V I P SERVICE STATION
385 Century Circle
Danville, CA 94526
925-838-0768

February 22, 2011

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

SUBJECT: WELL INSTALLATION REPORT CERTIFICATION
County Case # RO 209
VIP Service
3889 Castro Valley Blvd.
Castro Valley, CA

Dear Mr. Khatri:

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

- Well Installation Report (EW1-EW3, OW1, OW3-OW6, C1-C4, F1-F4) dated February 22, 2011 (document 0047.R47).

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

Should you have any questions, please do not hesitate to contact my consultant Paul King at P&D Environmental, Inc. at (510) 658-6916.

Sincerely,

VIP Service

Lalji Patel

Enclosure

0047.L116

P&D ENVIRONMENTAL, INC.

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

February 22, 2011
Report 0047.R47

Mr. L.B. Patel
Mr. P. Gupta
VIP Service
385 Century Circle
Danville, CA 94526

SUBJECT: WELL INSTALLATION REPORT
(EW1-EW3, OW1, OW3-OW6, C1-C4, F1-F4)
County Case # RO 209
VIP Service
3889 Castro Valley Blvd.
Castro Valley, CA

Gentlemen:

P&D Environmental, Inc. (P&D) is pleased to present this report documenting the installation of three dual phase extraction wells (EW1 through EW4), five observation wells (OW1, OW3 through OW6), four soil vapor extraction wells in coarse-grained soil (C1 through C4), and four soil vapor extraction wells in fine-grained soil (F1 through F4) at and near the subject site. Well installation was performed on December 6 through 9, 2010. The wells were developed on December 17 and 18, 2010 and groundwater samples were collected from the wells on December 20 and 21, 2010 in conjunction with the semi-annual monitoring and sampling event for on site wells MW1 through MW3. A Site Location Map is attached as Figure 1, and a Site Vicinity Map Detail showing the well locations is attached as Figure 2.

Well installation was performed in accordance with activities identified in P&D's Remedial Investigation and Feasibility Study (RI/FS) Work Plan dated May 17, 2005 (document 0047.W5), and P&D's Remedial Investigation and Feasibility Study (RI/FS) Work Plan Addendum dated August 13, 2007 (document 0047.W5A), and documents referenced in an Alameda County Department of Environmental Health (ACDEH) August 20, 2010 letter approving installation of the wells. All work was performed under the direct supervision of an appropriately registered professional. This investigation was performed 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

It is P&D's understanding that the site was purchased by VIP Service in December 1984. Prior to purchase of the property by VIP Service, the site was operated as a retail gasoline station for an undetermined period of time. The site was operated by VIP Service as a retail gasoline station

from the time of purchase until the tanks were removed by Accutite on April 26, 1993. The underground tank system consisted of three 10,000-gallon capacity gasoline tanks, two dispenser islands, and one 550-gallon waste oil tank. It is P&D's understanding that the fuel tanks contained leaded and unleaded gasoline while in use by VIP Service. In addition, VIP Service reported that diesel fuel was not stored at the site at any time.

A detailed discussion on the site background, and historical monitoring and sampling, and investigations are provide in P&D's Remedial Investigation and Feasibility Study (RI/FS) Work Plan dated May 17, 2005 (document 0047.W5), and P&D's Groundwater and Soil Gas Subsurface Investigation Report dated October 27, 2009 (document 0047.R42). On December 6 through 9, 2010 P&D oversaw the installation of dual phase extraction wells EW1 through EW3, observation wells OW1 and OW3 through OW6, soil vapor extraction wells C1 through C4, and soil vapor extraction wells F1 through F4 at and near the subject site. The wells were installed in accordance with procedures identified in P&D's Remedial Investigation and Feasibility Study (RI/FS) Work Plan dated May 17, 2005 (document 0047.W5), P&D's Remedial Investigation and Feasibility Study (RI/FS) Work Plan Addendum dated August 13, 2007 (document 0047.W5A), and documents referenced in an ACDEH August 20, 2010 letter approving installation of the wells.

FIELD ACTIVITIES

Prior to performing field activities, permit W2010-0944 through W2010-0950 was obtained from the Alameda County Public Works Agency (ACPWA), drilling locations were marked with white paint, Underground Service Alert was notified for underground utility location, and a health and safety plan was prepared. Notification of the drilling dates was also provided to the ACDEH.

