoring and Sampling

On December 13, 2007 P&D personnel monitored wells MW5 through MW12. The wells were monitored for depth to water and the presence of free product or sheen. The depth to water was measured to the nearest 0.01 foot using an electric water level indicator and the presence of free product or sheen was evaluated using a transparent bailer. No free product or sheen was observed in any of the groundwater monitoring wells. The depth-to-water measurements are summarized in Table 2.

On December 13, 2007 P&D purged and sampled wells MW5 through MW10 and MW12. However, due to a slow recharge rate in well MW11, this well was purged on December 13, 2007 and sampled on December 14, 2007. Each well was purged of a minimum of three casing volumes of water, or until the wells had been purged dry. During purging operations, the field parameters of electrical conductivity, temperature, and pH were monitored. No sheen or petroleum hydrocarbon odor was detected on the purge water from any of the wells, except for wells MW6 and MW8 which had odors, but no sheen present. A faint odor was reported in purge water from well MW12, however it was not possible to determine if the odor was a petroleum hydrocarbon odor.

Once the field parameters were observed to stabilize during well purging and a minimum of three casing volumes had been purged, or the well had been purged dry, water samples were collected using a clean disposable bailer. No sheen or separate phase layers of petroleum hydrocarbons were observed on the groundwater samples from any of the wells. The water samples were transferred from the disposable bailer to 40-milliliter glass Volatile Organic Analysis (VOA) vials and 1-liter amber glass bottles that were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to assure that no air bubbles were present. The VOA vials and bottles were then transferred to a cooler with ice, pending transport to the laboratory.

Chain of custody documentation accompanied the samples to the laboratory. Records of the field parameters measured during well purging are attached with this report.

Based on the slow recharge rates in some of the wells and the positive air pressure encountered when some of the wells were opened for development and sampling, the expanding plugs were temporarily removed from all of the wells on December 14, 2007 to allow the water levels in the wells to equilibrate. All of the wells were monitored on December 17, 2007 and the plugs replaced in the wells. The depth-to-water measurements are summarized in Table 2.

Well Surveying

The elevations of the top of the PVC casing and the ground surface (pavement or sidewalk) for each monitoring well were surveyed by Kier & Wright, Inc, on January 7, 2008. In addition, the well locations were surveyed horizontally. The surveying was performed in accordance with Geotracker requirements. The top of casing elevations for each well are provided in Table 1. In addition, the elevations for the tops of previously existing wells at the subject site, and selected offsite features (building corners and curbs for site vicinity map accuracy verification) were surveyed horizontally. A copy of the survey information provided by the surveyor, including a table of survey elevations and a map of horizontally surveyed locations is attached with this report.

Soil and Water Disposal

One composite soil sample designated as COMP A was collected from the drummed soil for characterization for disposal purposes. Nine drums of soil generated during well drilling were removed from the site as non-hazardous waste on December 11, 2007 by Clearwater Environmental of Newark, California (Clearwater). Clearwater is a State-licensed hazardous waste transporter. The drums were transported to the Alviso Independent Oil facility in Alviso, California using non-hazardous waste manifest 4845. The Alviso Independent Oil facility is a State-licensed Transfer Storage and Disposal Facility for hazardous waste. A copy of the soil disposal manifest is attached with this report. Drummed water associated with drilling equipment decontamination, well development and well sampling was pumped into the onsite groundwater treatment system and discharged to the sanitary sewer.

GEOLOGY AND HYDROGEOLOGY

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

The subsurface materials encountered in the boreholes consisted predominantly of silty clay, with lesser amounts of clayey silt encountered in boreholes MW5, MW6, MW10 and MW12. Coarse - grained materials consisting of silty or clayey sand were encountered in boreholes MW5, MW8 and MW12 in layers measuring approximately 1.5, 1.0 and 1.5 feet thick, respectively.

Groundwater was not encountered while drilling in boreholes MW6, MW7 and MW11. Groundwater was encountered during drilling in boreholes MW5 and MW9 at a depth of 19 feet, in borehole MW10 at a depth of 18 feet, in borehole MW8 between the depths of 14 and 15 feet, and in borehole MW12 at a depth of 12.5 feet.

Review of depth to water level measurements in Table 2 shows a substantial difference between well MW11 and all of the other wells, indicating that the water level in well MW11 still had not equilibrated after more than two days. Figure 3 shows groundwater surface contours based on December 17, 2007 well monitoring data, after the wells had been uncapped for at least two days for water level equilibration. Based on the slow recovery of water levels in well MW11, this well was not included in the interpretation of groundwater surface contours shown on Figure 3. Review of the contours shows that the groundwater flow direction in the vicinity of the subject site is southerly. Inflections in the contours in the vicinity of wells MW5, MW6 and MW7 suggest a southwesterly groundwater flow direction in the vicinity of these wells, which is consistent with the distribution of petroleum hydrocarbons historically encountered in groundwater grab samples in the vicinity of the site (see Figures 7, 8 and 9).

LABORATORY ANALYSIS

All of the soil and groundwater samples were analyzed at McCampbell Analytical, Inc. in Pacheco, California. McCampbell Analytical, Inc. is a state-accredited hazardous waste testing laboratory. The soil samples collected from the boreholes for the monitoring wells were analyzed for Total Petroleum Hydrocarbons as Bunker Oil (TPH-BO), Total Petroleum Hydrocarbons as Diesel (TPH-D), and Total Petroleum Hydrocarbons as Gasoline (TPH-G) using EPA Method 8015C; and for benzene, toluene, ethylbenzene, and xylenes (BTEX), fuel oxygenates including MTBE, and lead scavengers using EPA Method 8260B. The groundwater samples were analyzed for the same compounds with the exception of TPH-BO. The composite soil sample collected from the drummed borehole soil was also analyzed for the same compounds using the same methods in addition to CAM 17 metals using EPA Method 6020A. The borehole soil sample results are summarized in Table 3, and the groundwater sample results are summarized in Table 4. The drummed soil waste disposal characterization sample results are not summarized in a table. Copies of all of the laboratory analytical reports and chain of custody documentation are attached with this report.

No fuel oxygenates or lead scavengers were detected in any of the soil samples. No petroleum hydrocarbons were detected in any of the soil samples collected from boreholes MW10 and MW11. Petroleum hydrocarbons were not detected in any of the soil samples from borehole MW12 with the exception of TPH-BO, TPH-D and TPH-G, all detected in the soil sample collected at a depth of 9.5 feet, and with none of the detected concentrations exceeding their respective Environmental Screening Level (ESL) values for residential land use. Similarly, petroleum hydrocarbons were not detected in any of the soil samples from borehole MW8 with the exception of TPH-BO, TPH-D, TPH-G, ethylbenzene and total xylenes, all detected in the soil sample collected at a depth of 9.5 feet, and with none of the detected concentrations exceeding their respective ESL values for residential land use except for TPH-G. Petroleum hydrocarbons were also detected at a depth of 4.5 feet in the soil sample from borehole MW7, with detected concentrations exceeding the respective ESL values for TPH-G, benzene and total xylenes.

Petroleum hydrocarbons were detected at depths of approximately 5 and 10 feet in boreholes MW5, MW6 and MW9. In borehole MW5, TPH-G, benzene, ethylbenzene and total xylene concentrations exceeded the respective ESL values at a depth of 5.0 feet and benzene and total xylenes exceeded their respective ESL values at a depth of 10.0 feet. In borehole MW6, the benzene concentration exceeded the respective ESL value at a depth of 4.5 feet, and TPH-D, TPH-G, toluene, ethylbenzene and total xylenes exceeded their respective ESL values at a depth of 9.5 feet. In borehole MW9, the benzene concentration exceeded the respective ESL value at a depth of 5.5 feet.

Review of the laboratory analytical reports shows that the laboratory identified the results reported as diesel for the MW5 boring at a depth of 5.0 feet, the MW6 boring at 9.5 feet, the MW7 boring at 4.5 feet, the MW8 boring at 9.5 feet, and the MW12 boring at 9.5 feet, as consisting of both diesel range and gasoline range compounds. The lab reports identified the results reported as diesel for the MW6 boring at 4.5 feet, and the MW9 boring at 5.5 and 10.0 feet, as containing significant gasoline range compounds. The laboratory also identified the results reported as gasoline for the MW6 boring at 9.5 feet, the MW7 boring at 4.5 feet, the MW8 boring at 9.5 feet, and the MW12 boring at 9.5 feet, as containing significant heavier gasoline range compounds (aged gasoline?), and having no recognizable pattern.

Review of Table 4 shows that MTBE was detected in all of the groundwater samples except for the samples collected from wells MW6 and MW9. The MTBE concentrations exceeded the ESL in wells MW7, MW8 MW11 and MW12. No other fuel oxygenates or lead scavengers were detected other than 14 ug/L TBA in the sample from well MW7. Review of the groundwater sample results shows that the highest concentrations of petroleum hydrocarbons occurred in the groundwater samples from wells MW6 and MW8. TPH-D and TPH-G concentrations in MW6 were 6,200 and 66,000 ug/L, respectively, and in MW8 they were 1,500 and 6,200, respectively. In addition, petroleum hydrocarbons were detected in MW5 groundwater (110 ug/L TPH-G, and TPH-D not detected), and in MW12 groundwater (200 ug/L TPH-D, and 320 ug/L TPH-G). Neither TPH-D or TPH-G were detected in the groundwater samples from MW7, MW9, MW10, or MW11. Benzene was detected in wells MW5, MW6, MW8 and MW9 at concentrations of 5.3, 7,900, 57 and 1.0 ug/L, respectively. All of the detected TPH-D, TPH-G and benzene concentrations equaled or exceeded their respective ESL values. In addition, toluene, ethylbenzene and total xylenes concentrations exceeded their respective ESL values in well MW6, and the ethylbenzene concentration in well MW8 exceeded the ESL.

Review of the laboratory analytical reports shows that the laboratory identified the results reported as diesel for the MW6, MW8, and MW12 groundwater samples as containing significant gasoline-range compounds. The laboratory also identified the results reported as gasoline for the MW12 groundwater sample as having no recognizable pattern.

DISCUSSION AND RECOMMENDATIONS

Review of the survey information provided by Kier & Wright shows that the survey results correspond well with the base map used as a Site Vicinity Map during previous subsurface investigations and in the work plan for offsite well installation.

Review of the boring logs shows that the subsurface materials encountered in the boreholes consisted predominantly of silty clay, with lesser amounts of clayey silt encountered in boreholes MW5, MW6, MW10 and MW12. Coarse-grained materials consisting of silty or clayey sand were encountered in boreholes MW5, MW8 and MW12 in layers measuring approximately 1.5, 1.0 and 1.5 feet thick, respectively.

Review of the water levels in Table 2 and the groundwater surface elevations shown on Figure 3 shows that there is very slow recovery of water levels in well MW11, and that a static water level was not measured in well MW11. For this reason, well MW11 was not included in the interpretation of groundwater surface contours and the groundwater flow direction in the vicinity of the subject site. Review of the contours shows that the groundwater flow direction in the vicinity of the subject site is southerly. Inflections in the contours in the vicinity of wells MW5, MW6 and MW7 suggest a southwesterly groundwater flow direction in the vicinity of these wells, which is consistent with the distribution of petroleum hydrocarbons historically encountered in groundwater grab samples in the vicinity of the site (see Figures 7, 8 and 9).

TPH-D, TPH-G, and benzene groundwater sample results are shown on Figures 4, 5 and 6, respectively. Offsite wells MW5, MW6, MW7 and MW8 were installed with the objective of monitoring groundwater in impacted areas identified during previous subsurface investigations, and the remaining offsite wells were installed with the objective of monitoring plume perimeter conditions. Figures 7, 8, and 9 show historic investigation TPH-D, TPH-G, and benzene, respectively for groundwater sample results. These figures also show the groundwater sample results for the recently installed offsite groundwater monitoring wells. Review of Figures 4 through 9 shows that the groundwater sample results from the wells corresponds with the expected results from the perimeter wells MW9 through MW12 with the exception of TPH-G in well MW12. However, the results also show that the plume interior wells MW5 through MW8 do not correspond well with the anticipated results with the exception of TPH-G and benzene in well MW6 and TPH-D and TPH-G in well MW8.

The absence of a good correlation between plume interior well expected results and actual results indicates that the petroleum hydrocarbons in groundwater downgradient from the subject site are present in localized pathways that are not as extensive as shown by the contours on Figures 7, 8 and 9, and that some of the plume interior wells are not located in the localized pathways where the petroleum hydrocarbons are present. This interpretation is consistent with the predominantly silty clay materials encountered in the boreholes for the wells and historic soil borings and the small amount of coarse-grained materials encountered in the boreholes.

Based on the sample results, P&D recommends that the offsite groundwater monitoring wells be sampled at the same time as the onsite groundwater monitoring wells during the next quarterly monitoring and sampling event. In addition, P&D recommends that a feasibility test be performed to evaluate effective remedial technologies for reducing elevated petroleum hydrocarbon concentrations encountered at locations downgradient of the subject site.

DISTRIBUTION

A copy of this report will be uploaded to the ACDEH website, in accordance with ACDEH requirements. In addition, a copy of this report will be uploaded to the GeoTracker database.

LIMITATIONS

This report was prepared solely for the use of Xtra Oil Company. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with 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.

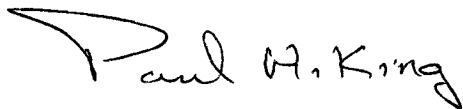
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the 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: 12/31/09



Attachments: Table 1 – Well Construction Detail Summary
Table 2 – Well Monitoring Data
Table 3 – Summary of Soil Sample Laboratory Analytical Results
Table 4 – Summary of Groundwater Sample Laboratory Analytical Results
Figure 1 - Site Location Map
Figure 2 - Site Vicinity Map Showing Monitoring Well and Soil Boring Locations
Figure 3 – Site Vicinity Map Showing Groundwater Surface Contours
Figure 4 - Site Vicinity Map Showing TPH-D in Groundwater
Figure 5 - Site Vicinity Map Showing TPH-G in Groundwater
Figure 6 - Site Vicinity Map Showing Benzene in Groundwater
Figure 7 - Site Vicinity Map Showing TPH-D Isoconcentration Contours
Figure 8 - Site Vicinity Map Showing TPH-G Isoconcentration Contours
Figure 9 - Site Vicinity Map Showing Benzene Isoconcentration Contours
Boring Logs
Well Construction Diagrams
Survey Report
Well Monitoring and Purging Data Sheets
Drum Disposal Manifest
Laboratory Analytical Reports and Chain of Custody Documentation

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TABLES

Table 1. Well Construction Detail Summary									
Proposed Well	Construction Date	Total Borehole Depth (Feet)	Screen Length (Feet)	Screen Interval Depth (Feet)	Filter Pack Interval (Feet)	Bentonite Seal Interval (Feet)	Sanitary Seal Interval (Feet)	Top of Casing Elevation (Feet)	ACPWA Permit Number
MW5	11/27/07	22.0	5.0	17 to 22	16 to 22	15 to 16	1 to 15	176.02	W2007-1171
MW6	11/28/07	11.0	5.0	6 to 11	5 to 11	4 to 5	1 to 4	175.24	W2007-1172
MW7	11/27/07	11.0	5.0	6 to 11	5 to 11	4 to 5	1 to 4	170.34	W2007-1173
MW8	12/5/07	15.0	5.0	10 to 15	9 to 15	8 to 9	1 to 8	176.00	W2007-1174
MW9	11/28/07	22.0	5.0	17 to 22	16 to 22	15 to 16	1 to 15	175.09	W2007-1175
MW10	11/27/07	22.0	5.0	17 to 22	16 to 22	15 to 16	1 to 15	176.03	W2007-1168
MW11	11/27/07	15.0	5.0	10 to 15	9 to 15	8 to 9	1 to 8	171.03	W2007-1169
MW12	12/5/07	13.0	5.0	8 to 13	7 to 13	6 to 7	1 to 6	173.98	W2007-1170

Abbreviations
 ACPWA = Alameda County Public Works Agency

TABLE 2
GROUNDWATER LEVEL MONITORING DATA
FOR WELLS MW5, MW6, MW7, MW8, MW9, MW10, MW11, and MW12

Well No.	Date Monitored	*Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW5	12/12/2007	176.02	5.98**	170.04
	12/13/2007		5.83	170.19
	12/17/2007		5.83	170.19
MW6	12/11/2007	175.24	6.17**	169.07
	12/13/2007		5.63	169.61
	12/17/2007		5.69	169.55
MW7	12/11/2007	170.34	5.98**	164.36
	12/12/2007		5.49	164.85
	12/13/2007		4.74	165.60
	12/17/2007		3.68	166.66
MW8	12/12/2007	176.00	6.56**	169.44
	12/13/2007		6.52	169.48
	12/17/2007		6.73	169.27
MW9	12/11/2007	175.09	11.21**	163.88
	12/13/2007		6.31	168.78
	12/17/2007		6.35	168.74
MW10	12/12/2007	176.03	5.70**	170.33
	12/13/2007		5.55	170.48
	12/17/2007		5.77	170.26
MW11	12/11/2007	171.03	11.94**	159.09
	12/12/2007		12.99	158.04
	12/13/2007		12.72	158.31
	12/17/2007		10.19	160.84
MW12	12/12/2007	173.98	7.67**	166.31
	12/13/2007		7.66	166.32
	12/17/2007		7.71	166.27

Notes:

* = Surveyed by Kier & Wright, Inc. on January 7, 2008

** = Prior to well development.

TABLE 3
SUMMARY OF SOIL SAMPLE LABORATORY ANALYTICAL RESULTS

Sample Date	Well and Sample Depth	TPH-BO	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Fuel Additives by 8260*
11/27/07	MW5-5.0	59	55, b	<u>180</u>	ND<0.10	<u>1.9</u>	ND<0.10	<u>3.9</u>	<u>5.3</u>	ND<0.10, except TBA
	MW5-10.0	ND<5.0	ND<1.0	4.3	ND<.005	<u>0.25</u>	0.012	0.019	<u>5.3</u>	ND<1.0, except TBA
	MW5-15.0	ND<5.0	ND<1.0	ND<1.0	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005	ND<.05, except TBA
	MW5-20.5	ND<5.0	ND<1.0	ND<1.0	ND<.005	ND<.005	ND<.005	ND<.005	ND<.005	ND<.05, except TBA
11/28/07	MW6-4.5	ND<5.0	4.7, c	15	ND<0.025	<u>0.62</u>	ND<0.025	0.64	0.88	ND<0.025, except TBA
	MW6-9.5	180	<u>240, b</u>	<u>1200, f, g</u>	ND<1.0	ND<1.0	<u>3.9</u>	<u>24</u>	<u>120</u>	ND<0.25, except TBA
ESL ¹		2500	83	83	0.023	0.044	2.9	3.3	2.3	ND<1.0, except TBA
ESL ²		410	83	83	0.023	0.044	2.9	3.3	2.3	ND<10

TABLE 3
SUMMARY OF SOIL SAMPLE LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Date	Well and Sample Depth	TPH-BO	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260*
11/27/07	MW7-4.5	32	38, b	<u>100, f, g</u>	ND<0.050	<u>0.066</u>	0.30	0.68	<u>2.5</u>	ND<0.050, except TBA ND<0.50
	MW7-9.5	ND<1.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005
12/5/07	MW8-4.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005, TBA ND<0.05
	MW8-9.5	57	59, b	<u>230, f, g</u>	ND<0.020	ND<0.020	ND<0.020	0.62	0.030	ND<0.020, TBA ND<0.20
	MW8-14.0	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005, TBA ND<0.05
ESL ¹		2500	83	83	0.023	0.044	2.9	3.3	2.3	
ESL ²		410	83	83	0.023	0.044	2.9	3.3	2.3	

TABLE 3
SUMMARY OF SOIL SAMPLE LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Date	Well and Sample Depth	TPH-BO	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Fuel Additives by 8260*
11/28/07	MW9-5.5	ND<5.0	1.2, c	24	ND<0.025	<u>0.70</u>	ND<0.025	0.73	0.89	ND<0.025, TBA ND<0.25
	MW9-10.0	ND<5.0	1.5, c	11	ND<0.010	0.026	0.037	0.17	0.73	ND<0.010, TBA ND<0.10
	MW9-15.0	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005, TBA ND<0.05
	MW9-20.0	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005, TBA ND<0.05
ESL ¹		2500	83	83	0.023	0.044	2.9	3.3	2.3	
ESL ²		410	83	83	0.023	0.044	2.9	3.3	2.3	

TABLE 3
SUMMARY OF SOIL SAMPLE LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Date	Well and Sample Depth	TPH-BO	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260*
11/27/07	MW10-5.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005 TBA ND<0.05
	MW10-10.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005 TBA ND<0.05
	MW10-15.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005 TBA ND<0.05
	MW10-20.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005 TBA ND<0.05
ESL ¹		2500	83	83	0.023	0.044	2.9	3.3	2.3	
ESL ²		410	83	83	0.023	0.044	2.9	3.3	2.3	

TABLE 3
SUMMARY OF SOIL SAMPLE LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Date		TPH-BO	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260*
11/27/07	MW11-4.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005 TBA ND<0.05
	MW11-9.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005 TBA ND<0.05
	MW11-14.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005 TBA ND<0.05
12/5/07	MW12-4.5	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005, TBA ND<0.05
	MW12-9.5	7.1	5.4, b	20, f, g	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005, TBA ND<0.05
	MW12-12.0	ND<5.0	ND<1.0	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.005, TBA ND<0.05
ESL ¹		2500	83	83	0.023	0.044	2.9	3.3	2.3	
ESL ²		410	83	83	0.023	0.044	2.9	3.3	2.3	

NOTES:

TPH-BO = Total Petroleum Hydrocarbons as Bunker Oil.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results contain significant gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

f = Laboratory analytical report note: TPH-G results have no recognizable pattern.

g = Laboratory analytical report note: TPH-G results show heavier gasoline range compounds are significant (aged gasoline?).

ESL¹ = November 2007 San Francisco Regional Water Quality Control Board Environmental Screening Level, commercial/ industrial land use, where groundwater is considered a current or potential source of drinking water. Values underlined exceed the Commercial/Industrial land use ESL.

ESL² = November 2007 San Francisco Regional Water Quality Control Board Environmental Screening Level, residential land use, where groundwater is considered a current or potential source of drinking water. **Values in bold exceed the Residential land use ESL.**

* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) and lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per kilogram (mg/Kg), unless otherwise indicated.