Well Installation

On December 6 through 9, 2010 P&D personnel oversaw the installation of three dual phase extraction wells (EW1 through EW4), five observation wells (OW1, OW3 through OW6), four soil vapor extraction wells in coarse-grained soil (C1 through C4), and four soil vapor extraction wells in fine-grained soil (F1 through F4) at the subject site and at the property adjacent to the subject site. Well OW2 was not installed based on the absence of sand layers during during installation of wells OW1 and OW3 and time constraints. Exploration Geoservices, Inc. of San Jose, California performed the well installation. The locations of the wells at the site are shown in Figure 2.

The boreholes for dual-phase groundwater/soil vapor extraction wells (EW1 through EW3) were drilled to total depths of 20.0, 25.0, and 23.0 feet below the ground surface (bgs), respectively. The boreholes for observation wells (OW1, OW3 through OW6) were drilled to total depths of 20.0 feet bgs. The boreholes for the soil vapor extraction wells in coarse-grained soil (C1 through C4) were drilled to total depths of 13.0 feet bgs, and the boreholes for the soil vapor extraction wells in fine-grained soil (F1 through F4) were drilled to total depths of 9.0 feet bgs. Each borehole was drilled using a truck-mounted drill rig with 12-inch outside diameter hollow stem augers for the extractions wells, and 8-inch outside diameter hollow stem augers for the observations wells and soil vapor extraction wells. Soil samples were collected at geologic contacts (as defined by boring logs for nearby boreholes) 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 (USCS). No soil samples were retained for laboratory analysis. Copies of the boring logs are attached with this report as Appendix A.

Soil cuttings were screened in the field at the time of drilling for organic vapors with a photoionization detector (PID), calibrated with 100 parts per million by volume isobutylene gas, and for petroleum hydrocarbon odors by P&D personnel. Table 1 provides a graphical summary of hydrocarbon odor intervals and PID values.

Wells EW1 through EW3 were constructed using 4-inch diameter Schedule 40 PVC pipe and the remaining wells were constructed using 2-inch diameter Schedule 40 PVC pipe. All of the pipe joints were threaded, bottom caps were placed on all of the wells with stainless steel screws, and all of the wells were constructed with 0.020 factory slots in the lowermost portion of the well as summarized in Table 2. The screened lengths and intervals for wells MW1 through MW3 are also included in Table 2.

Although borehole EW2 was drilled to a total depth of 25.0 feet bgs, the lowermost two feet of the borehole was filled with bentonite pellets to a depth of 23.0 feet bgs prior to well construction. The annular space surrounding the slotted PVC pipe for all of the wells was filled with #2/12 RMC Pacific Materials sack sand 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. The remaining annular space was filled with neat cement grout to approximately one foot bgs. At locations EW1, EW2 and EW3 the annular space was filled with neat cement grout to approximately 1.5 feet bgs. The top of each of the PVC well pipes were secured with a watertight locking plug and covered with a traffic-rated watertight well vault. Well construction diagrams for all of the wells are attached with this report as Appendix B.

All drilling and sampling equipment was either previously unused clean material, or was cleaned by steam cleaning or with an Alconox solution followed by a clean water rinse prior to use in each borehole. All well construction materials were new. Soil and water generated during drilling activities were stored in drums onsite, pending analysis and appropriate disposal.

Well Surveying

The vertical elevations and horizontal locations for the top of the PVC casing for each of the new wells was surveyed in accordance with GeoTracker requirements by Kier & Wright Engineers Surveyors, Inc. of Livermore, California on December 14, 2010. In addition, the ground surface elevation adjacent to each well was also surveyed. The surveyed top of casing elevations for each well are provided in Table 3 and a copy of the December 2010 survey information provided by the surveyor is attached with this report as Appendix C. The 1993 survey report for wells MW1 through MW3 is also included in Appendix C.

The three groundwater monitoring wells MW1, MW2 and MW3 were installed in 1993 and were surveyed in 1993 relative to the North American Geodetic Vertical Datum of 1929 (NGVD 29). In February 2011 these three wells were resurveyed relative to the North American Vertical Datum of 1988 (NAVD 88). A copy of the February 2011 information provided by the surveyor is

included in Appendix C of this report. All of the new wells (EW1 through EW3; OW1, OW3 through OW6; C1 through C4; and F1 through F4) were surveyed in December 2010 relative to NAVD 88.