TABLE 4
SUMMARY OF GROUNDWATER SAMPLE LABORATORY ANALYTICAL RESULTS
(Collected December 13-14, 2007)

Well ID	TPH-D	TPH-G	MTBE ⁺	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260*
MW5	ND<50	110	4.0	5.3	0.5	ND<0.5	5.1	ND
MW6	6,200, c	66,000	ND<120	7900	3,600	2,600	16,000	ND
MW7	ND<50	ND<50	9.3	ND<0.5	ND<0.5	ND<0.5	0.83	ND, except TBA = 14
MW8	1,500, c	6,200	11	57	ND<5.0	160	18	ND
MW9	ND<50	ND<50	ND<0.5	1.0	ND<0.5	ND<0.5	4.5	ND
MW10	ND<50	ND<50	1.9	ND<0.5	ND<0.5	1.5	1.8	ND
MW11	ND<50	ND<50	21	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
MW12	200, c	320, f	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
ESL	100	100	5.0	1.0	40	30	20	

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results contain significant gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

f = Laboratory analytical report note: TPH-G results have no recognizable pattern.

ESL = November 2007 San Francisco Regional Water Quality Control Board Environmental Screening Level, where groundwater is considered a current or potential source of drinking water. **Values in bold exceed the ESL.**

+ = Analyzed by EPA Method 8260.

* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) and lead scavengers (EDB, 1,2-DCA/EDC).

Results in micrograms per liter ($\mu\text{g/L}$), unless otherwise indicated.

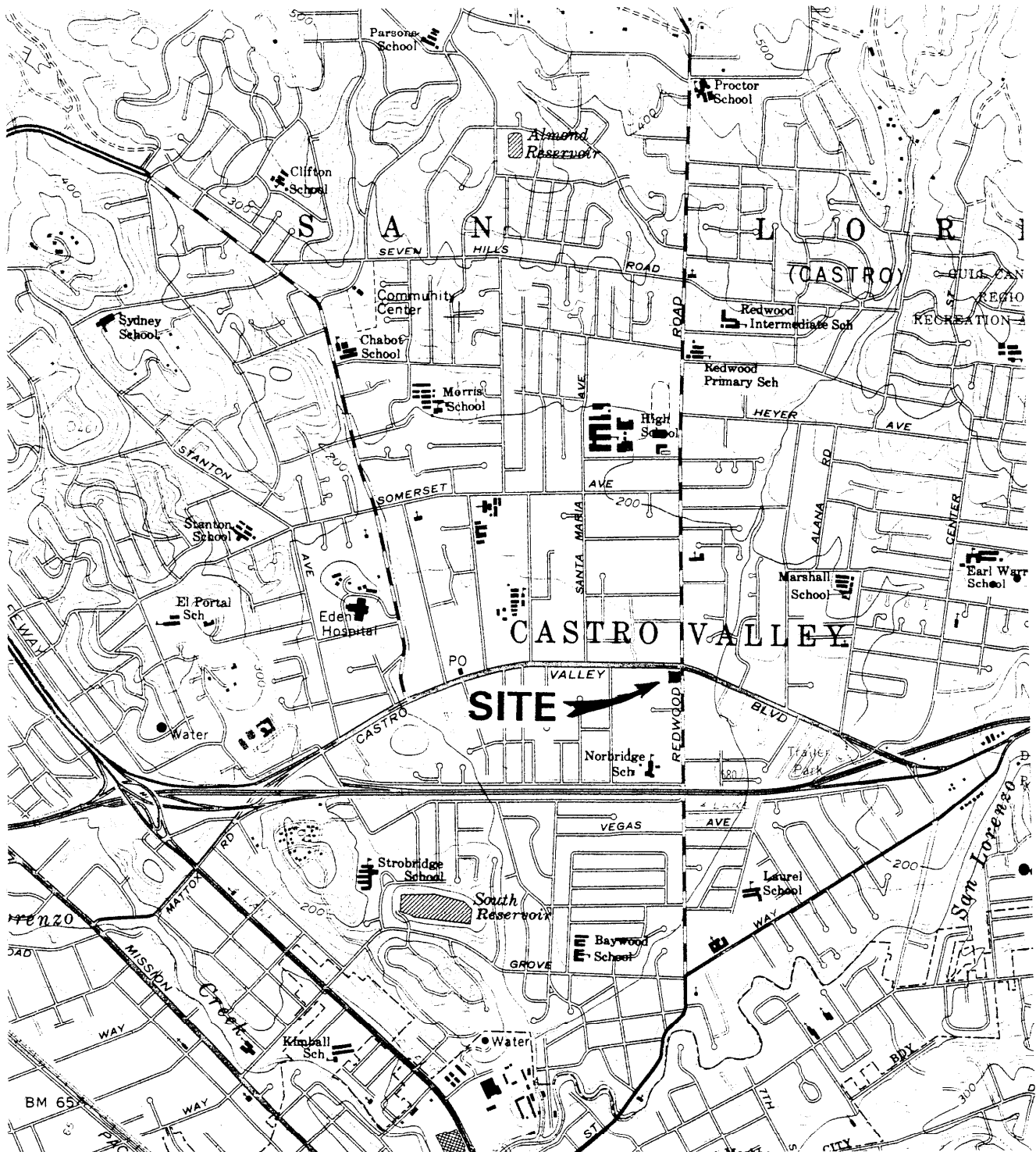
FIGURES

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Oakland, CA 94610

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Base Map From:
U.S. Geological Survey
Hayward, Calif.
7.5 Minute Quadrangle
Photorevised 1980

North

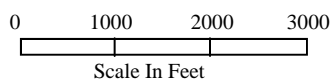
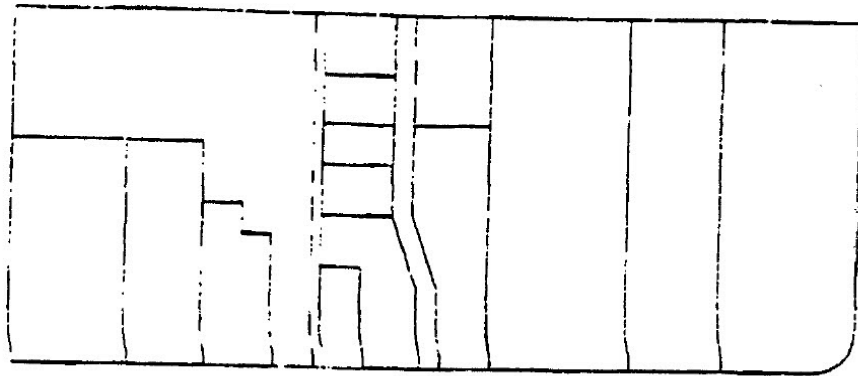
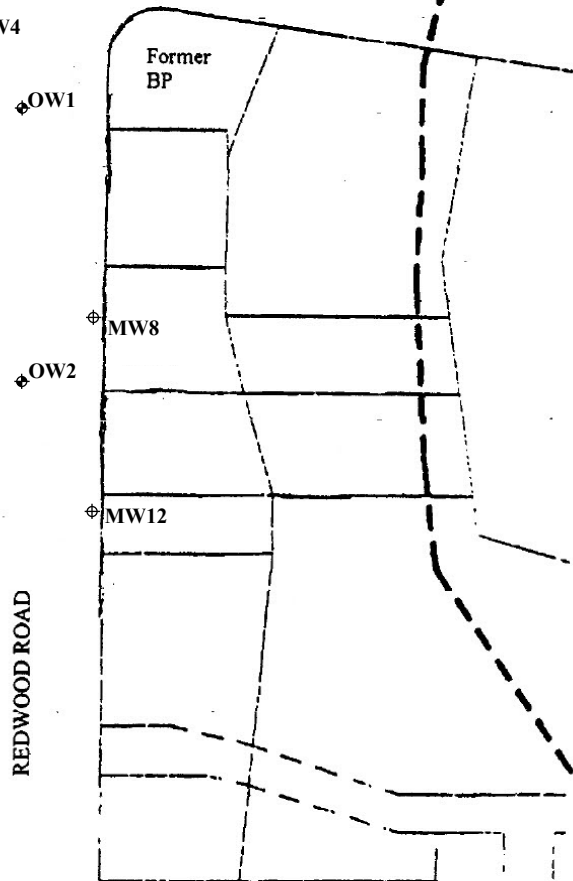
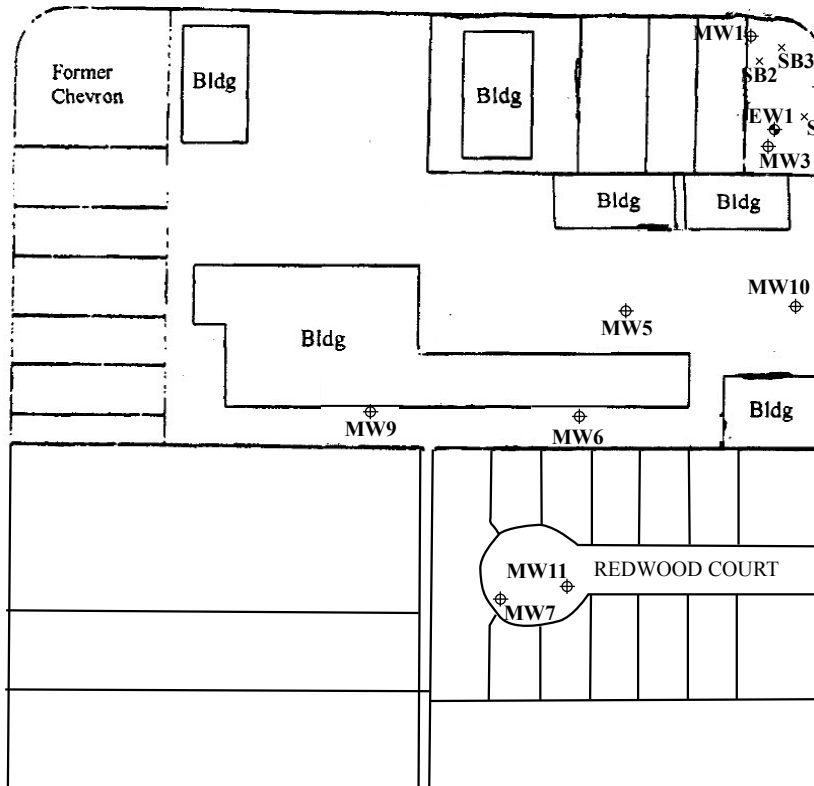
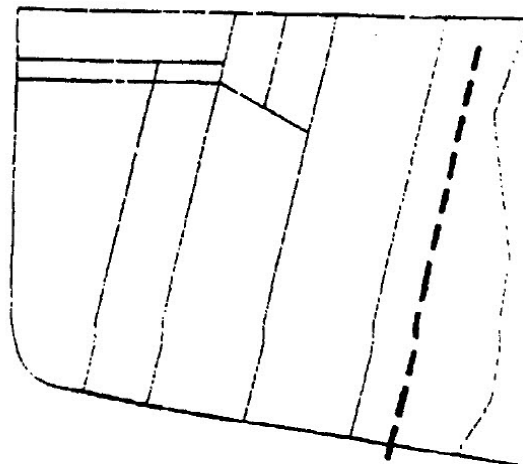


Figure 1
SITE LOCATION MAP
Xtra Oil Company
3495 Castro Valley Blvd.
Castro Valley, California



CASTRO VALLEY BOULEVARD



REDWOOD ROAD

LEGEND

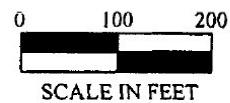
- ⊕ MW12 Monitoring Well
- ⊕ EW1 Extraction Well
- ⊕ OW2 Observation Well
- × SB3 Soil Boring
- Approximate Creek Location

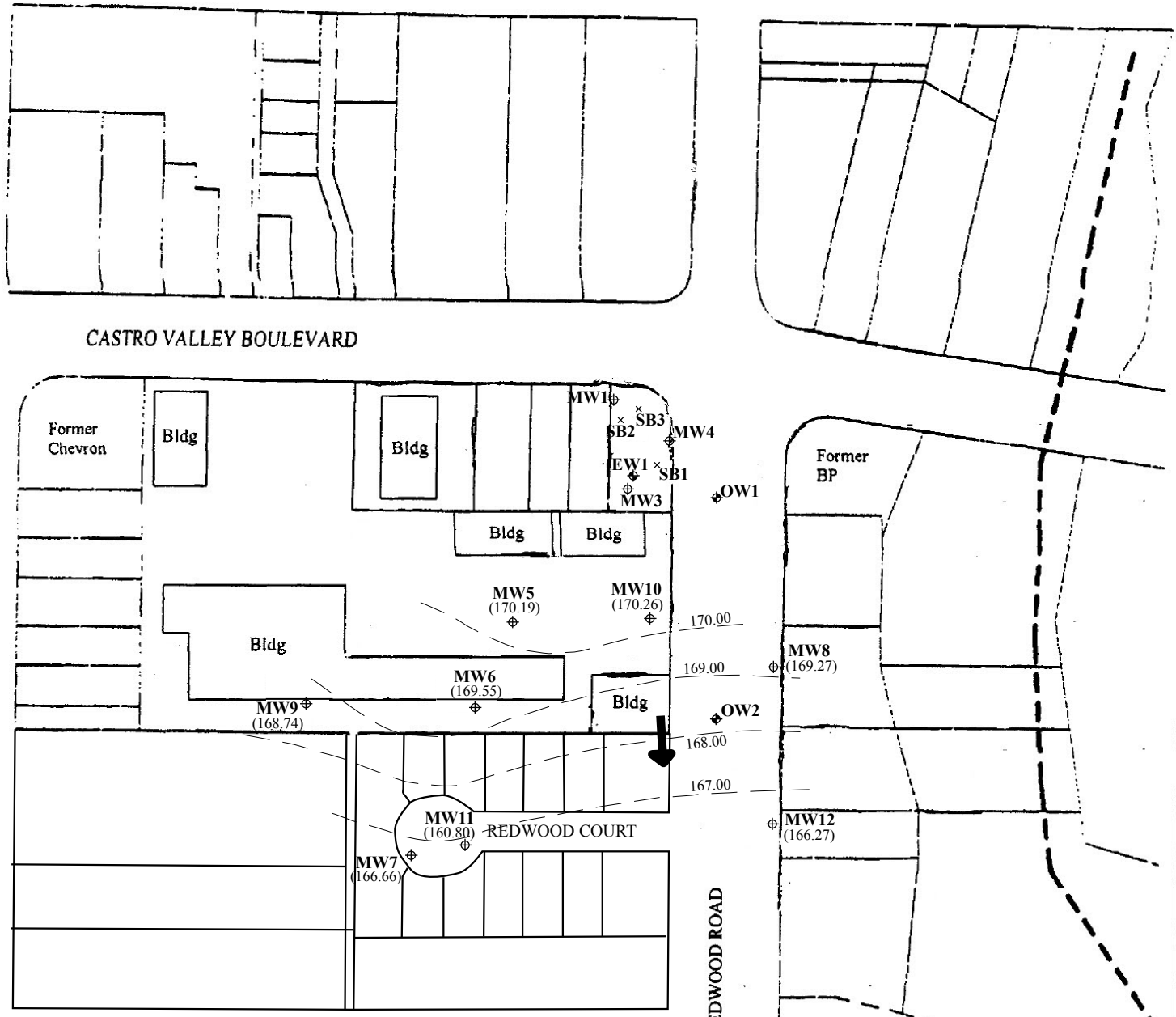
Figure 2
 Site Vicinity Map Showing Well and Soil Boring Locations
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



Base Map From:
 Castro Valley Sanitation
 District

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





LEGEND

- ⊕ MW12 Monitoring Well
- ⊕ EW1 Extraction Well
- ⊕ OW2 Observation Well
- × SB3 Soil Boring
- - - Approximate Creek Location
- (170.26) Groundwater Surface Elevation on December 17, 2007
- ➔ Groundwater Flow direction
- - - Groundwater Surface Contour

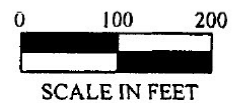
Note: Well MW11 water level not included in water surface interpretation.

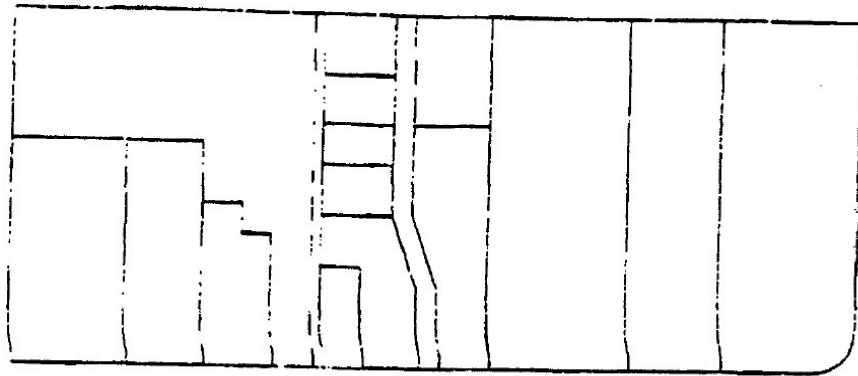
Figure 3
 Site Vicinity Map Showing Groundwater Surface Contours
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



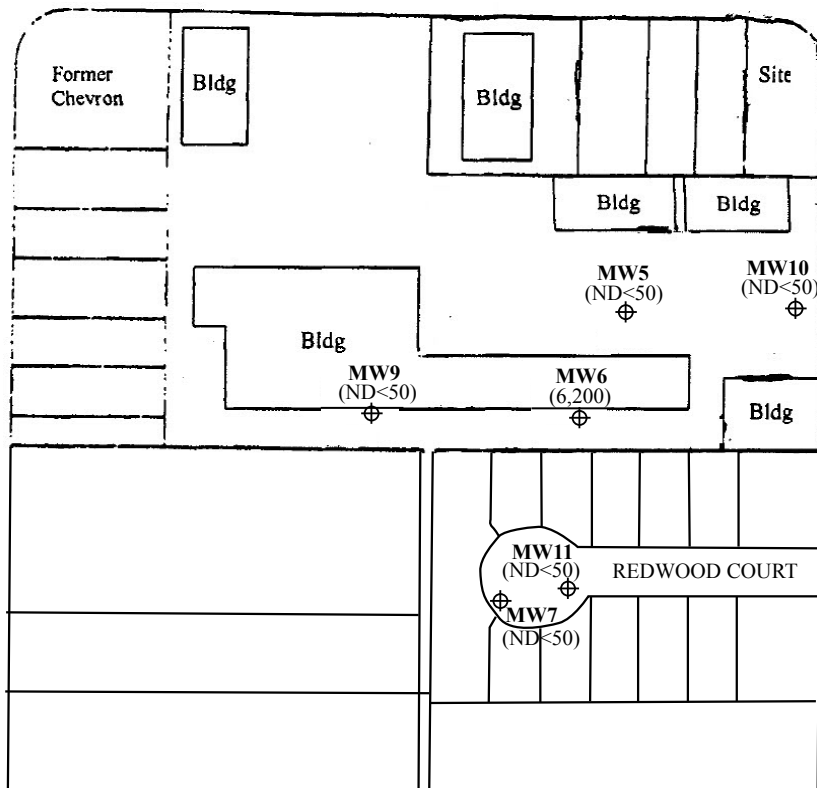
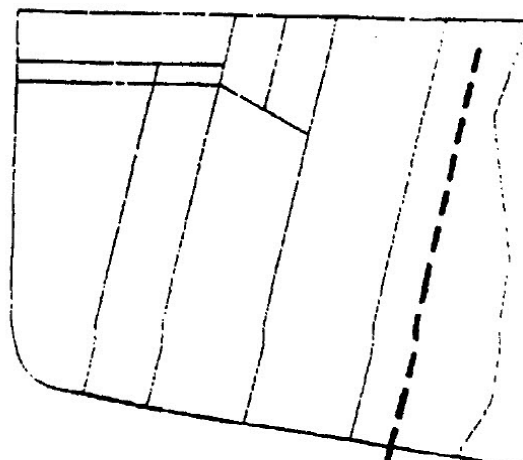
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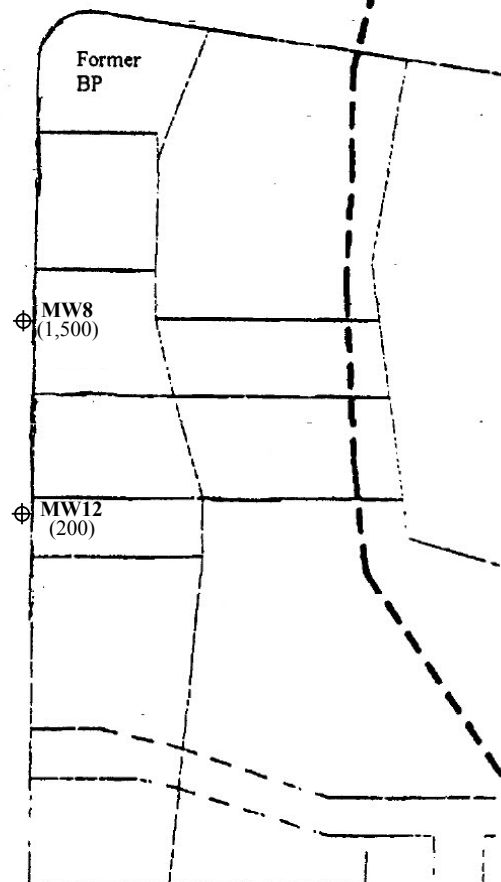




CASTRO VALLEY BOULEVARD



REDWOOD ROAD



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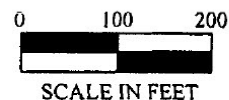
- ⊕ MW12 Well Location
- (6,200) TPH-Diesel Concentration in Groundwater (ug/L)
- Approximate Creek Location

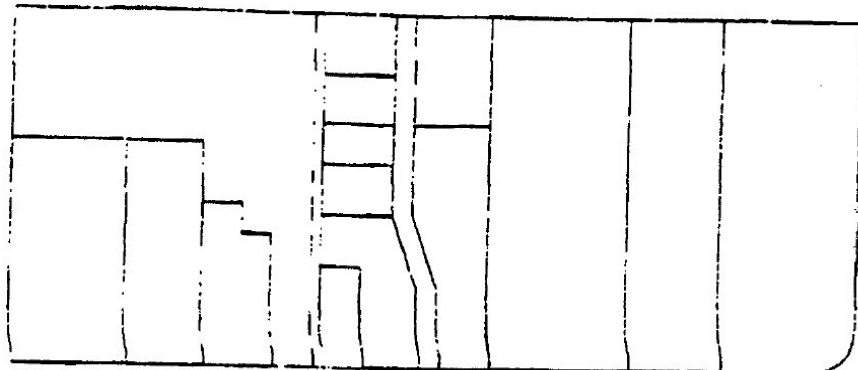
Figure 4
 Site Vicinity Map Showing TPH-D in Groundwater
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