Depth-to-water level measurements for all of the wells for the subject site are summarized in Table 3. All of the calculated groundwater surface elevations in Table 3 are relative to NAVD 88, and all of the calculated groundwater surface elevations in prior reports for the site are relative to NGVD 29.

Well Development

On December 17 and 18, 2010 all of the new wells were developed by surging and over-pumping by Environmental Field Services of Patterson, California. Prior to development, the wells were monitored for depth to water to the nearest 0.01 feet using an electric water level indicator. Although water was measured in all of the wells, vapor extraction wells F1 and F2 did not contain sufficient water to develop. The measured depth to groundwater prior to development on December 17, 2010 in wells EW1, EW2, and EW3 was 2.10, 3.18, and 6.57 feet, respectively; in wells OW1, OW3, OW4, OW5, and OW6 was 2.70, 4.05, 6.15, 6.32, and 3.34 feet, respectively; in wells C1, C2, C3, and C4 was 3.61, 4.21, 3.10, 5.90 feet, respectively; and in wells F1, F2, F3, and F4 was 8.27, 7.53, 5.95, and 2.28 feet, respectively. The depth-to-water measurements are summarized in Table 3.

During development of the wells Environmental Field Services personnel did not detect petroleum hydrocarbon or solvent odors or sheen on the water purged from any of the wells except for a slight odor on the purge water from wells C1, C3, C4, and F3. Approximately 72, 130, and 100 gallons of water was purged from wells EW1, EW2, and EW3, respectively; approximately 21, 21, 20, 30, and 30 gallons of water was purged from wells OW1, OW3, OW4, OW5, and OW6, respectively; approximately 20, 20, 20, and 10 gallons of water was purged from wells C1, C2, C3, and C4, respectively; and approximately 4 and 5 gallons of water was purged from wells F3 and F4, respectively. Wells EW1, OW1, OW3, F3, and F4, were also noted to have purged dry during well development activities. Water removed from the wells during development was stored in drums onsite, pending characterization and appropriate disposal. Well development data sheets are attached with this report as Appendix D.

Well Sampling

On December 20, 2010 P&D personnel monitored historical groundwater monitoring wells MW1 through MW3, and recently installed wells EW1 through EW3, OW1 and OW3 through OW6, C1 through C4, and F1 through F4, located at and near the subject site. On December 20 and 21, 2010 all of the wells except F1 through F4 were sampled by P&D personnel. Wells F1 through F4 were monitored but not sampled because of the high spatial density of wells that had recently been installed (see Figure 2) in conjunction with the shallow completion depth to eight feet below the ground surface for wells F1 through F4.

The wells were monitored for depth to water to the nearest 0.01 foot using an electric water level indicator and for the presence of free product or sheen using a transparent bailer. No free product or sheen was observed in any of the wells. The measured depth to groundwater on December 20,

2010 prior to purging in wells MW1, MW2, and MW3 was 7.27, 7.10, and 7.07 feet, respectively; in wells EW1, EW2, and EW3 was 1.59, 2.74, and 6.08 feet, respectively; in wells OW1, OW3, OW4, OW5, and OW6 was 1.88, 3.46, 5.75, 5.82, and 2.86 feet, respectively; in wells C1, C2, C3, and C4 was 3.24, 3.84, 3.02, 5.41 feet, respectively; and in wells F1, F2, F3, and F4 was 7.98, 7.16, 5.45, and 3.26 feet, respectively. Depth-to-water level measurements are presented in Table 1.

Prior to sampling, the monitoring wells were purged of a minimum of three casing volumes of water. During purging operations, the field parameters of electrical conductivity, temperature and pH were monitored. Once the field parameters were observed to stabilize, and a minimum of three casing volumes had been purged, a water sample was collected using a clean disposable bailer.

No odor or sheen was detected on the water purged from wells MW1, MW2, EW3 and OW3. Sheen was detected on water purged from wells OW1, OW5, OW6 and C1 through C3. Odor was detected in water purged from wells as very slight or slight in wells EW1, EW2, OW1, OW4, and C3; slight to moderate or moderate in wells MW3, OW6 and C2; and as moderate to strong or strong in wells OW5, C1 and C4. Because wells F1 through F4 were not purged, no evaluation of odor or sheen for purged water was performed for these wells.