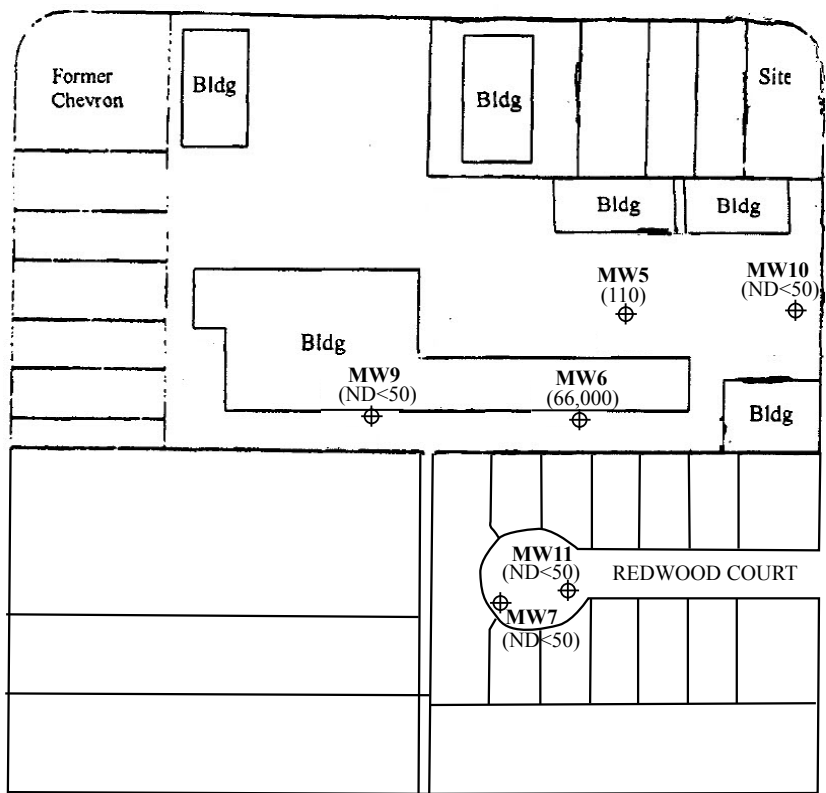
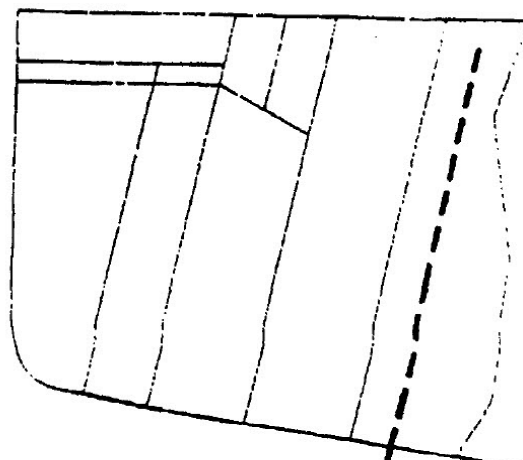
Base Map From:
 Castro Valley Sanitation
 District

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

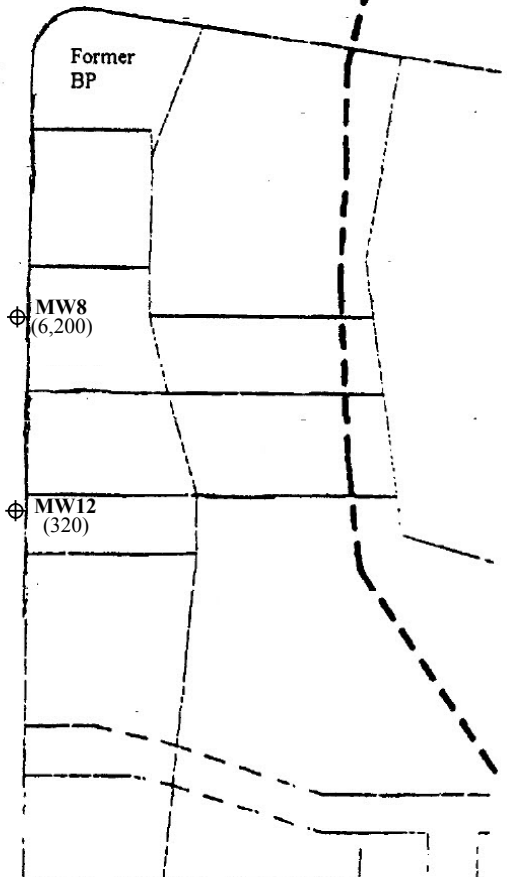




CASTRO VALLEY BOULEVARD



REDWOOD ROAD



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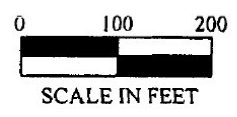
- ⊕ MW12 Well Location
- (66,000) TPH-Gasoline Concentration in Groundwater (ug/L)
- Approximate Creek Location

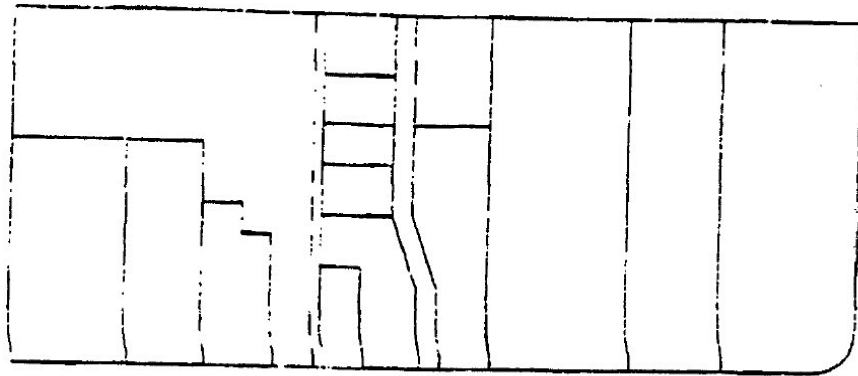
Figure 5
 Site Vicinity Map Showing TPH-G in Groundwater
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



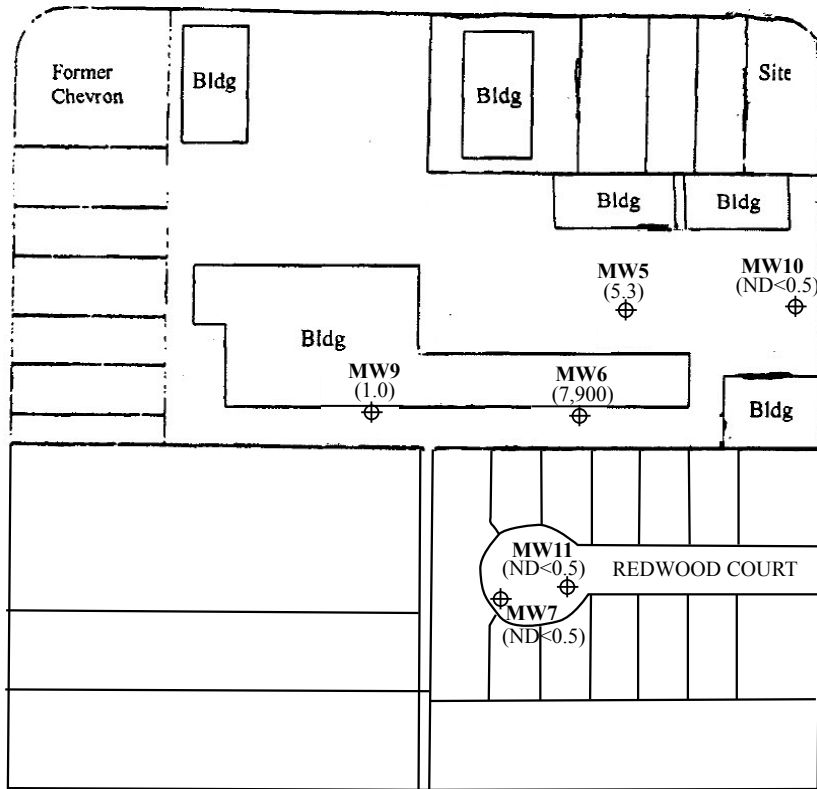
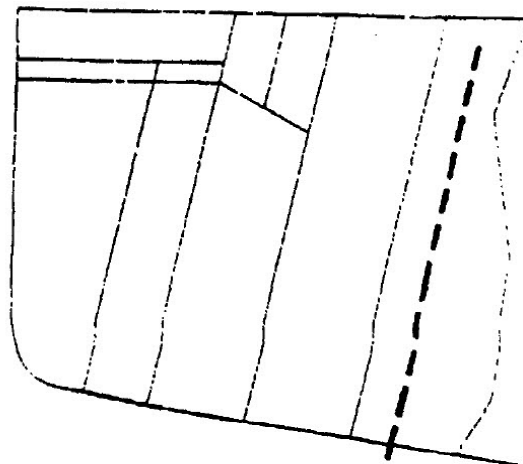
Base Map From:
 Castro Valley Sanitation
 District

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

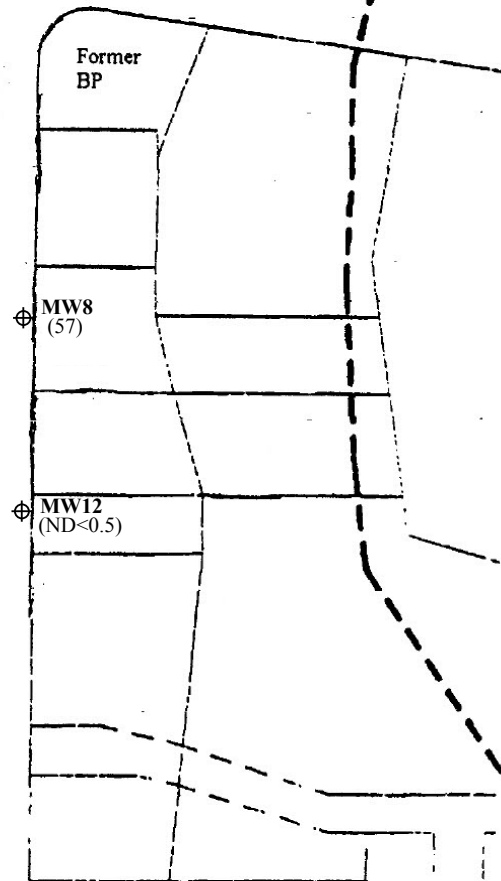




CASTRO VALLEY BOULEVARD



REDWOOD ROAD



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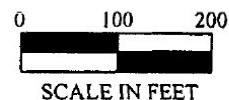
- ⊕ MW12 Well Location
- (7,900) Benzene Concentration in Groundwater (ug/L)
- - - - Approximate Creek Location

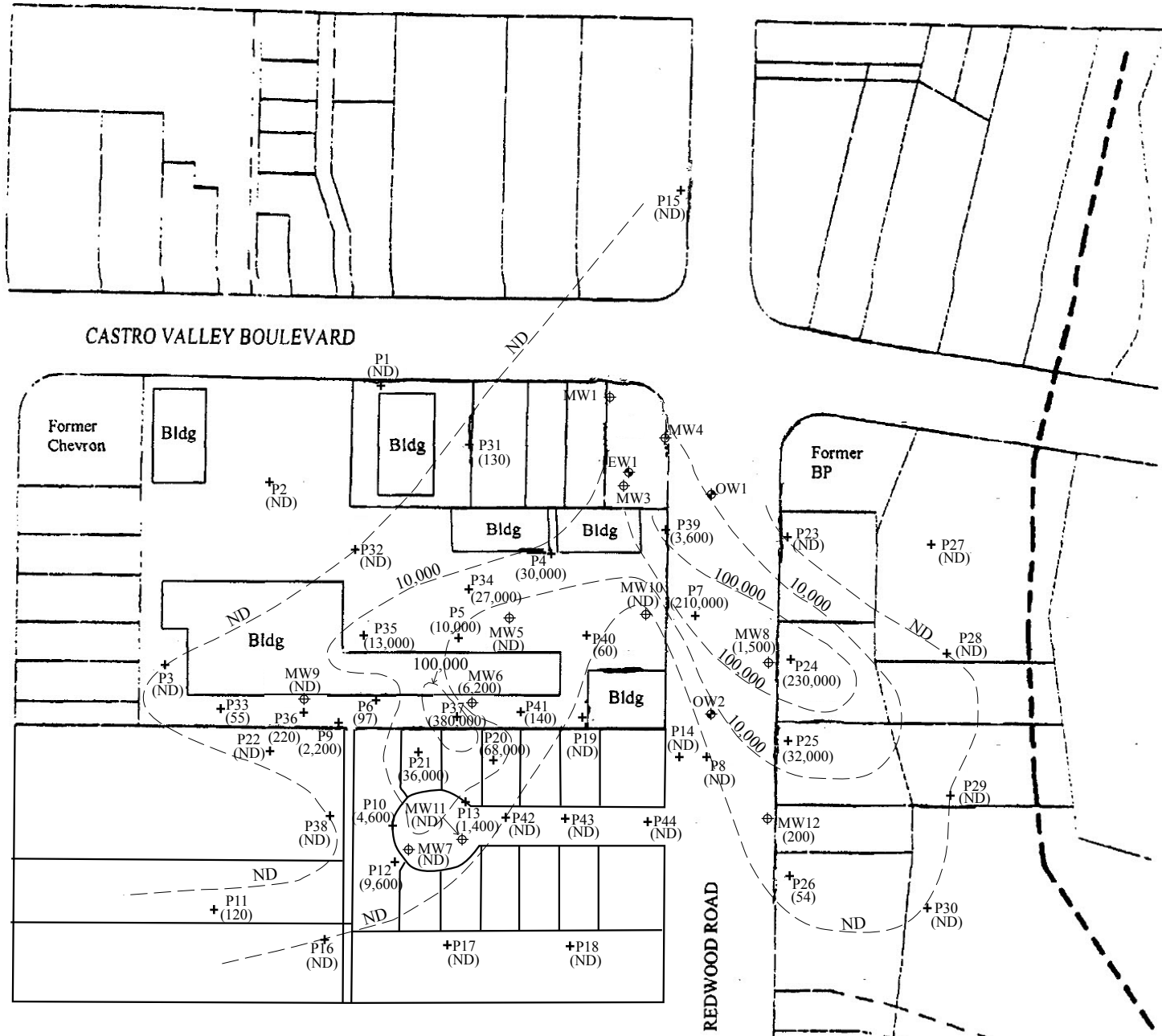
Figure 6
 Site Vicinity Map Showing Benzene in Groundwater
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



Base Map From:
 Castro Valley Sanitation
 District

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





LEGEND

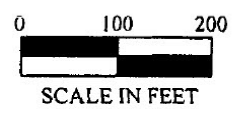
- ⊕ MW12 Monitoring Well Location (230,000) TPH-D Concentration in Groundwater (ug/L)
- ⊕ EW1 Extraction Well Location
- ⊕ OW2 Observation Well Location
- + P44 Previous Investigation Groundwater Grab Sample Collection Location
- - - Approximate Creek Location
- - - TPH-D Groundwater Isoconcentration Contour (ug/L)

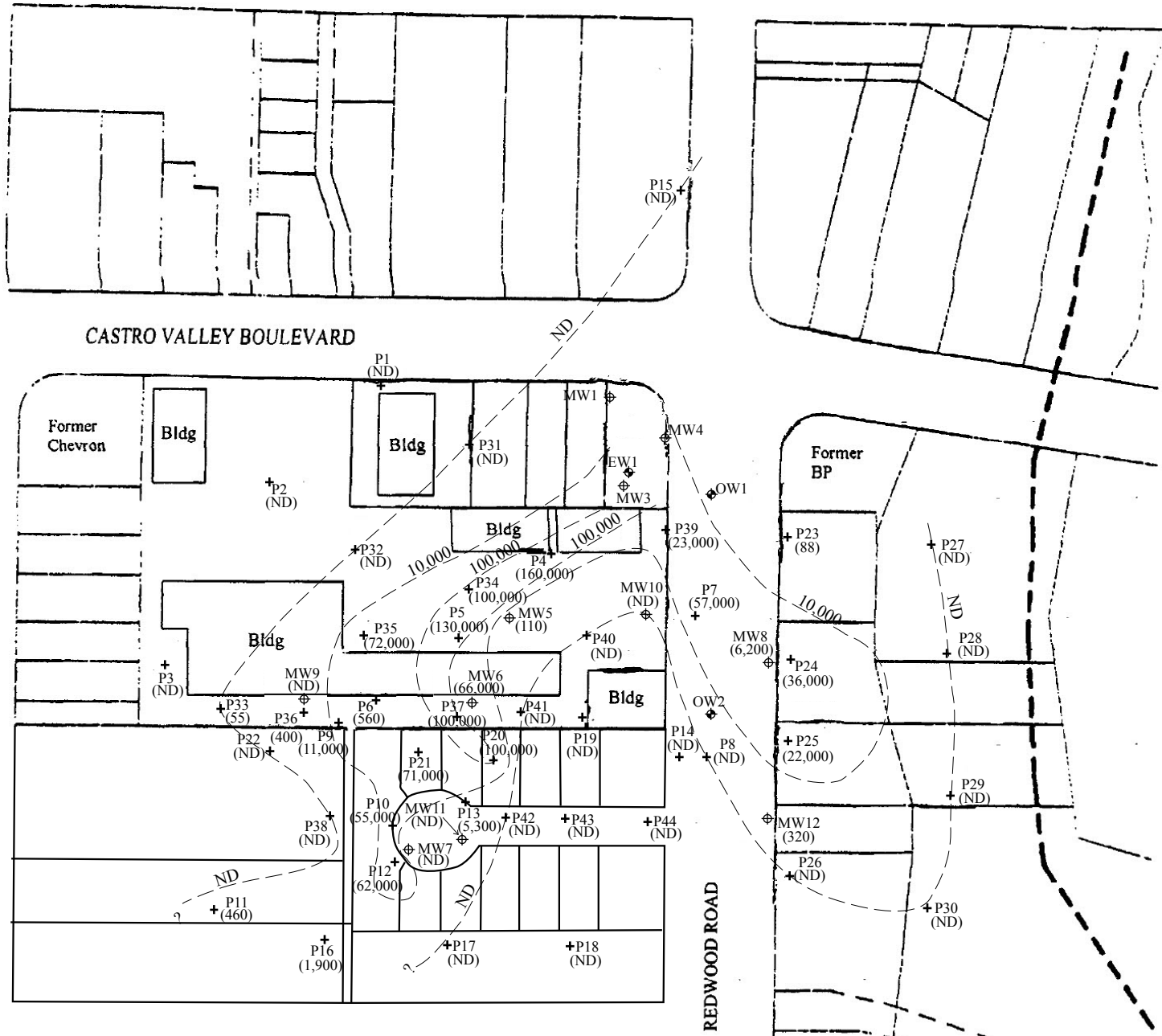
Figure 7
 Site Vicinity Map Showing TPH-D Isoconcentration Contours
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



Base Map From:
 Castro Valley Sanitation
 District

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





LEGEND

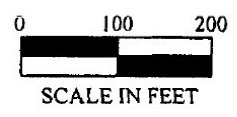
- ⊕ MW12 Monitoring Well Location (160,000) TPH-G Concentration in Groundwater (ug/L)
- ⊕ EW1 Extraction Well Location
- ⊕ OW2 Observation Well Location
- + P44 Previous Investigation Groundwater Grab Sample Collection Location
- - - Approximate Creek Location
- - - - - TPH-G Groundwater Isoconcentration Contour (ug/L)

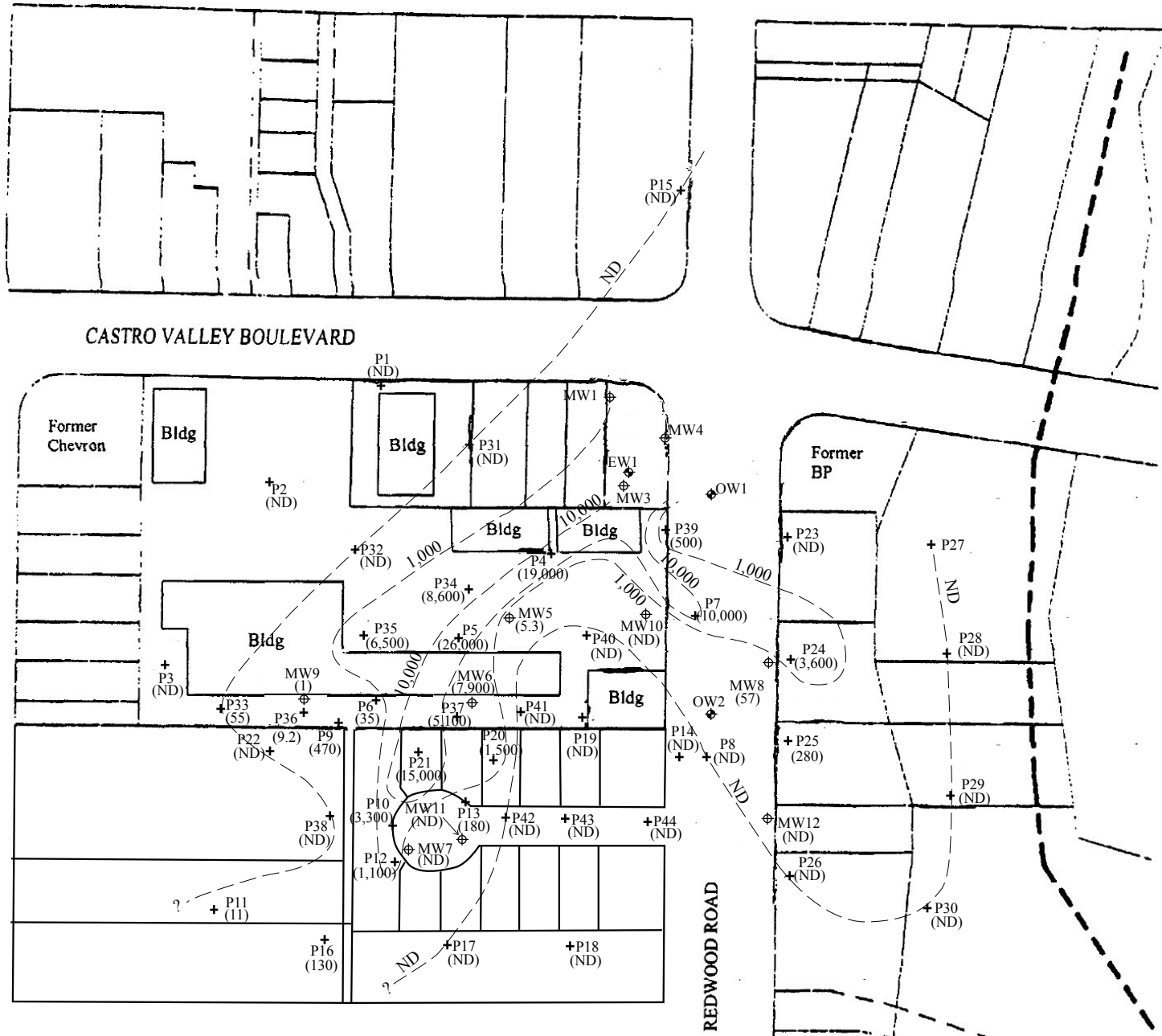
Figure 8
 Site Vicinity Map Showing TPH-G Isoconcentration Contours
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



Base Map From:
 Castro Valley Sanitation
 District

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





LEGEND

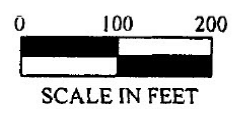
- ⊕ MW12 Monitoring Well Location (26,000) Benzene Concentration in Groundwater (ug/L)
- ⊕ EW1 Extraction Well Location
- ⊕ OW2 Observation Well Location - - - Benzene Groundwater Isoconcentration Contour (ug/L)
- + P44 Previous Investigation Groundwater Grab Sample Collection Location
- - - Approximate Creek Location

Figure 9
 Site Vicinity Map Showing Benzene Isoconcentration Contours
 Xtra Oil Company
 3495 Castro Valley Boulevard
 Castro Valley, California



Base Map From:
 Castro Valley Sanitation
 District

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







BORING LOGS

BORING NO.: MW5		PROJECT NO.: 0014		PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley			
BORING LOCATION: Shopping center parking lot, ~200 feet west of Redwood Road				ELEVATION AND DATUM: 176.02 NAVD88			
DRILLING AGENCY: Exploration Geoservices		DRILLER: Loren D.		DATE & TIME STARTED: 11/27/07 1055		DATE & TIME FINISHED: 11/27/07 1135	
DRILLING EQUIPMENT: Mobile B53 Hollow Stem Auger Drill Rig				LOGGED BY: SF		CHECKED BY:	
COMPLETION DEPTH: 22 feet		BEDROCK DEPTH: None encountered					
FIRST WATER DEPTH: ~19 feet		NO. OF SAMPLES: 4 soil					
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS	
5	Asphalt (3 inch) Dark gray clay (CL); moist, stiff, with minor gravel to 0.25". Strong Petroleum Hydrocarbon (PHC) odor.	CL ✕	See Well Construction Diagram MW5-5.0	6 10 16		Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches. recovery: 6", 6", 6"	
10	Gray clayey silt (ML); moist, stiff, with yellow-brown streaks or mottling. Moderate PHC odor. 10.5 to 11.0 ft. Change to brown, moist to wet, with orange and black mottling. No PHC odor.	ML ✕	MW5-10.0	10 12 15		6", 6", 6"	
15	Brown silty clay (CL); moist, very stiff. No PHC odor.	CL ✕	MW5-15.0	10 17 24		6", 6", 6"	
20	Gray-brown clayey medium sand (SC); wet, stiff, with minor gravel to 0.25", and some orange mottling. Sand content decreasing with depth. No PHC odor.	SC ✕	MW5-20.5	9 14 21		First water encountered at ~19 feet depth, 11/27/07 1130. 2", 6", 6"	
25	Light gray-brown very silty clay (CL); wet, very stiff, no sand. No PHC odor.	CL				Borehole terminated at 22.0 ft. on 11/27/07. Well constructed 11/27/07. Vicki Hamlin of Alameda Public Works Agency onsite to inspect sanitary seal on 11/27/07.	
30							

BORING NO.: MW6		PROJECT NO.: 0014		PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley			
BORING LOCATION: South end shopping center parking lot, ~250 feet west of Redwood Road				ELEVATION AND DATUM: 175.24 NAVD88			
DRILLING AGENCY: Exploration Geoservices			DRILLER: Loren D.		DATE & TIME STARTED: 11/28/07 0830		DATE & TIME FINISHED: 11/28/07 0855
DRILLING EQUIPMENT: Mobile B53 Hollow Stem Auger Drill Rig				LOGGED BY: SF		CHECKED BY:	
COMPLETION DEPTH: 11 feet		BEDROCK DEPTH: None encountered		FIRST WATER DEPTH: None encountered		NO. OF SAMPLES: 2 soil	
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS	
5	Asphalt (4 inch) Black clay (CL); moist, stiff. Moderate Petroleum Hydrocarbon (PHC) odor.	[X] CL	See Well Construction Diagram MW6-4.5	4	0	Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches. recovery: 4", 6", 6"	
	6 8			22			
10	8.5 ft. Gray-brown, with strong orange mottling, and clay content decreasing with depth. Strong PHC odor.	[X] ML	MW6-9.5	7	218	6", 6", 6"	
	9 10			296			
15						Borehole terminated at 11.0 ft. on 11/28/07. Well constructed 11/28/07.	
20							
25							
30							

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BORING NO.: MW7		PROJECT NO.: 0014		PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley			
BORING LOCATION: Redwood Court cul-de-sac, SW side				ELEVATION AND DATUM: 170.34 NAVD88			
DRILLING AGENCY: Exploration Geoservices		DRILLER: Loren D.		DATE & TIME STARTED: 11/27/07 1325		DATE & TIME FINISHED: 11/27/07 1355	
DRILLING EQUIPMENT: Mobile B53 Hollow Stem Auger Drill Rig				LOGGED BY: SF		CHECKED BY:	
COMPLETION DEPTH: 11 feet		BEDROCK DEPTH: None encountered					
FIRST WATER DEPTH: None encountered		NO. OF SAMPLES: 2 soil					
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS	
5	Asphalt (4-5 inch) Concrete, gravel, and sand (FILL); dry, loose. No Petroleum Hydrocarbon (PHC) odor.	FILL	See Well Construction Diagram			Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches.	
	Dark gray silty clay (CL); moist, stiff, with gravel to 0.25". Moderate to strong (PHC) odor.	<input checked="" type="checkbox"/>		7 9 16		recovery: 3", 6", 6"	
	4.5 to 5.0 ft. Color change to brown.	CL	MW7-4.5				
10	8.5 ft. Brown with gray mottling. No PHC odor.	<input checked="" type="checkbox"/>		9 11 13		6", 6", 6"	
						Borehole terminated at 11.0 ft. on 11/27/07. Well constructed 11/27/07.	
15							
20							
25							
30							

BORING NO.: MW8		PROJECT NO.: 0014		PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley			
BORING LOCATION: W side Redwood Road				ELEVATION AND DATUM: 176.00 NAVD88			
DRILLING AGENCY: Exploration Geoservices			DRILLER: John C.		DATE & TIME STARTED: 12/5/07 1325		DATE & TIME FINISHED: 12/5/07 1345
DRILLING EQUIPMENT: Mobile B-40 L22 Hollow Stem Auger Drill Rig				LOGGED BY: SF		CHECKED BY:	
COMPLETION DEPTH: 15 feet		BEDROCK DEPTH: None encountered					
FIRST WATER DEPTH: 14 to 15 feet		NO. OF SAMPLES: 3 soil					
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS	
	Concrete (~8-in. slab), gravel, and sand (FILL); dry, loose. No Petroleum Hydrocarbon (PHC) odor.	FILL	See Well Construction Diagram		0	Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches.	
5	Brown silty clay (CL); moist, stiff, with fine gray root marks decreasing with depth. No PHC odor.		MW8-4.5	6 7 7	0	recovery: 1", 6", 6"	
10	8.5 ft. Slight to moderate PHC odor.		MW8-9.5	8 8 10	17 123	6", 6", 6"	
15	13.0 ft. As above, but sandy, wet, medium soft, with gray segregations.				14	First water encountered at 14-15 feet depth, 12/5/07 1340.	
15	Silty fine sand (SM); saturated, loose. Slight PHC odor.		SM MW8-14.0	6 6 7	7	6", 6", 6"	
20						Borehole terminated at 15.0 ft. on 12/5/07. Well constructed 12/5/07.	
25							
30							

BORING NO.: MW9		PROJECT NO.: 0014		PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley			
BORING LOCATION: South end shopping center parking lot, ~500 feet west of Redwood Road				ELEVATION AND DATUM: 175.09 NAVD88			
DRILLING AGENCY: Exploration Geoservices			DRILLER: Loren D.		DATE & TIME STARTED: 11/28/07 1000		DATE & TIME FINISHED: 11/28/07 1035
DRILLING EQUIPMENT: Mobile B53 Hollow Stem Auger Drill Rig				LOGGED BY: SF		CHECKED BY:	
COMPLETION DEPTH: 22 feet		BEDROCK DEPTH: None encountered					
FIRST WATER DEPTH: ~19 feet		NO. OF SAMPLES: 4 soil					
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS	
	Asphalt (~6 inch) Gravel and sand (FILL); dry, loose. No Petroleum Hydrocarbon (PHC) odor.	FILL	See Well Construction Diagram			Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches.	
5	Black clay (CL); moist, stiff. Very slight (PHC) odor.			6 10 14	5	recovery: 1", 6", 6"	
10	10.0 ft. Change to gray and brown, with orange and black mottling. Slight PHC odor.			7 12 15	4	6", 6", 6"	
15	15.0 ft. As above but brown, very silty, moist to wet, with gray inclusions. Very slight to no PHC odor. 16.0 to 16.5 ft. Siltier, transitional to clayey silt (ML).			11 12 16	0	6", 6", 6"	
20	Light gray-brown silty clay (CL); wet, stiff, homogeneous but for some orange and black mottling. No PHC odor.			10 11 17	0	First water encountered at ~19 feet depth, 11/28/07 1030. 6", 6", 6"	
25						Borehole terminated at 22.0 ft. on 11/28/07. Well constructed 11/28/07. Vicki Hamlin of Alameda Public Works Agency onsite to inspect sanitary seal on 11/28/07.	
30							

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BORING NO.: MW10 PROJECT NO.: 0014 PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley						
BORING LOCATION: Shopping center parking lot entrance, ~50 feet west of Redwood Road					ELEVATION AND DATUM: 176.03 NAVD88	
DRILLING AGENCY: Exploration Geoservices DRILLER: Loren D.				DATE & TIME STARTED:	DATE & TIME FINISHED:	
DRILLING EQUIPMENT: Mobile B53 Hollow Stem Auger Drill Rig				11/27/07 0845	11/27/07 0920	
COMPLETION DEPTH: 22 feet			BEDROCK DEPTH: None encountered		LOGGED BY:	CHECKED BY:
FIRST WATER DEPTH: ~18 feet			NO. OF SAMPLES: 4 soil		SF	
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	Asphalt (~3 inch) Concrete, gravel, and sand (FILL); dry, loose. No Petroleum Hydrocarbon (PHC) odor.	FILL	See Well Construction Diagram			Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches.
5	Brown (black above 3 ft.) silty clay (CL); moist, stiff, with gray mottling. No PHC odor.	CL		7		
		X	MW10-5.5	16		recovery: 5", 6", 6"
	Brown clayey silt (ML); dry to moist, very stiff, with orange and gray mottling, and minor fine sand. No PHC odor.	ML		30		
10	Brown silty clay (CL); moist, stiff, with gray mottling. NoPHC odor. 11.0 ft. With orange and black mottling.	X	MW10-10.5	9		6", 6", 6"
				14		
				22		
15	15 ft. As above, but moist to wet. Slight PHC odor.	CL		9		2", 6", 6"
		X	MW10-15.5	9		
				9		
		∇				First water encountered at ~18 feet depth, 11/27/07 0915.
20	20 ft. As above, but brown-gray, saturated, with fine black mottling. No PHC odor	X	MW10-20.5	9		6", 6", 6"
				14		
				16		
25						Borehole terminated at 22.0 ft. on 11/27/07. Well constructed 11/27/07.
30						

BORING NO.: MW11		PROJECT NO.: 0014		PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley			
BORING LOCATION: Redwood Court cul-de-sac, SE side				ELEVATION AND DATUM: 171.03 NAVD88			
DRILLING AGENCY: Exploration Geoservices		DRILLER: Loren D.		DATE & TIME STARTED: 11/27/07 1445		DATE & TIME FINISHED: 11/27/07 1520	
DRILLING EQUIPMENT: Mobile B53 Hollow Stem Auger Drill Rig				LOGGED BY: SF		CHECKED BY:	
COMPLETION DEPTH: 15 feet		BEDROCK DEPTH: None encountered					
FIRST WATER DEPTH: None encountered		NO. OF SAMPLES: 3 soil					
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS	
5	Asphalt (4-5 inch) Concrete, gravel, and sand (FILL); dry, loose. No Petroleum Hydrocarbon (PHC) odor.	FILL	See Well Construction Diagram			Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches.	
	Dark gray sandy silty clay (CL); moist, stiff, with fine sand, abundant gravel to 0.5", and orange, brown, and black sandy inclusions. Very slight (PHC) odor.		MW11-4.5	7 17 20		recovery: 4", 6", 6"	
	8.5 ft. Brown with black mottling or root marks, no sand, and minor gravel to 0.25". No PHC odor.	CL	MW11-9.5	8 12 19		6", 6", 6"	
15	13.5 ft. Light gray-brown, homogeneous but for fine black mottling. No PHC odor.		MW11-14.5	9 16 17		6", 6", 6"	
20						Borehole terminated at 15.0 ft. on 11/27/07. Well constructed 11/27/07.	
25							
30							

BORING NO.: MW12		PROJECT NO.: 0014		PROJECT NAME: 3495 Castro Valley Blvd, Castro Valley			
BORING LOCATION: W side Redwood Road				ELEVATION AND DATUM: 173.98 NAVD88			
DRILLING AGENCY: Exploration Geoservices			DRILLER: John C.		DATE & TIME STARTED: 12/5/07 1140		DATE & TIME FINISHED: 12/5/07 1220
DRILLING EQUIPMENT: Mobile B-40 L22 Hollow Stem Auger Drill Rig				LOGGED BY: SF		CHECKED BY:	
COMPLETION DEPTH: 13 feet		BEDROCK DEPTH: None encountered					
FIRST WATER DEPTH: 12.5 feet		NO. OF SAMPLES: 3 soil					
DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS	
	6-in. concrete slab and gravel (FILL).	FILL	See Well Construction Diagram		0	Soil samples collected using a 2-1/2" OD California Modified split spoon sampler driven by a 140-pound downhole hammer falling 30 inches.	
	Black clay (CL); moist, stiff. No Petroleum Hydrocarbon (PHC) odor.	CL					
5	Light brown clayey silt (ML); dry to moist, very stiff, with minor fine sand and clay. No PHC odor.	ML	MW12-4.5	16 30 30	0	recovery: 0", 6", 6"	
10	Brown very silty clay (CL); moist, medium soft, with gray sub-vertical streaks. 8.5-9.0 ft. No PHC odor. 9.0-10.0 ft. Moderate PHC odor.	CL	MW12-9.5	5 6 8	0 23	6", 6", 6" First water encountered at 12.5 feet depth, 12/5/07 1215.	
	Brown silty clayey sand (SC); moist to wet, medium soft, with orange and gray segregations. No PHC odor.	SC	MW12-12.0	8 12 14	0	6", 6", 3"	
	Brown silty fine to medium sand (SM); saturated, loose. No PHC odor.	SM					
15	Borehole terminated at 13.0 ft. on 12/5/07. Well constructed 12/5/07.						
20							
25							
30							

WELL CONSTRUCTION DIAGRAMS

P&D ENVIRONMENTAL, INC.

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

WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0014

BORING/WELL NO. MW5

PROJECT NAME 3495 Castro Valley Blvd.

TOP OF CASING ELEV. 176.02

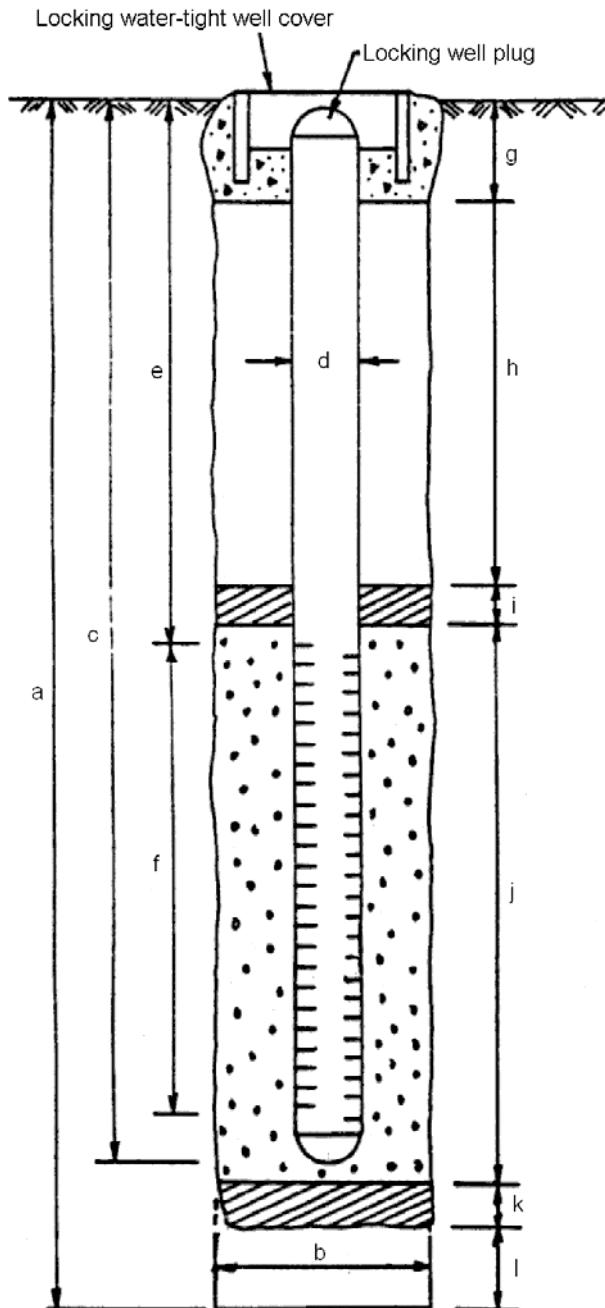
COUNTY Alameda

GROUND SURFACE ELEVATION 176.27

WELL PERMIT NO. W2007-1171

DATUM NAVD88

DATE(S) CONSTRUCTED 11/27/07



EXPLORATORY BORING

- a. Total depth 22.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

- c. Casing length 22 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 17 ft.
- f. Perforated length 5 ft.
Perforated interval from 22 to 17 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 14 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 22 to 16 ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

P&D ENVIRONMENTAL, INC.

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Oakland, CA 94610
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WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0014

BORING/WELL NO. MW6

PROJECT NAME 3495 Castro Valley Blvd.

TOP OF CASING ELEV. 175.24

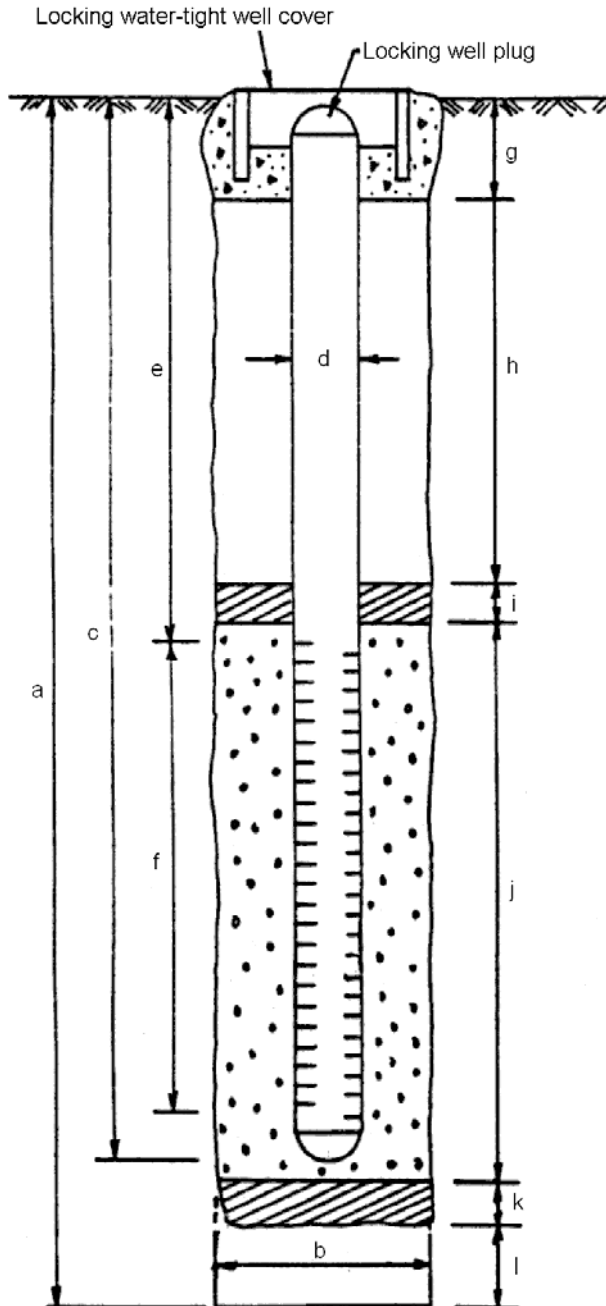
COUNTY Alameda

GROUND SURFACE ELEVATION 175.49

WELL PERMIT NO. W2007-1172

DATUM NAVD88

DATE(S) CONSTRUCTED 11/28/07



EXPLORATORY BORING

- a. Total depth 11.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

- c. Casing length 11 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 6 ft.
- f. Perforated length 5 ft.
Perforated interval from 11 to 6 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 3 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 11 to 5 ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

P&D ENVIRONMENTAL, INC.

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Oakland, CA 94610
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WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0014

BORING/WELL NO. MW7

PROJECT NAME 3495 Castro Valley Blvd.