The water samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials and 1-liter amber glass bottles, as appropriate, which were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to ensure that no air bubbles were present. The VOA vials and bottles were labeled and then transferred to a cooler with ice, until they were transported to McCampbell Analytical, Inc. in Pittsburg, California. McCampbell Analytical, Inc. is a State-accredited hazardous waste testing 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 as Appendix E. Water purged from the wells during purging operations was stored in a Department of Transportation (DOT) approved 55-gallon drum at the site pending appropriate disposal.

Soil and Water Disposal

Two soil composite soil samples designated as COMP A and COMP B were collected from the drummed soil for characterization for disposal purposes. Copies of the A total of 22 drums of soil generated during well drilling and a total of 11 drums of water generated during drilling equipment steam cleaning, well development, and well purging prior to sampling were removed from the site as non-hazardous waste on December 27, 2010 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 9686. The Alviso Independent Oil facility is a State-licensed Transfer Storage and Disposal Facility for hazardous waste. A copy of the soil disposal non-hazardous waste manifest is attached with this report as Appendix F. Copies of the laboratory analytical reports and chain of custody documentation associated with the characterization of the soil for disposal is attached with this report as G.

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.

Review of the boring logs attached with this report as Appendix A for the new groundwater monitoring wells shows that the subsurface materials encountered in the boreholes for the monitoring wells are consistent with the Qpa description provided above. In addition, a revised copy of the boring log for borehole P34 that was located in the former UST pit (previously submitted in P&D's Groundwater and Soil Gas Subsurface Investigation Report dated October 27, 2009 (document 0047.R42)) is attached with this report in Appendix A. The boring log was revised to amend the upper 11 feet of the materials encountered in the borehole from USCS descriptions to descriptions consistent with fill material, based on descriptions of the depth of excavation of the former UST pit.

A Site Vicinity Map showing the locations of sample collection locations, wells, and geologic cross sections A-A' through G-G' is attached with this report as Figure 3. Geologic cross sections A-A' through G-G' have been amended to incorporate borehole information that has become available since the preparation of the geologic cross sections for P&D's RI/FS Work Plan dated May 17, 2005 (document 0047.W5). Copies of revised geologic cross sections A-A' through G-G' are attached with this report as Figures 4 through 6. The addition of lithologic information from the recently installed wells to the geologic cross sections has completed the vertical delineation of the sand layer that is generally encountered at and near the site between the depths of approximately 8 to 12 feet bgs, with the exception of G-G' (see Figures 4 through 6).

Review of the geologic cross sections also shows that the sand layer thickness increases to approximately 8 to 10 feet at locations immediately downgradient of the former UST pit (see cross section B-B'). Review of the sand layer thickness on cross section B-B' also shows that the sand layer nearly pinches out immediately upgradient of the building located at 3945 Castro Valley Boulevard (see boring location P26 on B-B').

In continuously cored borehole EW1 and EW2, OW1, OW3 through OW6, and C1 through C4 groundwater was initially encountered during drilling at a depth of 11.0, 10.0, 19.0, 18.5, 10.5, 11.5, 10.5, 11.5, 11.5, 9.5, and 11.5 feet bgs, respectively. Groundwater was subsequently measured in the wells at 8.7, 3.6, 19.4, 5.3, 6.4, 6.7, 4.3, 4.2, 5.5, 9.1, and 6.4 feet bgs, respectively. Groundwater was not encountered while drilling in boreholes F1 through F4.

The groundwater flow direction at the site has been historically to the west. Based on the water levels measured in wells MW1, MW2 and MW3 on December 20, 2010 the groundwater flow direction was to the west and has shifted slightly north and the gradient has increased slightly from 0.013 to 0.014 since the previous semi-annual monitoring event on June 17, 2010. Comparison of the groundwater flow direction and gradient when calculated using NGVD 29 and NAVD 88

elevations for the December 20, 2010 depth-to-water level measurements shows that the calculated groundwater flow directions and gradients are almost identical.