TOP OF CASING ELEV. 170.34

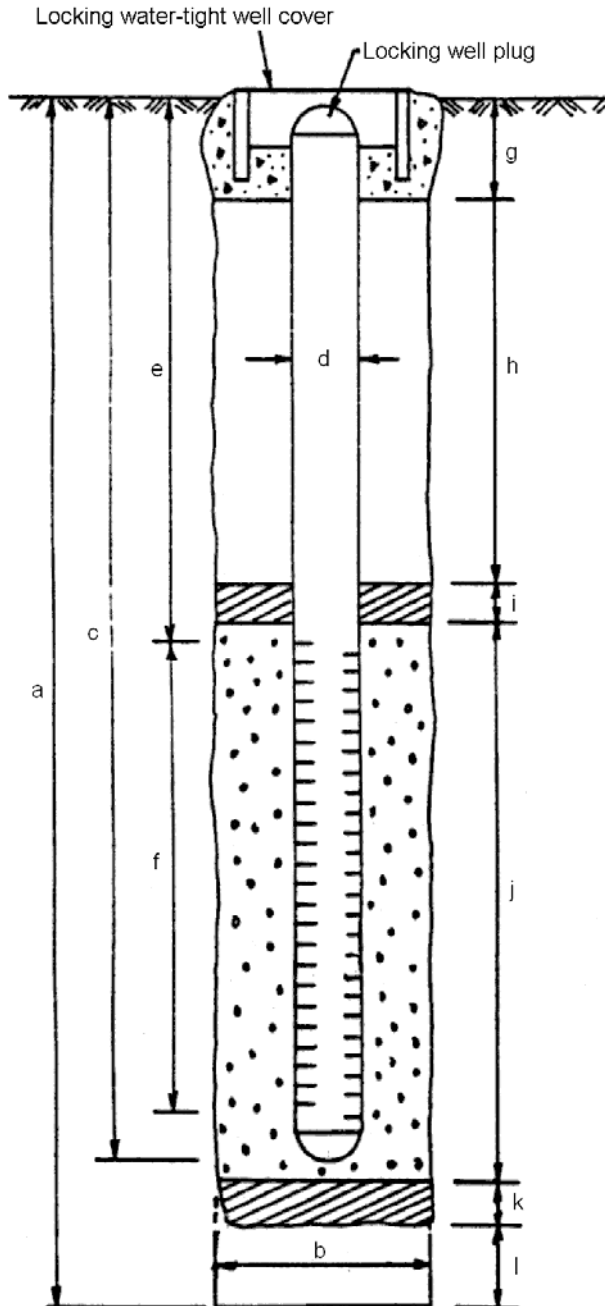
COUNTY Alameda

GROUND SURFACE ELEVATION 170.66

WELL PERMIT NO. W2007-1173

DATUM NAVD88

DATE(S) CONSTRUCTED 11/27/07



EXPLORATORY BORING

- a. Total depth 11.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

- c. Casing length 11 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 6 ft.
- f. Perforated length 5 ft.
Perforated interval from 11 to 6 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 3 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 11 to 5 ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

P&D ENVIRONMENTAL, INC.

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Oakland, CA 94610
(510) 658-6916

WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0014

BORING/WELL NO. MW8

PROJECT NAME 3495 Castro Valley Blvd.

TOP OF CASING ELEV. 176.00

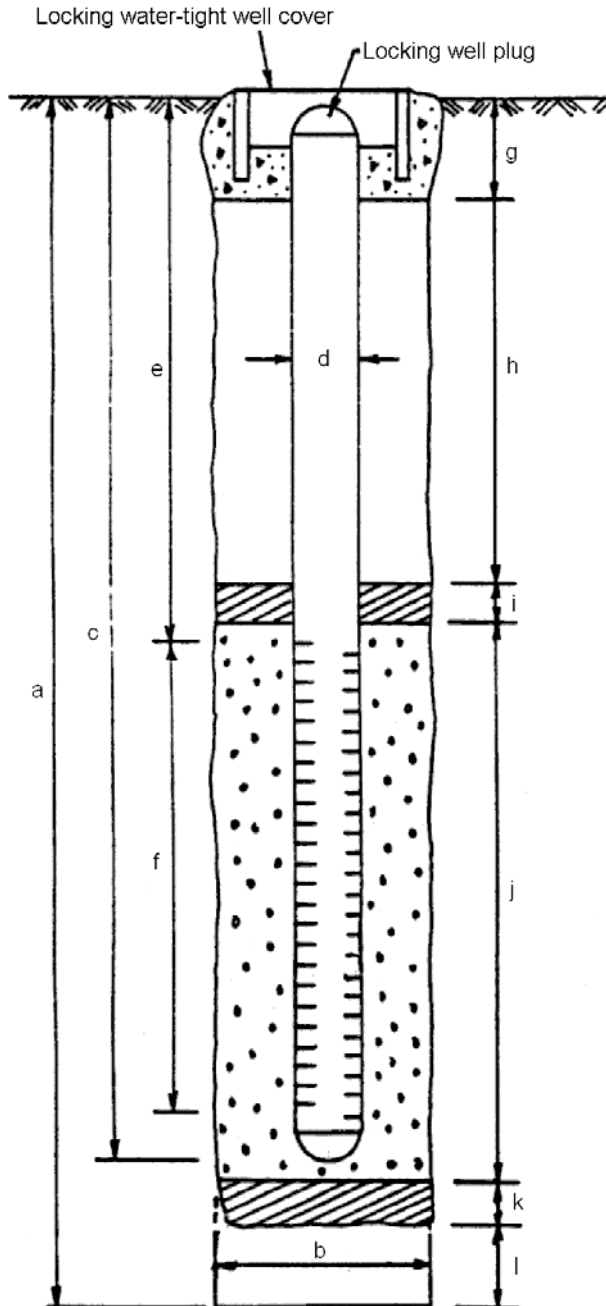
COUNTY Alameda

GROUND SURFACE ELEVATION 176.36

WELL PERMIT NO. W2007-1174

DATUM NAVD88

DATE(S) CONSTRUCTED 12/5/07



EXPLORATORY BORING

- a. Total depth 15.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

- c. Casing length 15 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 10 ft.
- f. Perforated length 5 ft.
Perforated interval from 15 to 10 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 7 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 15 to 9ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

P&D ENVIRONMENTAL, INC.

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Oakland, CA 94610
(510) 658-6916

WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0014

BORING/WELL NO. MW9

PROJECT NAME 3495 Castro Valley Blvd.

TOP OF CASING ELEV. 175.09

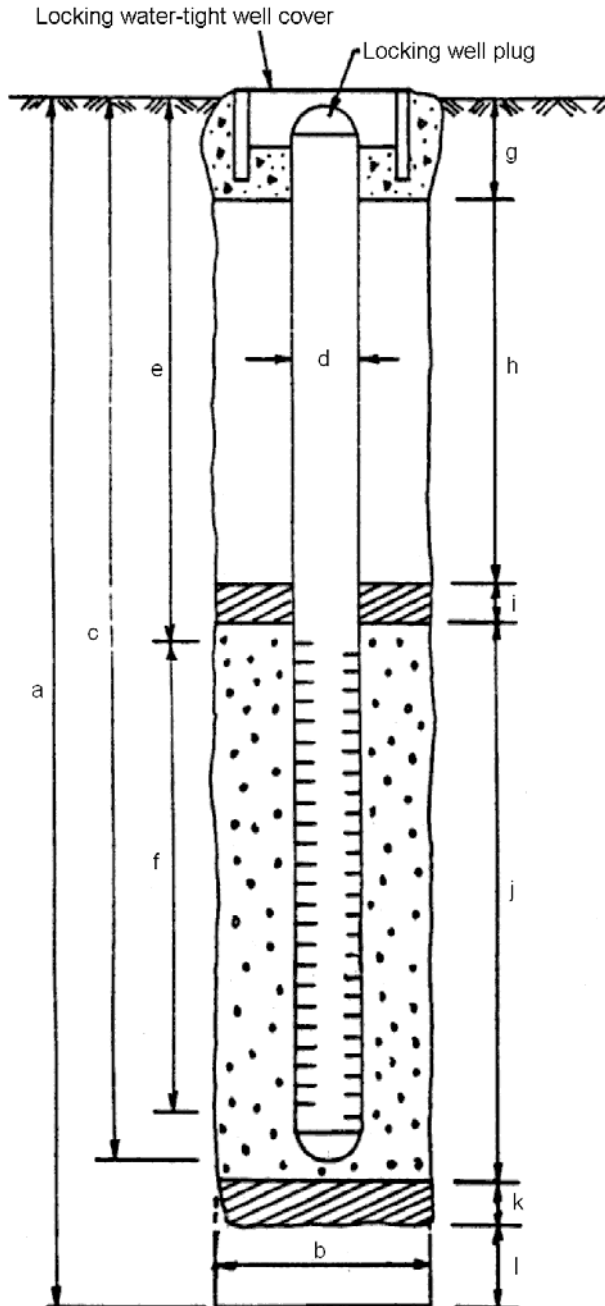
COUNTY Alameda

GROUND SURFACE ELEVATION 175.38

WELL PERMIT NO. W2007-1175

DATUM NAVD88

DATE(S) CONSTRUCTED 11/28/07



EXPLORATORY BORING

- a. Total depth 22.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

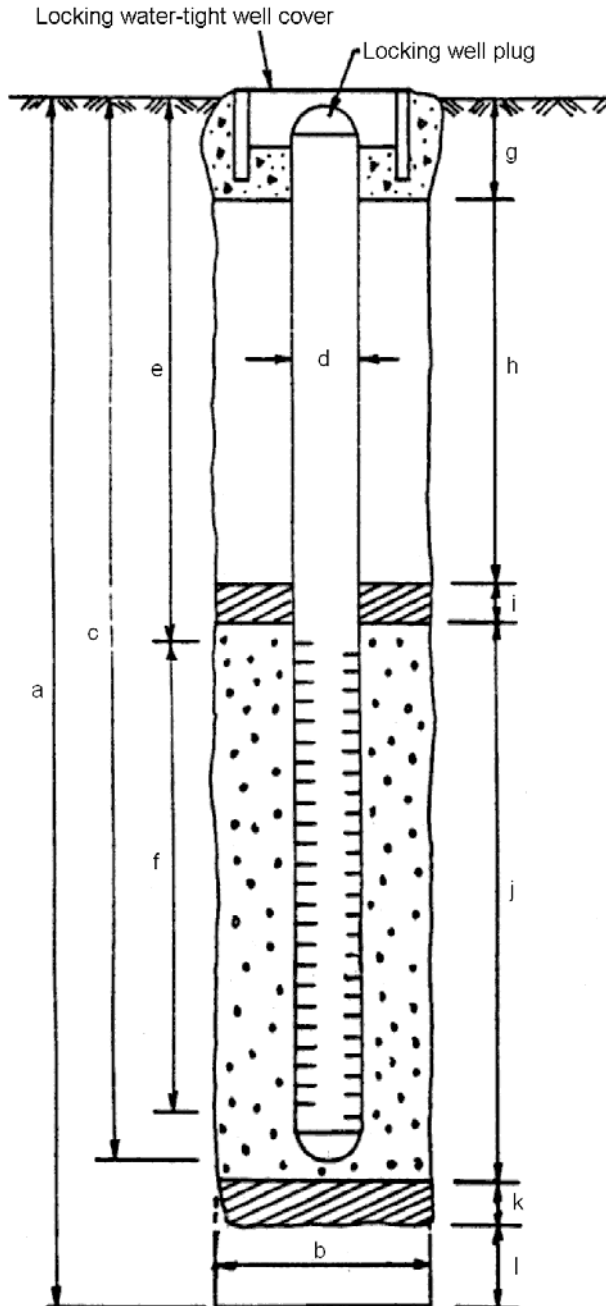
- c. Casing length 22 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 17 ft.
- f. Perforated length 5 ft.
Perforated interval from 22 to 17 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 14 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 22 to 16 ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

P&D ENVIRONMENTAL, INC.

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

WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER <u>0014</u>	BORING/WELL NO. <u>MW10</u>
PROJECT NAME <u>3495 Castro Valley Blvd.</u>	TOP OF CASING ELEV. <u>176.03</u>
COUNTY <u>Alameda</u>	GROUND SURFACE ELEVATION <u>176.32</u>
WELL PERMIT NO. <u>W2007-1168</u>	DATUM <u>NAVD88</u>
	DATE(S) CONSTRUCTED <u>11/27/07</u>



EXPLORATORY BORING

- a. Total depth 22.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

- c. Casing length 22 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 17 ft.
- f. Perforated length 5 ft.
Perforated interval from 22 to 17 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 14 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 22 to 16 ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

P&D ENVIRONMENTAL, INC.

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

WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0014

BORING/WELL NO. MW11

PROJECT NAME 3495 Castro Valley Blvd.

TOP OF CASING ELEV. 171.03

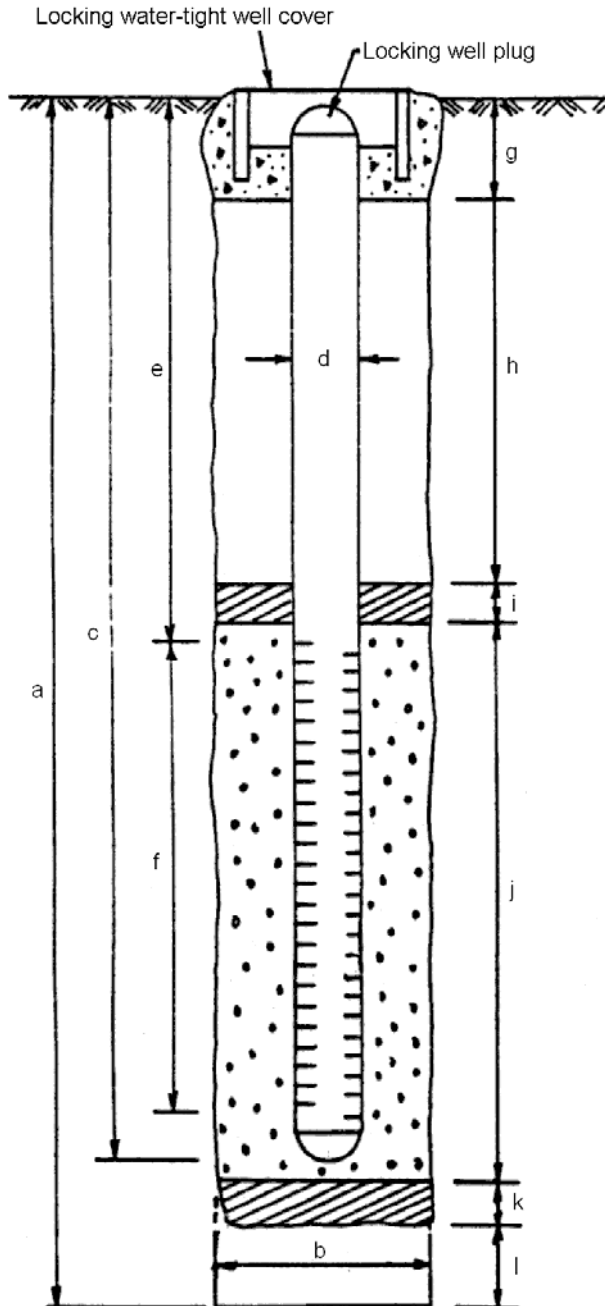
COUNTY Alameda

GROUND SURFACE ELEVATION 171.52

WELL PERMIT NO. W2007-1169

DATUM NAVD88

DATE(S) CONSTRUCTED 11/27/07



EXPLORATORY BORING

- a. Total depth 15.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

- c. Casing length 15 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 10 ft.
- f. Perforated length 5 ft.
Perforated interval from 15 to 10 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 7 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 15 to 9ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

P&D ENVIRONMENTAL, INC.

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

WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0014

BORING/WELL NO. MW12

PROJECT NAME 3495 Castro Valley Blvd.

TOP OF CASING ELEV. 173.98

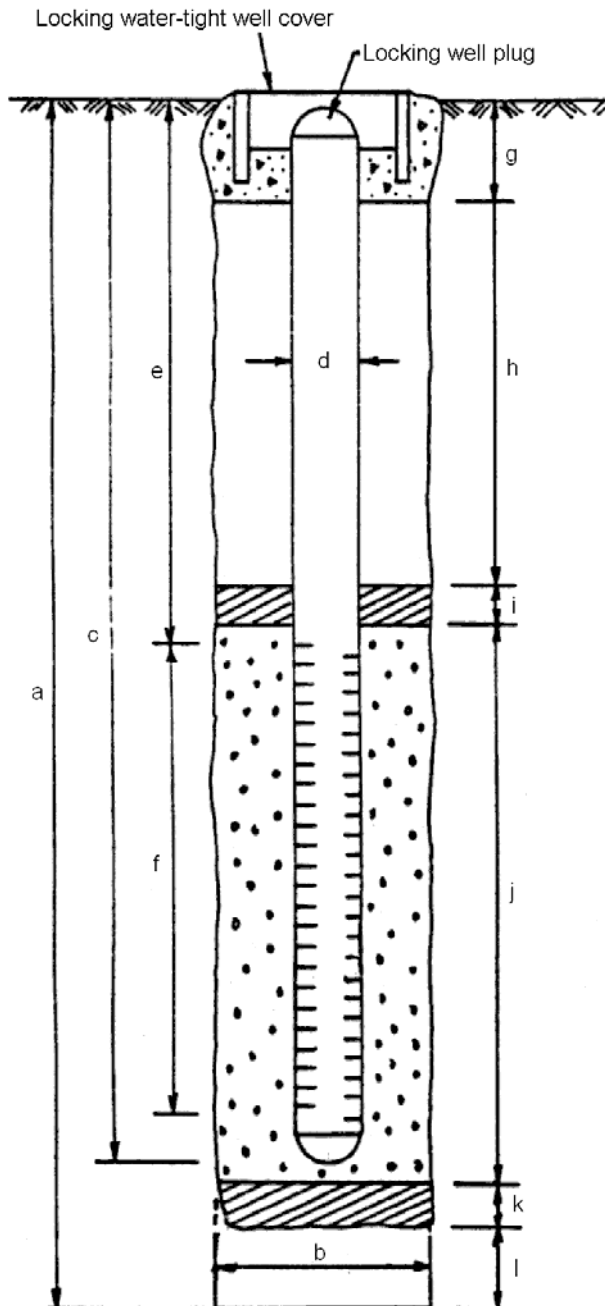
COUNTY Alameda

GROUND SURFACE ELEVATION 174.19

WELL PERMIT NO. W2007-1170

DATUM NAVD88

DATE(S) CONSTRUCTED 12/5/07



EXPLORATORY BORING

- a. Total depth 13.0 ft.
- b. Diameter 8 in.
- Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

- c. Casing length 13 ft.
Material PVC Schedule 40
- d. Diameter 2 in.
- e. Depth to top of perforations 8 ft.
- f. Perforated length 5 ft.
Perforated interval from 13 to 8 ft.
Perforation type Factory Slotted PVC
Perforation size 0.010 in.
- g. Surface sanitary seal 1 ft.
Seal material Portland cement type I-II
- h. Sanitary seal 5 ft.
Seal material Portland cement type I-II
- i. Filter pack seal 1 ft.
Seal material Bentonite pellet
- j. Filter pack length 6 ft.
Filter pack interval from 13 to 7 ft.
Pack material #2/12 sand
- k. Bottom seal 0 ft.
Seal material None
- l. Sluff in bottom of borehole 0 ft.

WELL SURVEY REPORT

**TABLE OF ELEVATIONS COORDINATES
ON MONITORING WELLS**
P D ENVIRONMENTAL
3495 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
EW-1	2079411.67	6106190.29	179.27	2" PVC NORTH SIDE
	N 37° 41' 42.52489"	W 122° 04' 27.50870"	179.75	NOTCH NORTH SIDE RIM
			179.74	CONC. NORTH SIDE
MW-1	2079508.78	6106168.07	180.22	2" PVC NORTH SIDE
	N 37° 41' 43.48109"	W 122° 04' 27.80553"	180.59	NOTCH NORTH SIDE RIM
			180.54	CONC. NORTH SIDE
MW-3	2079392.89	6106191.58	179.46	2" PVC NORTH SIDE
	N 37° 41' 42.33945"	W 122° 04' 27.48879"	179.95	NOTCH NORTH SIDE RIM
			179.94	CONC. NORTH SIDE
MW-4	2079455.99	6106244.22	179.21	2" PVC NORTH SIDE
	N 37° 41' 42.97199"	W 122° 04' 26.84706"	179.67	NOTCH NORTH SIDE RIM
			179.64	CONC. NORTH SIDE
MW-5	2079223.31	6106033.74	176.02	2" PVC NORTH SIDE
	N 37° 41' 40.63681"	W 122° 04' 29.41690"	176.28	NOTCH NORTH SIDE RIM
			176.27	PVMT. NORTH SIDE
MW-6	2079113.36	6105985.71	175.24	2" PVC NORTH SIDE
	N 37° 41' 39.54182"	W 122° 04' 29.99135	175.5	NOTCH NORTH SIDE RIM
			175.49	PVMT. NORTH SIDE
MW-7	2078922.29	6105903.77	170.34	2" PVC NORTH SIDE
	N 37° 41' 37.63937"	W 122° 04' 30.97075"	170.66	NOTCH NORTH SIDE RIM
			170.66	PVMT. NORTH SIDE
MW-8	2079164.71	6106369.73	176.00	2" PVC NORTH SIDE
	N 37° 41' 40.11333"	W 122° 04' 25.22471"	176.36	NOTCH NORTH SIDE RIM
			176.36	CONC. NORTH SIDE
MW-9	2079116.76	6105769.26	175.09	2" PVC NORTH SIDE
	N 37° 41' 39.53949"	W 122° 04' 32.684.92"	175.38	NOTCH NORTH SIDE RIM
			175.38	PVMT. NORTH SIDE

Kier Wright Civil Engineers Surveyors
1233 Quarry Lane, Suite 145, Pleasanton, CA 94566
Phone: (925) 249-6555
Fax: (925) 249-6563

**TABLE OF ELEVATIONS COORDINATES
ON MONITORING WELLS**

P D ENVIRONMENTAL
3495 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
MW-10	2079227.12	6106210.36	176.03	2" PVC NORTH SIDE
	N 37° 41' 40.70383"	W 122° 04' 27.22044"	176.32	NOTCH NORTH SIDE RIM
			176.32	PVMT. NORTH SIDE
MW-11	2078935.46	6105972.85	171.03	2" PVC NORTH SIDE
	N 37° 41' 37.78108"	W 122° 04' 30.11416"	171.50	NOTCH NORTH SIDE RIM
			171.52	PVMT. NORTH SIDE
MW-12	2078963.24	6106369.23	173.98	2" PVC NORTH SIDE
	N 37° 41' 38.12157"	W 122° 04' 25.18886"	174.20	NOTCH NORTH SIDE RIM
			174.19	CONC. NORTH SIDE
OW-1	2079384.06	6106324.06	178.93	2" PVC NORTH SIDE
	N 37° 41' 42.27418"	W 122° 04' 25.83876"	179.18	NOTCH NORTH SIDE RIM
			179.17	PVMT. NORTH SIDE
OW-2	2079098.62	6106323.09	176.03	2" PVC NORTH SIDE
	N 37° 41' 39.45224"	W 122° 04' 25.79112"	176.22	NOTCH NORTH SIDE RIM
			176.20	PVMT. NORTH SIDE

ADDITIONAL POINTS

PT#	NORTHING (FT.)	EASTING (FT.)	ELEVATION (FT.)	DESCRIPTION
59	2079527.38	6106166.71	N/A	TC
60	2079523.32	6106208.90	N/A	TC RET
61	2079467.34	6106259.33	N/A	TC RET
62	2079401.78	6106259.23	N/A	TC
64	2079351.15	6106369.06	N/A	TC
68	2078931.31	6106368.24	N/A	TC
73	2079151.82	6106241.80	N/A	BL<
74	2079152.58	6106151.56	N/A	BL<
75	2079171.22	6106102.78	N/A	BL<
76	2079257.77	6105813.50	N/A	BL<
77	2079309.57	6105977.00	N/A	BL<

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**TABLE OF ELEVATIONS COORDINATES
ON MONITORING WELLS**
P D ENVIRONMENTAL
3495 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

ADDITIONAL POINTS

PT#	NORTHING (FT.)	EASTING (FT.)	ELEVATION (FT.)	DESCRIPTION
78	2079308.62	6106092.07	N/A	BL<
79	2079307.52	6106115.04	N/A	BL<
80	2079306.66	6106205.21	N/A	BL<
81	2079346.52	6106259.08	N/A	TC
87	2079125.16	6105607.43	N/A	BL<
92	2078991.76	6106258.25	N/A	TC RET
93	2078962.07	6106229.96	N/A	TC RET
94	2078921.85	6106228.47	N/A	TC RET
95	2078895.50	6106258.07	N/A	TC RET
98	2078962.56	6105967.93	N/A	TC B-C
99	2078922.56	6105966.15	N/A	TC B-C
100	2078912.80	6105938.62	N/A	TC PRC
101	2078973.10	6105938.17	N/A	TC PRC

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**TABLE OF ELEVATIONS COORDINATES
ON MONITORING WELLS**
P D ENVIRONMENTAL
3495 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

BENCH MARK: NGS Bench mark No.PID# HT0223

THE STATION IS LOCATED IN THE CITY OF HAYWARD AT THE RAILROAD CROSSING OF THE SOUTHERN PACIFIC RAIL-ROAD AND BLOSSOM WAY, IN THE TOP OF THE NORTHWEST CURB OF BLOSSOM WAY.

TO REACH THE STATION FROM THE JUNCTION OF U S HIGHWAY 880 ON WEST A STREET, GO SOUTHEAST ON WEST A STREET FOR 0.2 MILES TO A CROSSROAD, HATHAWAY AVE ON THE LEFT, SANTA CLARA STREET ON THE RIGHT. TURN LEFT, NORTH, ON HATHAWAY AVENUE AND CONTINUE FOR 0.7 MILES TO WEST BLOSSOM WAY. TURN RIGHT, NORTH, ON WEST BLOSSOM WAY AND CONTINUE FOR 0.25 MILES TO THE STATION ON THE LEFT, JUST PAST THE RAIL-ROAD TRACKS.

THE STATION IS 48.95 M (160.6 FT) NORTHEAST OF THE NORTHEAST RAIL, 7.01 M NORTHWEST OF THE CENTER OF BLOSSOM WAY, 0.24 M (0.8 FT) NORTH OF THE NORTH CORNER OF A STEEL GRATE IN THE STREET, 5.6 M (18.5 FT) SOUTHWEST OF A POWER POLE AND 0.12 M (0.4 FT) HIGHER THAN THE STREET.

Elevation =56.33 FEET NAVD88 Datum
ADJUSTED

HORIZONTAL CONTROL:

PID - HT0223

NORTHING =2,072,670.26 , EASTING = 6,095,650.79 FEET; EPOCH DATE = 1998.50

PID - HT 2583

NORTHING =2,082,510.30 , EASTING = 6,116,892.13 FEET; EPOCH DATE = 1991.35

Coordinate values are based on the California Coordinate System, Zone III NAD 83 Datum.

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Phone: (925) 249-6555
Fax: (925) 249-6563

**WELL MONITORING AND
PURGING DATA SHEETS**

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name Xtra Oil / Castro Valley
 Job No. 0014
 TOC to Water (ft.) 5.55
 Well Depth (ft.) 21.6
 Well Diameter 7" (0.16)
 Gal./Casing Vol. 2.6



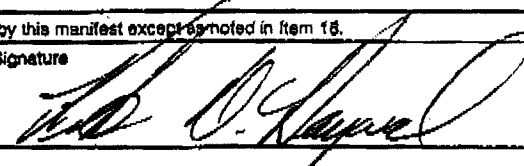
Well No. MW10
 Date 12/13/07
 Sheen No
 Free Product Thickness 0
 Sample Collection Method Disposable bailer

3.01 = 7.8

TIME	GAL. PURGED	pH	TEMPERATURE °F	ELECTRICAL CONDUCTIVITY $\mu\text{s/cm}$
0940	0.9	6.81	48.1	20
0943	1.8	6.79	49.5	170
0946	2.6	6.77	50.7	520
0948	3.5	6.75	50.8	480
0950	4.4	6.75	51.0	400
0952	5.2	6.68	50.5	610
0954	6.1	6.60	49.8	770
0956	7.0	6.58	50.8	970
0958	7.8	6.56	51.7	1,170
1000	8.7	6.51	51.6 51.6	1,700

NOTES: No sheen, no odor
Sample time \Rightarrow 10:10 hrs

DRUM DISPOSAL MANIFEST

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	2. Page 1 of 1	3. Document Number 4845
GENERATOR	4. Generator's Name and Mailing Address XTRA OIL CO. 3495 CASTRO VALLEY BLVD CASTRO VALLEY CA 94546 Generator's Phone			
	5. Transporter Company Name CLEARWATER ENVIRONMENTAL	6. US EPA ID Number CAR000007013	7. Transporter Phone (510) 476-1740	
	8. Designated Facility Name and Site Address ALVISO INDEPENDENT OIL 5002 ARCHER STREET ALVISO, CA 95002	9. US EPA ID Number CAL000161743	10. Facility's Phone (510) 476-1740	
	11. Waste Shipping Name and Description a. Non-Hazardous waste, liquid Solid (soil cuttings)		12. Containers No. 9 Type DM B	13. Total Quantity 8000
15. Special Handling Instructions and Additional Information Wear PPE Emergency Contact (510) 476-1740 Attn: Kirk Hayward		Handling Codes for Wastes Listed Above 11a. 11b.		
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste.				
Printed/Typed Name Xia Juan Wu		Signature 		Month Day Year 12/11/07
17. Transporter Acknowledgement of Receipt of Materials				
Printed/Typed Name Scott Sauer		Signature 		Month Day Year 12/11/07
18. Discrepancy Indication Space				
19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 18.				
Printed/Typed Name Kirk D. Hayward		Signature 		Month Day Year 12/12/07
FACILITY				

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

- **Lab ID 0711698 Soil from Boreholes**
- **Lab ID 0712157 Soil from Boreholes**
- **Lab ID 0712503 Groundwater from Wells**
- **Lab ID 0711709 Soil for Waste Characterization**



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 11/27/07-11/28/07
		Date Received: 11/29/07
	Client Contact: Steve Flexser	Date Reported: 12/06/07
	Client P.O.:	Date Completed: 12/06/07

WorkOrder: 0711698

December 06, 2007

Dear Steve:

Enclosed are:

- 1). the results of 19 analyzed samples from your #0014; 3495 Castro Valley Blvd project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius, Lab Manager

071109.8

CHAIN OF CUSTODY RECORD

gas and lead
 sleeves
 by 8260

PROJECT NUMBER: 0014		PROJECT NAME: 3495 Castro Valley Blvd.			NUMBER OF CONTAINERS	ANALYSIS(ES):				PRESERVATIVE	REMARKS	
SAMPLED BY: (PRINTED AND SIGNATURE) Steven Fleysner <i>[Signature]</i>						TPH - G.D.B.O	BTEX, Fuel Oxy					
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION								
MWS-5.0	11/27/07	1105	S		1	/	/			ice	Normal TAT	
MWS-10.0	↓	1110	↓		1	/	/					
MWS-15.0	↓	1115	↓		1	/	/					
MWS-20.5	↓	1130	↓		1	/	/					
MW6-4.5	11/28/07	0840	↓		1	/	/					
MW6-9.5	↓	0850	↓		1	/	/					
MW7-4.5	11/27/07	1335	↓		1	/	/					
MW7-9.5	↓	1340	↓		1	/	/					
MW9-5.5	11/28/07	1010	↓		1	/	/					
MW9-10.0	↓	1020	↓		1	/	/					
MW9-15.0	↓	1025	↓		1	/	/					
MW9-20.0	↓	1035	↓		1	/	/					
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE 11/29/07	TIME 130	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TOTAL NO. OF SAMPLES (THIS SHIPMENT) 19		LABORATORY: McCampbell				
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE 11/29/07	TIME 230	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		LABORATORY CONTACT: Angela Rydelius		LABORATORY PHONE NUMBER: (877) 252-9262				
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: () Y'S (X) NO						
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com				REMARKS: ICE 11.7 GOOD CONDITION <input checked="" type="checkbox"/> APPROPRIATE HEAD SPACE ABSENT <input type="checkbox"/> CONTAINERS <input checked="" type="checkbox"/> DECLORINATED IN LAB <input type="checkbox"/> PRESERVED IN LAB <input type="checkbox"/> PRESERVATION VOAS O & G METALS OTHER								

P & D ENVIRONMENTAL, INC.

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


CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

TPH, lead, heavy metals, by 8260

PROJECT NUMBER: <u>0014</u>		PROJECT NAME: <u>3495 Castro Valley Blvd.</u>			NUMBER OF CONTAINERS	ANALYSIS(ES): <u>TPH-GP, BTEX, fuel ox, organics, lead</u>	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) <u>Steven Fleischer</u> <i>[Signature]</i>								
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION				
MW10-5.5	11/27/07	0855	<u>S</u>		1		ice	Normal TAT
MW10-10.5	↓	0905	↓		1			
MW10-15.5	↓	0910	↓		1			
MW10-20.5	↓	0915	↓		1			
MW11-4.5	11/27/07	1455	↓		1			
MW11-9.5	↓	1505	↓		1			
MW11-14.5	↓	1510	↓		1			
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE	TIME	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TOTAL NO. OF SAMPLES (THIS SHIPMENT) <u>19</u>	LABORATORY: <u>McCampbell</u>	
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE	TIME	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TOTAL NO. OF CONTAINERS (THIS SHIPMENT) <u>19</u>	LABORATORY CONTACT: <u>Angela Rydel</u> LABORATORY PHONE NUMBER: <u>(877) 252-9262</u>	
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: () Y'S (X) NO		
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com				REMARKS:				

McCampbell Analytical, Inc.


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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0711698

ClientID: PDEO

EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty

Report to:	Steve Flexser	Email: lab@pdenviro.com	Bill to:	Accounts Payable	Requested TAT: 5 days
	P & D Environmental	TEL: (510) 658-6916 FAX: (510) 834-0152		P & D Environmental	<i>Date Received: 11/29/2007</i>
	55 Santa Clara, Ste.240	ProjectNo: #0014; 3495 Castro Valley Blvd		55 Santa Clara, Ste.240	<i>Date Printed: 11/29/2007</i>
	Oakland, CA 94610	PO:		Oakland, CA 94610	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0711698-001	MW5-5.0	Soil	11/27/07 11:05:00	<input type="checkbox"/>	A	A											
0711698-002	MW5-10.0	Soil	11/27/07 11:10:00	<input type="checkbox"/>	A	A											
0711698-003	MW5-15.0	Soil	11/27/07 11:15:00	<input type="checkbox"/>	A	A											
0711698-004	MW5-20.5	Soil	11/27/07 11:30:00	<input type="checkbox"/>	A	A											
0711698-005	MW6-4.5	Soil	11/28/07 8:40:00	<input type="checkbox"/>	A	A											
0711698-006	MW6-9.5	Soil	11/28/07 8:50:00	<input type="checkbox"/>	A	A											
0711698-007	MW7-4.5	Soil	11/27/07 1:35:00	<input type="checkbox"/>	A	A											
0711698-008	MW7-9.5	Soil	11/27/07 1:40:00	<input type="checkbox"/>	A	A											
0711698-009	MW9-5.5	Soil	11/28/07 10:10:00	<input type="checkbox"/>	A	A											
0711698-010	MW9-10.0	Soil	11/28/07 10:20:00	<input type="checkbox"/>	A	A											
0711698-011	MW9-15.0	Soil	11/28/07 10:25:00	<input type="checkbox"/>	A	A											
0711698-012	MW9-20.0	Soil	11/28/07 10:35:00	<input type="checkbox"/>	A	A											
0711698-013	MW10-5.5	Soil	11/27/07 8:55:00	<input type="checkbox"/>	A	A											
0711698-014	MW10-10.5	Soil	11/27/07 9:05:00	<input type="checkbox"/>	A	A											
0711698-015	MW10-15.5	Soil	11/27/07 9:10:00	<input type="checkbox"/>	A	A											

Test Legend:

1	G-MBTEx_S	2	MBTEXOXY-8260B_S	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014A, 015A, 016A, 017A, 018A, 019A contain testgroup.

Prepared by: Ana Venegas

Comments:

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

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0711698

ClientID: PDEO

EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty

Report to:

Steve Flexser
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Email: lab@pdenviro.com
TEL: (510) 658-6916 FAX: (510) 834-0152
ProjectNo: #0014; 3495 Castro Valley Blvd
PO:

Bill to:

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

Requested TAT: 5 days

Date Received: 11/29/2007

Date Printed: 11/29/2007

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0711698-016	MW10-20.5	Soil	11/27/07 9:15:00	<input type="checkbox"/>	A	A											
0711698-017	MW11-4.5	Soil	11/27/07 2:55:00	<input type="checkbox"/>	A	A											
0711698-018	MW11-9.5	Soil	11/27/07 3:05:00	<input type="checkbox"/>	A	A											
0711698-019	MW11-14.5	Soil	11/27/07 1:10:00	<input type="checkbox"/>	A	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014A, 015A, 016A, 017A, 018A, 019A contain testgroup.

Prepared by: Ana Venegas

Comments:

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



Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **11/29/07 4:30:57 PM**

Project Name: **#0014; 3495 Castro Valley Blvd**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **0711698** Matrix Soil

Carrier: Rob Pringle (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: 10.4°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA

Client contacted:

Date contacted:

Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 11/27/07-11/28/07
	Client Contact: Steve Flexser	Date Received: 11/29/07
	Client P.O.:	Date Analyzed 11/30/07-12/03/07
		Date Extracted: 11/29/07

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*

Extraction method SW5030B

Analytical methods SW8015Cm

Work Order: 0711698

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
001A	MW5-5.0	S	180,a	20	120
002A	MW5-10.0	S	4.3,a	1	82
003A	MW5-15.0	S	ND	1	80
004A	MW5-20.5	S	ND	1	76
005A	MW6-4.5	S	15,a	1	88
006A	MW6-9.5	S	1200,b,m	100	112
007A	MW7-4.5	S	100,b,m	10	102
008A	MW7-9.5	S	ND	1	81
009A	MW9-5.5	S	24,a	1	91
010A	MW9-10.0	S	11,a	1	91
011A	MW9-15.0	S	ND	1	91
012A	MW9-20.0	S	ND	1	85
013A	MW10-5.5	S	ND	1	82
014A	MW10-10.5	S	ND	1	93
015A	MW10-15.5	S	ND	1	85
016A	MW10-20.5	S	ND	1	92

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high organic / MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.

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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 11/27/07-11/28/07
	Client Contact: Steve Flexser	Date Received: 11/29/07
	Client P.O.:	Date Extracted: 11/29/07
		Date Analyzed: 12/01/07-12/05/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711698

Lab ID	0711698-001A	0711698-002A	0711698-003A	0711698-004A	Reporting Limit for DF =1	
Client ID	MW5-5.0	MW5-10.0	MW5-15.0	MW5-20.5		
Matrix	S	S	S	S		
DF	20	1	1	1		

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND<0.10	ND	ND	ND	0.005
Benzene	1.9	0.25	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND<1.0	ND	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND<0.10	ND	ND	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND<0.10	ND	ND	ND	0.005	NA
Diisopropyl ether (DIPE)	ND<0.10	ND	ND	ND	0.005	NA
Ethylbenzene	3.9	0.019	ND	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND<0.10	ND	ND	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND<0.10	ND	ND	ND	0.005	NA
Toluene	ND<0.10	0.012	ND	ND	0.005	NA
Xylenes	5.3	0.042	ND	ND	0.005	NA

Surrogate Recoveries (%)

%SS1:	90	96	91	85
%SS2:	96	97	94	95
%SS3:	93	107	112	112

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 11/27/07-11/28/07
	Client Contact: Steve Flexser	Date Received: 11/29/07
	Client P.O.:	Date Extracted: 11/29/07
		Date Analyzed: 12/01/07-12/05/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711698

Lab ID	0711698-005A	0711698-006A	0711698-007A	0711698-008A	Reporting Limit for DF =1	
Client ID	MW6-4.5	MW6-9.5	MW7-4.5	MW7-9.5		
Matrix	S	S	S	S		
DF	5	200	10	1		

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND<0.025	ND<1.0	ND<0.050	ND	0.005
Benzene	0.62	ND<1.0	0.066	ND	0.005	NA
t-Butyl alcohol (TBA)	ND<0.25	ND<10	ND<0.50	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND<0.025	ND<1.0	ND<0.050	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND<0.025	ND<1.0	ND<0.050	ND	0.005	NA
Diisopropyl ether (DIPE)	ND<0.025	ND<1.0	ND<0.050	ND	0.005	NA
Ethylbenzene	0.64	24	0.68	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND<0.025	ND<1.0	ND<0.050	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND<0.025	ND<1.0	ND<0.050	ND	0.005	NA
Toluene	ND<0.025	3.9	0.30	ND	0.005	NA
Xylenes	0.88	120	2.5	ND	0.005	NA

Surrogate Recoveries (%)

%SS1:	93	91	89	86
%SS2:	94	96	94	95
%SS3:	99	99	99	109

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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	Client Contact: Steve Flexser	Date Received: 11/29/07
	Client P.O.:	Date Extracted: 11/29/07
		Date Analyzed: 12/01/07-12/05/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711698

Lab ID	0711698-009A	0711698-010A	0711698-011A	0711698-012A	Reporting Limit for DF =1	
Client ID	MW9-5.5	MW9-10.0	MW9-15.0	MW9-20.0		
Matrix	S	S	S	S		
DF	5	2	1	1		

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND<0.025	ND<0.010	ND	ND	0.005
Benzene	0.70	0.026	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND<0.25	ND<0.10	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND<0.025	ND<0.010	ND	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND<0.025	ND<0.010	ND	ND	0.005	NA
Diisopropyl ether (DIPE)	ND<0.025	ND<0.010	ND	ND	0.005	NA
Ethylbenzene	0.73	0.17	ND	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND<0.025	ND<0.010	ND	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND<0.025	ND<0.010	ND	ND	0.005	NA
Toluene	ND<0.025	0.037	ND	ND	0.005	NA
Xylenes	0.89	0.73	ND	ND	0.005	NA

Surrogate Recoveries (%)

%SS1:	91	91	89	86
%SS2:	94	96	95	95
%SS3:	105	101	108	110

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 11/27/07-11/28/07
	Client Contact: Steve Flexser	Date Received: 11/29/07
	Client P.O.:	Date Extracted: 11/29/07
		Date Analyzed: 12/01/07-12/05/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711698

Lab ID	0711698-013A	0711698-014A	0711698-015A	0711698-016A	Reporting Limit for DF =1	
Client ID	MW10-5.5	MW10-10.5	MW10-15.5	MW10-20.5		
Matrix	S	S	S	S		
DF	1	1	1	1		

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	0.005
Benzene	ND	ND	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	ND	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	0.005	NA
Diisopropyl ether (DIPE)	ND	ND	ND	ND	0.005	NA
Ethylbenzene	ND	ND	ND	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND	0.005	NA
Toluene	ND	ND	ND	ND	0.005	NA
Xylenes	ND	ND	ND	ND	0.005	NA

Surrogate Recoveries (%)

%SS1:	86	88	85	79
%SS2:	96	94	95	96
%SS3:	111	106	112	111

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 11/27/07-11/28/07
	Client Contact: Steve Flexser	Date Received: 11/29/07
	Client P.O.:	Date Extracted: 11/29/07
		Date Analyzed: 12/01/07-12/05/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711698

Lab ID	0711698-017A	0711698-018A	0711698-019A		Reporting Limit for DF =1
Client ID	MW11-4.5	MW11-9.5	MW11-14.5		
Matrix	S	S	S		
DF	1	1	1		

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND	ND	ND		0.005
Benzene	ND	ND	ND		0.005	NA
t-Butyl alcohol (TBA)	ND	ND	ND		0.05	NA
1,2-Dibromoethane (EDB)	ND	ND	ND		0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND		0.005	NA
Diisopropyl ether (DIPE)	ND	ND	ND		0.005	NA
Ethylbenzene	ND	ND	ND		0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND	ND		0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND	ND		0.005	NA
Toluene	ND	ND	ND		0.005	NA
Xylenes	ND	ND	ND		0.005	NA

Surrogate Recoveries (%)

%SS1:	79	81	79	
%SS2:	96	96	95	
%SS3:	109	113	111	

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 11/27/07-11/28/07
	Client Contact: Steve Flexser	Date Received: 11/29/07
	Client P.O.:	Date Analyzed: 11/30/07-12/01/07
		Date Extracted: 11/29/07

Diesel Range (C10-C23) & Bunker Oil Range (C10+) Extractable Hydrocarbons as Diesel & Bunker Oil*

Extraction method: SW3550C

Analytical methods: SW8015C

Work Order: 0711698

Lab ID	Client ID	Matrix	TPH(d)	TPH(bo)	DF	% SS
0711698-001A	MW5-5.0	S	55,d,b	59	1	113
0711698-002A	MW5-10.0	S	ND	ND	1	100
0711698-003A	MW5-15.0	S	ND	ND	1	102
0711698-004A	MW5-20.5	S	ND	ND	1	99
0711698-005A	MW6-4.5	S	4.7,d	ND	1	91
0711698-006A	MW6-9.5	S	240,d,b	180	1	118
0711698-007A	MW7-4.5	S	38,d,b	32	1	97
0711698-008A	MW7-9.5	S	ND	ND	1	100
0711698-009A	MW9-5.5	S	1.2,d	ND	1	100
0711698-010A	MW9-10.0	S	1.5,d	ND	1	101
0711698-011A	MW9-15.0	S	ND	ND	1	112
0711698-012A	MW9-20.0	S	ND	ND	1	112
0711698-013A	MW10-5.5	S	ND	ND	1	112
0711698-014A	MW10-10.5	S	ND	ND	1	115
0711698-015A	MW10-15.5	S	ND	ND	1	114
0711698-016A	MW10-20.5	S	ND	ND	1	115

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711698

Analyte	EPA Method SW8260B		Extraction SW5030B			BatchID: 32152			Spiked Sample ID: 0711698-003A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	107	102	5.36	98.7	93.1	5.88	70 - 130	30	70 - 130	30
Benzene	ND	0.050	123	116	5.48	117	110	6.28	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	81.9	84.8	3.49	76.8	78	1.51	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	112	101	11.0	110	101	8.39	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	98.8	95.2	3.72	88.2	85.8	2.71	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	113	106	6.16	105	100	4.93	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	102	95	7.48	96.1	89.8	6.86	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	102	89.6	12.9	96.5	86.6	10.8	70 - 130	30	70 - 130	30
Toluene	ND	0.050	108	104	3.84	102	97.1	4.69	70 - 130	30	70 - 130	30
%SS1:	91	0.050	101	92	9.53	98	93	5.47	70 - 130	30	70 - 130	30
%SS2:	94	0.050	88	85	3.89	86	85	1.34	70 - 130	30	70 - 130	30
%SS3:	112	0.050	88	88	0	91	93	1.65	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32152 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711698-001A	11/27/07 11:05 AM	11/29/07	12/05/07 5:07 PM	0711698-002A	11/27/07 11:10 AM	11/29/07	12/04/07 7:36 PM
0711698-003A	11/27/07 11:15 AM	11/29/07	12/01/07 9:43 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711698