Review of the December 20, 2010 depth-to-water level measurements in Table 3 shows that the measured depth to water was less than 2.00 feet at two locations (EW1, OW1); was less than 3.00 feet at two additional locations (EW2 and OW6); and was less than 4.00 feet at four additional locations (C1, C2, C3 and F4). Based on the measured depth to water in all of the wells, groundwater surface contours were identified as shown on Figure 7.

A retaining wall separates the upslope property at 3889 Castro Valley Boulevard (the subject site) from the 3945 Castro Valley Boulevard property (located immediately downslope from the subject site). The retaining wall increases in height with increasing distance from Castro Valley Boulevard. All of the wells identified as having water levels that are less than 2.00, 3.00 or 4.00 feet from the top of well are located on the downslope property (3945 Castro Valley Boulevard) with respect to the subject site.

Review of Figure 7 shows that the groundwater surface contours suggest a more northwesterly flow direction than the groundwater flow direction calculated using the depth-to-water level measurements in wells MW1 through MW3. The lower water levels in wells F1 and F4 when compared with adjacent wells is interpreted to be the result of slow infiltration of water into the clay layer in which these wells were constructed.

LABORATORY ANALYSIS

The groundwater samples collected from wells MW1 through MW3, EW1 through EW3, OW1, OW3 through OW6, and C1 through C4, were analyzed at McCampbell Analytical, Inc. in Pittsburg, California for Total Petroleum Hydrocarbons as Gasoline (TPH-G), and methyl-tert-butyl ether (MTBE), benzene, toluene, ethylbenzene, and xylenes (MBTEX), using EPA Method 8021B in conjunction with modified EPA Method 8015B. In addition, the groundwater sample from well MW3 was also analyzed for Volatile Organic Compounds using EPA Method 8260B, and for Semi-Volatile Organic Compounds by EPA Method 8270C. The laboratory analytical results are summarized in Table 4. Copies of the laboratory analytical reports and chain of custody documentation are attached with this report as Appendix G.

MTBE was not detected in any of the groundwater samples collected from any of the wells, and no analytes were detected in the groundwater samples collected from wells MW1 and MW2. TPH-G was detected at concentrations ranging from 18,000 to 47,000 ug/L in wells C1, C2, C4, OW5 and OW6; at concentrations ranging from 1,000 to 3,900 ug/L in wells MW3, C3, EW1, EW3, and OW4; and at concentrations ranging from 99 to 450 ug/L in wells EW2, OW1, and OW3. Benzene was detected at concentrations of 5,600 and 1,200 ug/L in wells C1 and OW6, respectively; at concentrations ranging from 190 to 900 ug/L in wells C3, C4, EW1, EW3, OW5; at concentrations of 83 and 17 ug/L in wells C2 and OW1, respectively; at concentrations 6.5 and 2.1 in wells EW2 and OW4, respectively; and was not detected in well OW4.

Review of the laboratory analytical report shows that the laboratory described a lighter than water immiscible sheen/product present on the groundwater samples collected from wells EW1, OW3, OW6, and MW3. Additionally the laboratory describes the TPH-G results for the sample

collected from well OW4 as consisting of heavier gasoline range compounds, possibly aged gasoline, and as having no recognizable pattern.

DISCUSSION AND RECOMMENDATIONS

Based on information obtained from the wells, groundwater surface elevation contours are shown in Figure 7, and groundwater TPH-G and benzene concentrations are shown in Figures 8 and 9, respectively. In addition, wells where sheen was identified on purge water during sampling are identified on Figure 7. Comparison of these figures shows that elevated TPH-G and benzene concentrations are distributed to the west of the former UST pit in a manner that is consistent with the groundwater flow direction and groundwater surface contours identified in Figure 2.

Although the downgradient extent of petroleum hydrocarbons is not fully defined in wells EW1 and OW1, groundwater grab samples collected from boreholes P29 and P30 show that benzene was not detected at these downgradient locations and that petroleum hydrocarbons were not detected at these locations at concentrations exceeding their respective SFRWQCB May 2008 Table A groundwater ESL values (see Figures 3 and 4 in Appendix A). Similarly, benzene was not detected in groundwater grab samples collected from locations P29, P30 or P32 at concentrations exceeding the SFRWQCB May 2008 Table E-1 (groundwater screening level for evaluation of potential vapor intrusion concerns) ESL value of 540 ug/L for residential land use. Although elevated groundwater grab sample petroleum hydrocarbon concentrations have historically been detected at groundwater grab sample locations downgradient of the wells, groundwater grab samples from boreholes are intended for screening purposes only and may be positively biased from petroleum hydrocarbons adsorbed on sediments in the samples. The groundwater results from wells are considered to be representative of water quality in the vicinity of the site. For these reasons, the extent of petroleum hydrocarbons in groundwater exceeding the SFRWQCB May 2008 Table E-1 residential land use benzene concentration of 540 ug/L has been defined by the wells located at and near the subject site.