EPA Method SW8260B	Extraction SW5030B			BatchID: 32166			Spiked Sample ID: 0711698-016A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	111	112	0.998	105	101	3.98	70 - 130	30	70 - 130	30
Benzene	ND	0.050	123	126	2.82	120	113	5.98	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	92.1	86.4	6.43	77.4	76.6	1.03	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	116	106	8.54	110	112	2.01	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	99.3	103	3.22	99.8	91.1	9.10	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	114	116	1.56	105	100	4.84	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	105	104	0.576	99.9	95.6	4.44	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	104	102	1.83	102	98.4	3.65	70 - 130	30	70 - 130	30
Toluene	ND	0.050	111	105	5.68	109	108	1.27	70 - 130	30	70 - 130	30
%SS1:	79	0.050	94	97	2.64	104	98	5.56	70 - 130	30	70 - 130	30
%SS2:	96	0.050	88	86	1.93	93	94	1.73	70 - 130	30	70 - 130	30
%SS3:	111	0.050	90	89	0.807	90	90	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32166 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711698-004A	11/27/07 11:30 AM	11/29/07	12/01/07 10:36 PM	0711698-005A	11/28/07 8:40 AM	11/29/07	12/05/07 3:11 AM
0711698-006A	11/28/07 8:50 AM	11/29/07	12/05/07 5:57 PM	0711698-007A	11/27/07 1:35 PM	11/29/07	12/05/07 4:48 AM
0711698-008A	11/27/07 1:40 PM	11/29/07	12/01/07 11:33 PM	0711698-009A	11/28/07 10:10 AM	11/29/07	12/05/07 5:38 AM
0711698-010A	11/28/07 10:20 AM	11/29/07	12/05/07 6:26 AM	0711698-011A	11/28/07 10:25 AM	11/29/07	12/02/07 12:26 AM
0711698-012A	11/28/07 10:35 AM	11/29/07	12/02/07 1:18 AM	0711698-013A	11/27/07 8:55 AM	11/29/07	12/02/07 2:14 AM
0711698-014A	11/27/07 9:05 AM	11/29/07	12/02/07 3:07 AM	0711698-015A	11/27/07 9:10 AM	11/29/07	12/02/07 3:58 AM
0711698-016A	11/27/07 9:15 AM	11/29/07	12/02/07 11:44 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711698

EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32170			Spiked Sample ID: 0711696-014A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	100	91.7	8.69	108	119	9.83	70 - 130	30	70 - 130	30
MTBE	ND	0.10	95.8	90.7	5.44	95.5	94.3	1.20	70 - 130	30	70 - 130	30
Benzene	ND	0.10	85.6	90.6	5.64	97.3	100	2.94	70 - 130	30	70 - 130	30
Toluene	ND	0.10	96.6	101	4.28	111	114	2.79	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	95.2	101	5.76	105	109	3.29	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	103	110	6.25	113	120	5.71	70 - 130	30	70 - 130	30
%SS:	92	0.10	85	89	4.94	94	92	2.83	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32170 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711698-001A	11/27/07 11:05 AM	11/29/07	11/30/07 5:10 PM	0711698-002A	11/27/07 11:10 AM	11/29/07	11/30/07 5:44 PM
0711698-003A	11/27/07 11:15 AM	11/29/07	11/30/07 5:21 AM	0711698-004A	11/27/07 11:30 AM	11/29/07	11/30/07 6:20 AM
0711698-005A	11/28/07 8:40 AM	11/29/07	11/30/07 9:42 AM	0711698-006A	11/28/07 8:50 AM	11/29/07	11/30/07 7:26 PM
0711698-007A	11/27/07 1:35 PM	11/29/07	11/30/07 9:07 PM	0711698-008A	11/27/07 1:40 PM	11/29/07	11/30/07 10:18 AM
0711698-009A	11/28/07 10:10 AM	11/29/07	11/30/07 2:00 AM	0711698-010A	11/28/07 10:20 AM	11/29/07	11/30/07 2:33 AM
0711698-011A	11/28/07 10:25 AM	11/29/07	12/03/07 5:43 PM	0711698-012A	11/28/07 10:35 AM	11/29/07	11/30/07 7:28 AM
0711698-013A	11/27/07 8:55 AM	11/29/07	11/30/07 8:34 AM	0711698-014A	11/27/07 9:05 AM	11/29/07	12/03/07 7:15 PM
0711698-015A	11/27/07 9:10 AM	11/29/07	11/30/07 4:45 AM	0711698-016A	11/27/07 9:15 AM	11/29/07	12/03/07 7:45 PM
0711698-017A	11/27/07 2:55 PM	11/29/07	11/30/07 5:50 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711698

Analyte	EPA Method SW8015C		Extraction SW3550C			BatchID: 32171			Spiked Sample ID: 0711696-014A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	114	94.2	19.4	105	106	0.838	70 - 130	30	70 - 130	30
%SS:	101	50	100	99	0.653	113	113	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32171 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711698-001A	11/27/07 11:05 AM	11/29/07	11/30/07 5:43 AM	0711698-002A	11/27/07 11:10 AM	11/29/07	11/30/07 6:51 AM
0711698-003A	11/27/07 11:15 AM	11/29/07	11/30/07 7:59 AM	0711698-004A	11/27/07 11:30 AM	11/29/07	11/30/07 3:19 PM
0711698-005A	11/28/07 8:40 AM	11/29/07	11/30/07 5:43 AM	0711698-006A	11/28/07 8:50 AM	11/29/07	11/30/07 6:51 AM
0711698-007A	11/27/07 1:35 PM	11/29/07	11/30/07 7:59 AM	0711698-008A	11/27/07 1:40 PM	11/29/07	11/30/07 4:31 PM
0711698-009A	11/28/07 10:10 AM	11/29/07	11/30/07 8:07 PM	0711698-010A	11/28/07 10:20 AM	11/29/07	11/30/07 9:19 PM
0711698-011A	11/28/07 10:25 AM	11/29/07	11/30/07 1:55 PM	0711698-012A	11/28/07 10:35 AM	11/29/07	11/30/07 3:04 PM
0711698-013A	11/27/07 8:55 AM	11/29/07	11/30/07 4:13 PM	0711698-014A	11/27/07 9:05 AM	11/29/07	11/30/07 5:22 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711698

EPA Method SW8015C		Extraction SW3550C			BatchID: 32174			Spiked Sample ID: 0711698-019A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	103	106	2.69	104	105	1.34	70 - 130	30	70 - 130	30
%SS:	113	50	115	117	2.34	112	112	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32174 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711698-015A	11/27/07 9:10 AM	11/29/07	11/30/07 7:41 PM	0711698-016A	11/27/07 9:15 AM	11/29/07	11/30/07 8:50 PM
0711698-017A	11/27/07 2:55 PM	11/29/07	11/30/07 5:43 PM	0711698-018A	11/27/07 3:05 PM	11/29/07	11/30/07 10:30 PM
0711698-019A	11/27/07 1:10 PM	11/29/07	12/01/07 2:40 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = $100 * (MS - Sample) / (Amount\ Spiked)$; $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$.

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711698

EPA Method SW8021B/8015Cm	Extraction SW5030B			BatchID: 32175			Spiked Sample ID: 0711698-019A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	101	85.6	16.6	97.4	108	10.2	70 - 130	30	70 - 130	30
MTBE	ND	0.10	76	76.2	0.208	98.4	102	3.39	70 - 130	30	70 - 130	30
Benzene	ND	0.10	86.5	91.3	5.37	99.1	98.7	0.397	70 - 130	30	70 - 130	30
Toluene	ND	0.10	83.9	87.8	4.58	114	114	0	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	90.6	95.7	5.48	108	108	0	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	86	90	4.55	120	120	0	70 - 130	30	70 - 130	30
%SS:	84	0.10	77	81	5.32	97	91	6.12	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32175 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711698-018A	11/27/07 3:05 PM	11/29/07	11/30/07 6:56 AM	0711698-019A	11/27/07 1:10 PM	11/29/07	11/30/07 7:28 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711698

EPA Method SW8260B	Extraction SW5030B			BatchID: 32176			Spiked Sample ID: 0711727-001A						
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
		mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	105	108	2.72	105	106	0.499	70 - 130	30	70 - 130	30	
Benzene	ND	0.050	119	122	2.76	121	123	2.35	70 - 130	30	70 - 130	30	
t-Butyl alcohol (TBA)	ND	0.25	83.7	81.3	2.97	80.7	80.4	0.401	70 - 130	30	70 - 130	30	
1,2-Dibromoethane (EDB)	ND	0.050	111	114	2.47	115	114	0.624	70 - 130	30	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	0.050	98.2	101	3.28	93.3	97.3	4.12	70 - 130	30	70 - 130	30	
Diisopropyl ether (DIPE)	ND	0.050	110	112	1.73	106	109	2.31	70 - 130	30	70 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND	0.050	100	104	3.86	99.2	99.2	0	70 - 130	30	70 - 130	30	
Methyl-t-butyl ether (MTBE)	ND	0.050	98.3	106	7.59	98.5	96.6	1.91	70 - 130	30	70 - 130	30	
Toluene	ND	0.050	106	104	1.24	116	120	4.01	70 - 130	30	70 - 130	30	
%SS1:	73	0.050	94	98	4.76	92	86	6.80	70 - 130	30	70 - 130	30	
%SS2:	100	0.050	87	88	0.733	91	90	1.10	70 - 130	30	70 - 130	30	
%SS3:	93	0.050	90	89	1.70	91	90	0.917	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32176 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711698-017A	11/27/07 2:55 PM	11/29/07	12/02/07 12:34 PM	0711698-018A	11/27/07 3:05 PM	11/29/07	12/02/07 1:23 PM
0711698-019A	11/27/07 1:10 PM	11/29/07	12/02/07 2:12 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 12/05/07
	Client Contact: Steve Flexser	Date Received: 12/06/07
	Client P.O.:	Date Reported: 12/12/07
		Date Completed: 12/12/07

WorkOrder: 0712157

December 12, 2007

Dear Steve:

Enclosed within are:

- 1) The results of the **6** analyzed samples from your project: **#0014; 3495 Castro Valley Blvd,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

P&D

0

07/21/57

P & D ENVIRONMENTAL, INC.

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

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

Lead, Stevengly
678260

PROJECT NUMBER: 0014				PROJECT NAME: 3495 Castro Valley Blvd.				NUMBER OF CONTAINERS	ANALYSIS(ES): TPH, S.D, BO BTEX, Fuel, Oxygen, Lead, Stevengly	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) Steve Flexser <i>Steve Flexser</i>											
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION							
MW8-4.5	12/5/07	1330	SOIL					1		ice	Normal
MW8-9.5	↓	1335	↓					1			Turn around Time
MW8-14.0	↓	1340	↓					1			
MW12-4.5	12/5/07	1145	SOIL					1			
MW12-9.5	↓	1155	↓					1			
MW12-12.0	↓	1215	↓					1			
RELINQUISHED BY: (SIGNATURE) <i>Steve Flexser</i>				DATE 12/5/07	TIME 1330	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>				TOTAL NO. OF SAMPLES (THIS SHIPMENT) 6	LABORATORY: McCampbell
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>				DATE 12/6/07	TIME 1300	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>				TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 6	LABORATORY CONTACT: Amyde Rydelius
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)				LABORATORY PHONE NUMBER: (877) 252-9262	
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com						REMARKS:					

ICE / 1.7
 GOOD CONDITION APPROPRIATE CONTAINERS
 HEAD SPACE ABSENT PRESERVED IN LAB
 DECHLORINATED LAB
 PRESERVATION VOAS O & G METALS OTHER

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0712157

ClientID: PDEO

EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty

Report to:

Steve Flexser
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

Email: lab@pdenviro.com
TEL: (510) 658-6916 FAX: (510) 834-0152
ProjectNo: #0014; 3495 Castro Valley Blvd
PO:

Bill to:

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

Requested TAT: 5 days

Date Received: 12/06/2007

Date Printed: 12/06/2007

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0712157-001	MW8-4.5	Soil	12/5/2007 1:30:00	<input type="checkbox"/>	A	A											
0712157-002	MW8-9.5	Soil	12/5/2007 1:35:00	<input type="checkbox"/>	A	A											
0712157-003	MW8-14.0	Soil	12/5/2007 1:40:00	<input type="checkbox"/>	A	A											
0712157-004	MW12-4.5	Soil	12/5/2007	<input type="checkbox"/>	A	A											
0712157-005	MW12-9.5	Soil	12/5/2007	<input type="checkbox"/>	A	A											
0712157-006	MW12-12.0	Soil	12/5/2007	<input type="checkbox"/>	A	A											

Test Legend:

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

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A contain testgroup.

Prepared by: Elisa Venegas

Comments:

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



Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **12/6/2007 4:05:29 PM**

Project Name: **#0014; 3495 Castro Valley Blvd**

Checklist completed and reviewed by: **Elisa Venegas**

WorkOrder N°: **0712157** Matrix Soil

Carrier: Rob Pringle (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: 1.7°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 12/05/07
	Client Contact: Steve Flexser	Date Received: 12/06/07
	Client P.O.:	Date Extracted: 12/06/07
		Date Analyzed: 12/08/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0712157

Lab ID	0712157-001A	0712157-002A	0712157-003A	0712157-004A	Reporting Limit for DF =1	
Client ID	MW8-4.5	MW8-9.5	MW8-14.0	MW12-4.5		
Matrix	S	S	S	S		
DF	1	4	1	1		

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND	ND<0.020	ND	ND	0.005
Benzene	ND	ND<0.020	ND	ND	0.005	NA
t-Butyl alcohol (TBA)	ND	ND<0.20	ND	ND	0.05	NA
1,2-Dibromoethane (EDB)	ND	ND<0.020	ND	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND<0.020	ND	ND	0.005	NA
Diisopropyl ether (DIPE)	ND	ND<0.020	ND	ND	0.005	NA
Ethylbenzene	ND	0.62	ND	ND	0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND<0.020	ND	ND	0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND<0.020	ND	ND	0.005	NA
Toluene	ND	ND<0.020	ND	ND	0.005	NA
Xylenes	ND	0.030	ND	ND	0.005	NA

Surrogate Recoveries (%)

%SS1:	93	95	94	96
%SS2:	96	95	96	97
%SS3:	110	92	108	112

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 12/05/07
	Client Contact: Steve Flexser	Date Received: 12/06/07
	Client P.O.:	Date Extracted: 12/06/07
		Date Analyzed: 12/08/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0712157

Lab ID	0712157-005A	0712157-006A			Reporting Limit for DF =1
Client ID	MW12-9.5	MW12-12.0			
Matrix	S	S			
DF	1	1			

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND	ND			0.005
Benzene	ND	ND			0.005	NA
t-Butyl alcohol (TBA)	ND	ND			0.05	NA
1,2-Dibromoethane (EDB)	ND	ND			0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND	ND			0.005	NA
Diisopropyl ether (DIPE)	ND	ND			0.005	NA
Ethylbenzene	ND	ND			0.005	NA
Ethyl tert-butyl ether (ETBE)	ND	ND			0.005	NA
Methyl-t-butyl ether (MTBE)	ND	ND			0.005	NA
Toluene	ND	ND			0.005	NA
Xylenes	ND	ND			0.005	NA

Surrogate Recoveries (%)

%SS1:	89	91		
%SS2:	96	96		
%SS3:	103	110		

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; 3495 Castro Valley Blvd	Date Sampled: 12/05/07
	Client Contact: Steve Flexser	Date Received: 12/06/07
	Client P.O.:	Date Extracted: 12/06/07
		Date Analyzed 12/08/07

Diesel (C10-23) and Oil (C10+) Range Extractable Hydrocarbons as Diesel and Bunker Oil*

Extraction method: SW3550C

Analytical methods: SW8015C

Work Order: 0712157

Lab ID	Client ID	Matrix	TPH(d)	TPH(bo)	DF	% SS
0712157-001A	MW8-4.5	S	ND	ND	1	97
0712157-002A	MW8-9.5	S	59,d,b	57	1	114
0712157-003A	MW8-14.0	S	ND	ND	1	117
0712157-004A	MW12-4.5	S	ND	ND	1	117
0712157-005A	MW12-9.5	S	5.4,d,b	7.1	1	117
0712157-006A	MW12-12.0	S	ND	ND	1	117

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) mineral oil; p) see attached narrative.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712157

EPA Method SW8015C		Extraction SW3550C			BatchID: 32311			Spiked Sample ID: 0712110-002A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	94.7	99.7	5.16	98.1	99	0.909	70 - 130	30	70 - 130	30
%SS:	91	50	99	92	7.34	91	93	1.95	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32311 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712157-001A	12/05/07 1:30 PM	12/06/07	12/08/07 2:36 PM	0712157-002A	12/05/07 1:35 PM	12/06/07	12/08/07 3:47 PM
0712157-003A	12/05/07 1:40 PM	12/06/07	12/08/07 8:14 AM	0712157-004A	12/05/07 11:45 AM	12/06/07	12/08/07 9:22 AM
0712157-005A	12/05/07 11:55 AM	12/06/07	12/08/07 10:29 AM	0712157-006A	12/05/07 12:15 PM	12/06/07	12/08/07 4:52 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = $100 * (MS - Sample) / (Amount\ Spiked)$; $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$.

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712157

Analyte	EPA Method SW8015Cm		Extraction SW5030B			BatchID: 32337			Spiked Sample ID: 0712155-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	109	114	5.06	115	107	6.89	70 - 130	30	70 - 130	30
MTBE	ND	0.10	90.2	99.8	10.2	99.4	87	13.3	70 - 130	30	70 - 130	30
Benzene	ND	0.10	94.7	96.6	1.94	96.5	92.3	4.48	70 - 130	30	70 - 130	30
Toluene	ND	0.10	107	109	2.00	111	107	3.42	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	100	105	4.40	104	101	3.14	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	110	113	2.99	113	113	0	70 - 130	30	70 - 130	30
%SS:	76	0.10	91	93	1.84	93	90	3.70	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32337 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712157-001A	12/05/07 1:30 PM	12/06/07	12/07/07 2:45 AM	0712157-002A	12/05/07 1:35 PM	12/06/07	12/07/07 4:17 AM
0712157-003A	12/05/07 1:40 PM	12/06/07	12/07/07 5:41 PM	0712157-004A	12/05/07 11:45 AM	12/06/07	12/07/07 12:42 AM
0712157-005A	12/05/07 11:55 AM	12/06/07	12/07/07 6:12 PM	0712157-006A	12/05/07 12:15 PM	12/06/07	12/07/07 1:43 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0712157

Analyte	EPA Method SW8260B		Extraction SW5030B			BatchID: 32340			Spiked Sample ID: 0712157-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	111	106	4.01	99.8	96.7	3.09	70 - 130	30	70 - 130	30
Benzene	ND	0.050	126	120	4.86	113	109	3.41	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	83.8	82.5	1.63	76.7	76.7	0	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	111	108	2.92	100	96.5	3.64	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	105	102	2.74	96.2	92.7	3.63	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	106	105	0.474	100	96.1	3.99	70 - 130	30	70 - 130	30
Toluene	ND	0.050	109	111	1.65	111	108	2.37	70 - 130	30	70 - 130	30
%SS1:	93	0.050	107	101	5.02	98	96	2.59	70 - 130	30	70 - 130	30
%SS2:	96	0.050	90	91	1.78	93	93	0	70 - 130	30	70 - 130	30
%SS3:	110	0.050	88	89	0.506	89	90	0.813	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32340 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712157-001A	12/05/07 1:30 PM	12/06/07	12/08/07 2:06 AM	0712157-002A	12/05/07 1:35 PM	12/06/07	12/08/07 6:35 PM
0712157-003A	12/05/07 1:40 PM	12/06/07	12/08/07 3:42 AM	0712157-004A	12/05/07 11:45 AM	12/06/07	12/08/07 4:29 AM
0712157-005A	12/05/07 11:55 AM	12/06/07	12/08/07 5:18 AM	0712157-006A	12/05/07 12:15 PM	12/06/07	12/08/07 6:06 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/ Castro Valley	Date Sampled: 12/13/07-12/14/07
	Client Contact: Steve Carmack	Date Received: 12/14/07
	Client P.O.:	Date Reported: 12/21/07
		Date Completed: 12/21/07

WorkOrder: 0712503

December 21, 2007

Dear Steve:

Enclosed within are:

- 1) The results of the **8** analyzed samples from your project: **#0014; Xtra Oil/ Castro Valley**,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

P & D ENVIRONMENTAL, INC.

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

0712503


CHAIN OF CUSTODY RECORD

Lead Surveys by 8260

PROJECT NUMBER: 0014		PROJECT NAME: Xtra Oil / Castro Valley			NUMBER OF CONTAINERS	ANALYSIS(ES):				PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) Steve Carmack						TPH-Mw/Hrange	MBTEX	Fuel Oxy's +			
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION							
MW 5	12/13/07	1115	H ₂ O		7	X	X			ICE	Normal Turnaround Time
MW 6		1205			7	X	X				
MW 7		1415			7	X	X				
MW 8		1545			7	X	X				
MW 9		1250			7	X	X				
MW 10		1010			7	X	X				
MW 11	12/14/07	1015			7	X	X				
MW 12	12/13/07	1515	✓		7	X	X				
GOOD CONDITION _____ HEAD SPACE ABSENT _____ DECHLORINATED IN LAB _____ PRESERVATION _____					APPROPRIATE CONTAINERS _____ PRESERVED IN LAB _____ VOAS _____ ORG _____ METALS _____ OTHER _____						
RELINQUISHED BY: (SIGNATURE) <i>Steve Carmack</i>		DATE 12/14/07	TIME 555	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TOTAL NO. OF SAMPLES (THIS SHIPMENT) 8		LABORATORY: McCampbell Analytical			
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE 12/14/07	TIME 450	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 56		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: All bottles preserved w/ HCL except 1 narrow necked amber liter which is for MW 11							

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McC Campbell Analytical, Inc.


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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0712503

ClientID: PDEO

EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty

Report to: Steve Carmack P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Email: lab@pdenviro.com TEL: (510) 658-6916 FAX: 510-834-0152 ProjectNo: #0014; Xtra Oil/ Castro Valley PO:	Bill to: Accounts Receivable Xtra Oil 2307 Pacific Avenue Alameda, CA 94501 constanza.rodriguez@pdenviro.com	Requested TAT: 5 days Date Received: 12/14/2007 Date Printed: 12/14/2007
---	---	--	---

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0712503-001	MW-5	Water	12/13/07 11:15:00	<input type="checkbox"/>	A	B											
0712503-002	MW6	Water	12/13/07 12:05:00	<input type="checkbox"/>	A	B											
0712503-003	MW7	Water	12/13/07 2:15:00	<input type="checkbox"/>	A	B											
0712503-004	MW8	Water	12/13/07 3:45:00	<input type="checkbox"/>	A	B											
0712503-005	MW9	Water	12/13/07 12:50:00	<input type="checkbox"/>	A	B											
0712503-006	MW10	Water	12/13/07 10:10:00	<input type="checkbox"/>	A	B											
0712503-007	MW11	Water	12/14/07 10:15:00	<input type="checkbox"/>	A	B											
0712503-008	MW12	Water	12/13/07 3:15:00	<input type="checkbox"/>	A	B											

Test Legend:

1	G-MBTX W	2	MBTEXOXY-8260B W	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A contain testgroup.

Prepared by: Ana Venegas

Comments:

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



Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **12/14/07 7:47:50 PM**

Project Name: **#0014; Xtra Oil/ Castro Valley**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **0712503** Matrix Water

Carrier: Rob Pringle (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: 3.4°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA

Client contacted:

Date contacted:

Contacted by:

Comments:



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/ Castro Valley	Date Sampled: 12/13/07-12/14/07
	Client Contact: Steve Carmack	Date Received: 12/14/07
	Client P.O.:	Date Analyzed 12/17/07-12/19/07
		Date Extracted: 12/17/07-12/19/07

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*

Extraction method SW5030B

Analytical methods SW8015Cm

Work Order: 0712503

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS
001A	MW5	W	110,a	1	105
002A	MW6	W	66,000,a	100	98
003A	MW7	W	ND	1	103
004A	MW8	W	6200,a	10	114
005A	MW9	W	ND	1	97
006A	MW10	W	ND	1	100
007A	MW11	W	ND	1	106
008A	MW12	W	320,m	1	102

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.



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"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/ Castro Valley	Date Sampled: 12/13/07-12/14/07
	Client Contact: Steve Carmack	Date Received: 12/14/07
	Client P.O.:	Date Extracted: 12/18/07
		Date Analyzed: 12/18/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0712503

Lab ID	0712503-001B	0712503-002B	0712503-003B	0712503-004B	Reporting Limit for DF =1	
Client ID	MW5	MW6	MW7	MW8		
Matrix	W	W	W	W		
DF	1	250	1	10		

Compound	Concentration				ug/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND	ND<120	ND	ND<5.0	NA
Benzene	5.3	7900	ND	57	NA	0.5
t-Butyl alcohol (TBA)	ND	ND<1200	14	ND<50	NA	5.0
1,2-Dibromoethane (EDB)	ND	ND<120	ND	ND<5.0	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND<120	ND	ND<5.0	NA	0.5
Diisopropyl ether (DIPE)	ND	ND<120	ND	ND<5.0	NA	0.5
Ethylbenzene	ND	2600	ND	160	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND<120	ND	ND<5.0	NA	0.5
Methyl-t-butyl ether (MTBE)	4.0	ND<120	9.3	11	NA	0.5
Toluene	0.50	3600	ND	ND<5.0	NA	0.5
Xylenes	5.1	16,000	0.83	18	NA	0.5

Surrogate Recoveries (%)

%SS1:	107	104	108	104
%SS2:	96	96	95	98
%SS3:	102	104	102	104

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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	Client Contact: Steve Carmack	Date Received: 12/14/07
	Client P.O.:	Date Extracted: 12/18/07
		Date Analyzed: 12/18/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0712503

Lab ID	0712503-005B	0712503-006B	0712503-007B	0712503-008B	Reporting Limit for DF =1	
Client ID	MW9	MW10	MW11	MW12		
Matrix	W	W	W	W		
DF	1	1	1	1		

Compound	Concentration				ug/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND	ND	ND	ND	NA
Benzene	1.0	ND	ND	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	ND	ND	ND	NA	5.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND	ND	NA	0.5
Ethylbenzene	ND	1.5	ND	ND	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	1.9	21	11	NA	0.5
Toluene	ND	ND	ND	ND	NA	0.5
Xylenes	4.5	1.8	ND	ND	NA	0.5

Surrogate Recoveries (%)

%SS1:	107	107	108	104
%SS2:	99	98	99	97
%SS3:	103	101	103	104

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/ Castro Valley	Date Sampled: 12/13/07-12/14/07
	Client Contact: Steve Carmack	Date Received: 12/14/07
	Client P.O.:	Date Analyzed 12/18/07-12/20/07
		Date Extracted: 12/14/07

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C

Analytical methods: SW8015C

Work Order: 0712503

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0712503-001A	MW5	W	ND	ND	1	120
0712503-002A	MW6	W	6200,d	ND	1	108
0712503-003A	MW7	W	ND	ND	1	116
0712503-004A	MW8	W	1500,d	ND	1	118
0712503-005A	MW9	W	ND	ND	1	120
0712503-006A	MW10	W	ND	ND	1	119
0712503-007A	MW11	W	ND	ND	1	108
0712503-008A	MW12	W	200,d	ND	1	103

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant (cooking oil?); h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32581			Spiked Sample ID: 0712485-002A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	103	107	4.15	96.9	105	7.82	70 - 130	30	70 - 130	30
MTBE	ND	10	106	111	4.19	104	114	8.83	70 - 130	30	70 - 130	30
Benzene	ND	10	98.6	93.9	4.86	86	94	8.91	70 - 130	30	70 - 130	30
Toluene	ND	10	110	104	5.06	102	110	7.77	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	107	102	5.17	103	111	7.38	70 - 130	30	70 - 130	30
Xylenes	ND	30	113	110	2.99	113	120	5.71	70 - 130	30	70 - 130	30
%SS:	100	10	95	90	5.12	95	95	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32581 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-001A	12/13/07 11:15 AM	12/18/07	12/18/07 6:45 AM	0712503-002A	12/13/07 12:05 PM	12/19/07	12/19/07 9:59 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32583			Spiked Sample ID: 0712491-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	128	110	15.0	103	99.2	4.14	70 - 130	30	70 - 130	30
MTBE	ND	10	86.6	92	5.97	91.2	109	17.9	70 - 130	30	70 - 130	30
Benzene	ND	10	90.5	93.4	3.15	84.3	87.6	3.87	70 - 130	30	70 - 130	30
Toluene	ND	10	96	98.5	2.64	84.3	85.6	1.50	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	101	104	2.43	99.1	84.9	15.4	70 - 130	30	70 - 130	30
Xylenes	ND	30	115	119	2.82	96.7	96.7	0	70 - 130	30	70 - 130	30
%SS:	96	10	89	91	2.70	93	89	4.17	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32583 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-003A	12/13/07 2:15 PM	12/18/07	12/18/07 7:20 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32590			Spiked Sample ID: 0712552-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	83.6	110	27.0	99.6	100	0.913	70 - 130	30	70 - 130	30
MTBE	ND	10	95.9	100	4.67	98.6	96.6	2.00	70 - 130	30	70 - 130	30
Benzene	ND	10	97.7	87.1	11.5	100	97.9	2.58	70 - 130	30	70 - 130	30
Toluene	ND	10	103	103	0	104	104	0	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	106	104	1.91	106	108	2.37	70 - 130	30	70 - 130	30
Xylenes	ND	30	96.7	113	15.9	96.7	96.7	0	70 - 130	30	70 - 130	30
%SS:	99	10	108	88	20.6	113	111	1.33	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32590 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-004A	12/13/07 3:45 PM	12/17/07	12/17/07 4:16 PM	0712503-005A	12/13/07 12:50 PM	12/18/07	12/18/07 8:29 AM
0712503-006A	12/13/07 10:10 AM	12/18/07	12/18/07 9:03 AM	0712503-007A	12/14/07 10:15 AM	12/18/07	12/18/07 9:38 AM
0712503-008A	12/13/07 3:15 PM	12/17/07	12/17/07 10:22 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

Analyte	EPA Method SW8260B		Extraction SW5030B			BatchID: 32577			Spiked Sample ID: 0712483-001C			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	100	102	1.62	104	100	4.38	70 - 130	30	70 - 130	30
Benzene	ND	10	113	115	1.60	124	116	6.21	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	74	74.4	0.526	72.6	77.7	6.74	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	112	112	0	108	99.8	8.12	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	89.6	93.5	4.32	94.4	89.2	5.76	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	103	106	2.58	110	103	6.53	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	93.4	96.9	3.70	99.4	92.2	7.52	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	90.9	94.4	3.73	98	90.3	8.21	70 - 130	30	70 - 130	30
Toluene	ND	10	108	104	3.51	109	102	7.05	70 - 130	30	70 - 130	30
%SS1:	117	10	88	91	3.84	99	94	4.43	70 - 130	30	70 - 130	30
%SS2:	96	10	86	87	0.487	91	87	3.96	70 - 130	30	70 - 130	30
%SS3:	103	10	83	84	0.130	84	85	0.564	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32577 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-001B	12/13/07 11:15 AM	12/18/07	12/18/07 10:56 AM	0712503-002B	12/13/07 12:05 PM	12/18/07	12/18/07 12:27 PM
0712503-003B	12/13/07 2:15 PM	12/18/07	12/18/07 11:41 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

Analyte	Extraction SW5030B			BatchID: 32582				Spiked Sample ID: 0712485-007B				
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	10	101	106	5.61	110	102	7.35	70 - 130	30	70 - 130	30
Benzene	ND	10	115	121	4.59	124	116	6.76	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	50	78	79.2	1.56	76.6	74.7	2.47	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	108	113	4.10	115	105	9.47	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	92.4	98.2	6.07	102	92.2	10.6	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	10	105	113	7.70	114	104	8.58	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	10	94.3	102	7.97	103	94.9	8.46	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	10	89.1	101	12.7	103	92.1	11.3	70 - 130	30	70 - 130	30
Toluene	ND	10	108	105	2.95	108	103	4.71	70 - 130	30	70 - 130	30
%SS1:	112	10	87	101	14.7	104	96	8.33	70 - 130	30	70 - 130	30
%SS2:	99	10	84	87	3.81	90	87	2.97	70 - 130	30	70 - 130	30
%SS3:	99	10	82	84	2.17	85	85	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32582 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-004B	12/13/07 3:45 PM	12/18/07	12/18/07 1:39 AM	0712503-005B	12/13/07 12:50 PM	12/18/07	12/18/07 2:24 AM
0712503-006B	12/13/07 10:10 AM	12/18/07	12/18/07 3:09 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

Analyte	Extraction SW5030B			BatchID: 32586					Spiked Sample ID: 0712499-007B			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND<1.0	10	100	104	4.14	101	105	3.86	70 - 130	30	70 - 130	30
Benzene	ND<1.0	10	113	118	4.98	118	119	0.824	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND<10	50	76.2	76.5	0.398	74.6	78.8	5.48	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND<1.0	10	110	117	5.77	107	116	7.75	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND<1.0	10	90.8	97.1	6.70	90.5	97.8	7.71	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND<1.0	10	103	111	6.80	106	107	1.39	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND<1.0	10	93.2	99.8	6.81	95.2	101	5.64	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND<1.0	10	90.3	95.9	6.03	90.7	99	8.83	70 - 130	30	70 - 130	30
Toluene	ND<1.0	10	107	110	2.92	109	110	0.733	70 - 130	30	70 - 130	30
%SS1:	92	10	87	91	3.64	93	96	3.46	70 - 130	30	70 - 130	30
%SS2:	98	10	86	86	0	87	89	2.07	70 - 130	30	70 - 130	30
%SS3:	95	10	84	84	0	85	84	0.445	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32586 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-007B	12/14/07 10:15 AM	12/18/07	12/18/07 3:54 AM	0712503-008B	12/13/07 3:15 PM	12/18/07	12/18/07 4:39 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

EPA Method: SW8015C		Extraction: SW3510C			BatchID: 32564			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	113	112	1.15	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	119	118	1.36	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32564 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-001A	12/13/07 11:15 AM	12/14/07	12/18/07 9:40 PM	0712503-002A	12/13/07 12:05 PM	12/14/07	12/18/07 8:32 PM
0712503-003A	12/13/07 2:15 PM	12/14/07	12/19/07 3:17 AM	0712503-004A	12/13/07 3:45 PM	12/14/07	12/19/07 4:24 AM
0712503-005A	12/13/07 12:50 PM	12/14/07	12/19/07 5:31 AM	0712503-006A	12/13/07 10:10 AM	12/14/07	12/19/07 6:38 AM
0712503-007A	12/14/07 10:15 AM	12/14/07	12/20/07 1:43 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = 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.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0712503

EPA Method: SW8015C		Extraction: SW3510C			BatchID: 32588			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	113	112	1.69	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	116	117	1.43	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32588 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0712503-008A	12/13/07 3:15 PM	12/14/07	12/20/07 6:20 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = 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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014	Date Sampled: 11/28/07
		Date Received: 11/29/07
	Client Contact: Paul King	Date Reported: 12/05/07
	Client P.O.:	Date Completed: 12/05/07

WorkOrder: 0711709

December 05, 2007

Dear Paul:

Enclosed are:

- 1). the results of **1** analyzed sample from your **#0014 project**,
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius, Lab Manager

0711709

PDEO

P & D ENVIRONMENTAL, INC.

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

CHAIN OF CUSTODY RECORD

Lead Surveys by 8260

PROJECT NUMBER: 0014		PROJECT NAME: 3495 Castro Valley Blvd			NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-GP, BO BTEX fuel oxygens CAMEL metals	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) Steven Flexser <i>Steven Flexser</i>								
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION				
Comp A	11/28/07	1400	S		4	X X X	ICE	Normal Turn Around
					ICE/° <u>6.4</u>			
					GOOD CONDITION		APPROPRIATE CONTAINERS	
					HEAD SPACE ABSENT		PRESERVED IN LAB	
					DECHLORINATED IN LAB		PRESERVATION	
					VOAS		O&C METALS OTHER	
RELINQUISHED BY: (SIGNATURE) <i>Steven Flexser</i>		DATE 11/29/07	TIME 1500	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TOTAL NO. OF SAMPLES (THIS SHIPMENT)	1	LABORATORY:
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE 11/29/07	TIME 2300	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		TOTAL NO. OF CONTAINERS (THIS SHIPMENT)	4	McLampbell
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		LABORATORY CONTACT:	LABORATORY PHONE NUMBER:	
						Angela Rydelius	(877) 252-9262	
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com				REMARKS: Please composite sample.				

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0711709

ClientID: PDEO

EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty

Report to:		Bill to:	Requested TAT: 5 days
Paul King	Email: lab@pdenviro.com	Accounts Payable	
P & D Environmental	TEL: (510) 658-6916 FAX: 510-834-0152	P & D Environmental	<i>Date Received: 11/29/2007</i>
55 Santa Clara, Ste.240	ProjectNo: #0014	55 Santa Clara, Ste.240	<i>Date Printed: 11/29/2007</i>
Oakland, CA 94610	PO:	Oakland, CA 94610	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0711709-001	Comp A	Soil	11/28/07 2:00:00	<input type="checkbox"/>	A	A	A										

Test Legend:

1	CAM17MS_S	2	G-MBTEX_S	3	MBTEXOXY-8260B_S	4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Nickole White

Comments:

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



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014	Date Sampled: 11/28/07
		Date Received: 11/29/07
	Client Contact: Paul King	Date Extracted: 11/29/07
	Client P.O.:	Date Analyzed 11/30/07

CAM / CCR 17 Metals*

Lab ID	0711709-001A				Reporting Limit for DF =1; ND means not detected above the reporting limit
Client ID	Comp A				
Matrix	S				S W
Extraction Type	TOTAL				mg/Kg mg/L

ICP-MS Metals, Concentration*

Analytical Method: 6020A

Extraction Method: SW3050B

Work Order: 0711709

Dilution Factor	1				1	1
Antimony	ND				0.5	NA
Arsenic	5.3				0.5	NA
Barium	160				5.0	NA
Beryllium	ND				0.5	NA
Cadmium	ND				0.25	NA
Chromium	42				0.5	NA
Cobalt	7.5				0.5	NA
Copper	17				0.5	NA
Lead	7.6				0.5	NA
Mercury	ND				0.05	NA
Molybdenum	ND				0.5	NA
Nickel	37				0.5	NA
Selenium	ND				0.5	NA
Silver	ND				0.5	NA
Thallium	ND				0.5	NA
Vanadium	38				0.5	NA
Zinc	44				5.0	NA
%SS:	100					

Comments

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014	Date Sampled: 11/28/07
		Date Received: 11/29/07
	Client Contact: Paul King	Date Extracted: 11/29/07
	Client P.O.:	Date Analyzed: 12/04/07

Oxygenates and BTEX by GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0711709

Lab ID	0711709-001A				Reporting Limit for DF =1
Client ID	Comp A				
Matrix	S				
DF	1				

Compound	Concentration				mg/kg	ug/L
	tert-Amyl methyl ether (TAME)	ND				0.005
Benzene	ND				0.005	NA
t-Butyl alcohol (TBA)	ND				0.05	NA
1,2-Dibromoethane (EDB)	ND				0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND				0.005	NA
Diisopropyl ether (DIPE)	ND				0.005	NA
Ethylbenzene	0.036				0.005	NA
Ethyl tert-butyl ether (ETBE)	ND				0.005	NA
Methyl-t-butyl ether (MTBE)	ND				0.005	NA
Toluene	0.0058				0.005	NA
Xylenes	0.14				0.005	NA

Surrogate Recoveries (%)

%SS1:	92			
%SS2:	97			
%SS3:	97			

Comments

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



QC SUMMARY REPORT FOR 6020A

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711709

EPA Method 6020A		Extraction SW3050B				BatchID: 32142			Spiked Sample ID 0711670-030B				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	ND	50	108	109	1.21	10	116	118	1.20	70 - 130	20	80 - 120	20
Arsenic	1.7	50	99.4	100	0.756	10	103	102	1.17	70 - 130	20	80 - 120	20
Barium	110	500	102	105	2.00	100	106	107	0.847	70 - 130	20	80 - 120	20
Beryllium	ND	50	95.6	96.4	0.893	10	106	106	0	70 - 130	20	80 - 120	20
Cadmium	ND	50	101	102	0.925	10	106	107	0.749	70 - 130	20	80 - 120	20
Chromium	12	50	94.9	95.2	0.218	10	103	103	0	70 - 130	20	80 - 120	20
Cobalt	4.4	50	96.6	97.9	1.21	10	108	107	0.836	70 - 130	20	80 - 120	20
Copper	15	50	95.9	97.3	1.05	10	103	102	0.476	70 - 130	20	80 - 120	20
Lead	2.9	50	98.6	99	0.401	10	105	106	1.33	70 - 130	20	80 - 120	20
Mercury	ND	1.25	93.7	94.7	0.990	0.25	96.7	102	5.67	70 - 130	20	80 - 120	20
Molybdenum	ND	50	98.6	99	0.442	10	106	106	0	70 - 130	20	80 - 120	20
Nickel	14	50	97	98.1	0.913	10	102	103	0.195	70 - 130	20	80 - 120	20
Selenium	ND	50	98.6	99.4	0.845	10	106	103	2.48	70 - 130	20	80 - 120	20
Silver	ND	50	99.7	100	0.300	10	106	107	0.753	70 - 130	20	80 - 120	20
Thallium	ND	50	98.3	98.4	0.122	10	102	104	2.43	70 - 130	20	80 - 120	20
Vanadium	31	50	96.8	98.9	1.32	10	101	98.5	2.57	70 - 130	20	80 - 120	20
Zinc	52	500	103	104	0.193	100	109	109	0	70 - 130	20	80 - 120	20
%SS:	98	250	100	104	3.98	250	98	99	0.892	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32142 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711709-001A	11/28/07 2:00 PM	11/29/07	11/30/07 6:36 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = 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



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711709

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 32175			Spiked Sample ID: 0711698-019A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	0.60	101	85.6	16.6	97.4	108	10.2	70 - 130	30	70 - 130	30
MTBE	ND	0.10	76	76.2	0.208	98.4	102	3.39	70 - 130	30	70 - 130	30
Benzene	ND	0.10	86.5	91.3	5.37	99.1	98.7	0.397	70 - 130	30	70 - 130	30
Toluene	ND	0.10	83.9	87.8	4.58	114	114	0	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	90.6	95.7	5.48	108	108	0	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	86	90	4.55	120	120	0	70 - 130	30	70 - 130	30
%SS:	84	0.10	77	81	5.32	97	91	6.12	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32175 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711709-001A	11/28/07 2:00 PM	11/29/07	11/30/07 4:07 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder: 0711709

Analyte	EPA Method SW8260B		Extraction SW5030B			BatchID: 32176			Spiked Sample ID: 0711727-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
tert-Amyl methyl ether (TAME)	ND	0.050	105	108	2.72	105	106	0.499	70 - 130	30	70 - 130	30
Benzene	ND	0.050	119	122	2.76	121	123	2.35	70 - 130	30	70 - 130	30
t-Butyl alcohol (TBA)	ND	0.25	83.7	81.3	2.97	80.7	80.4	0.401	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	0.050	111	114	2.47	115	114	0.624	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	0.050	98.2	101	3.28	93.3	97.3	4.12	70 - 130	30	70 - 130	30
Diisopropyl ether (DIPE)	ND	0.050	110	112	1.73	106	109	2.31	70 - 130	30	70 - 130	30
Ethyl tert-butyl ether (ETBE)	ND	0.050	100	104	3.86	99.2	99.2	0	70 - 130	30	70 - 130	30
Methyl-t-butyl ether (MTBE)	ND	0.050	98.3	106	7.59	98.5	96.6	1.91	70 - 130	30	70 - 130	30
Toluene	ND	0.050	106	104	1.24	116	120	4.01	70 - 130	30	70 - 130	30
%SS1:	73	0.050	94	98	4.76	92	86	6.80	70 - 130	30	70 - 130	30
%SS2:	100	0.050	87	88	0.733	91	90	1.10	70 - 130	30	70 - 130	30
%SS3:	93	0.050	90	89	1.70	91	90	0.917	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32176 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711709-001A	11/28/07 2:00 PM	11/29/07	12/04/07 12:30 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil

QC Matrix: Soil

WorkOrder 0711709

EPA Method SW8015C	Extraction SW3550C			BatchID: 32174			Spiked Sample ID: 0711698-019A					
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	103	106	2.69	104	105	1.34	70 - 130	30	70 - 130	30
%SS:	113	50	115	117	2.34	112	112	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 32174 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0711709-001A	11/28/07 2:00 PM	11/29/07	12/04/07 7:24 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = 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.