The addition of lithologic information from the recently installed wells to the geologic cross sections has completed the vertical delineation of the sand layer that is generally encountered at and near the site between the depths of approximately 8 to 12 feet bgs, with the exception of G-G' (see Figures 4 through 6). Review of the geologic cross sections also shows that the sand layer thickness increases to approximately 8 to 10 feet at locations immediately downgradient of the former UST pit (see cross sections B-B' and E-E'). Review of the sand layer thickness on cross section B-B' also shows that the sand layer nearly pinches out immediately upgradient of the building located at 3945 Castro Valley Boulevard (see boring location P26 on B-B').

P&D recommends that the semi-annual monitoring and sampling program be continued, with monitoring of all of the wells, and collection of samples from wells MW3, EW1, OW1, OW3, OW5 and C3 on a semi-annual basis. Continuation of the monitoring and sampling program should be re-evaluated upon regulatory agency review of the Remedial Investigation/Feasibility Study Work Plan implementation results. P&D also recommends that the groundwater and soil vapor remediation feasibility studies be performed when water levels have lowered after the wet season. Recommendations related to additional investigation of the extent of petroleum hydrocarbons in soil gas and groundwater and potential vapor intrusion concerns are provided

under separate cover.

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

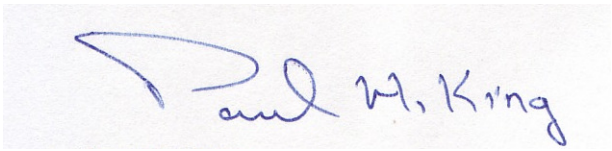
This report was prepared solely for the use of VIP Service. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with site owner, regulatory agencies and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

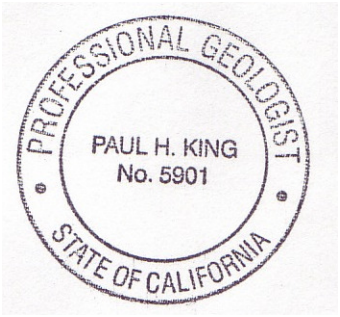
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the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

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

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: 12/31/11

Attachments:

Table 1 - Graphical Summary of Well Borehole Petroleum Hydrocarbon Odor Intervals and PID Values
Table 2 - Summary of Well Screen Length and Depth
Table 3 - Summary of Well Monitoring Data
Table 4 - Summary of Groundwater Analytical Results

Figure 1 - Site Location Map
Figure 2 - Site Vicinity Map Detail Showing Well Locations
Figure 3 - Site Vicinity Map Showing Sampling Locations, Wells, and Geologic Cross Section Locations
Figure 4 - Geologic Cross Section A-A' and B-B'
Figure 5 - Geologic Cross Section C-C' and D-D'
Figure 6 - Geologic Cross Section E-E', F-F' and G-G'
Figure 7 - Site Vicinity Map Detail Showing Groundwater Surface Contours
Figure 8 - Site Vicinity Map Showing TPH-Gasoline Concentrations In Groundwater
Figure 9 - Site Vicinity Map Showing Benzene Concentrations In Groundwater

Appendix A - Boring Logs
Appendix B - Well Construction Diagrams
Appendix C - Survey Data
Appendix D - Well Development Data Sheets
Appendix E - Well Monitoring/Purge Data Sheets
Appendix F - Drum Disposal Documentation
Appendix G - Laboratory Analytical Reports and Chain of Custody Documentation

PHK/sjc
0047.R47

TABLES

TABLE 1

GRAPHICAL SUMMARY OF WELL BOREHOLE PETROLEUM HYDROCARBON ODOR INTERVALS AND PID VALUES

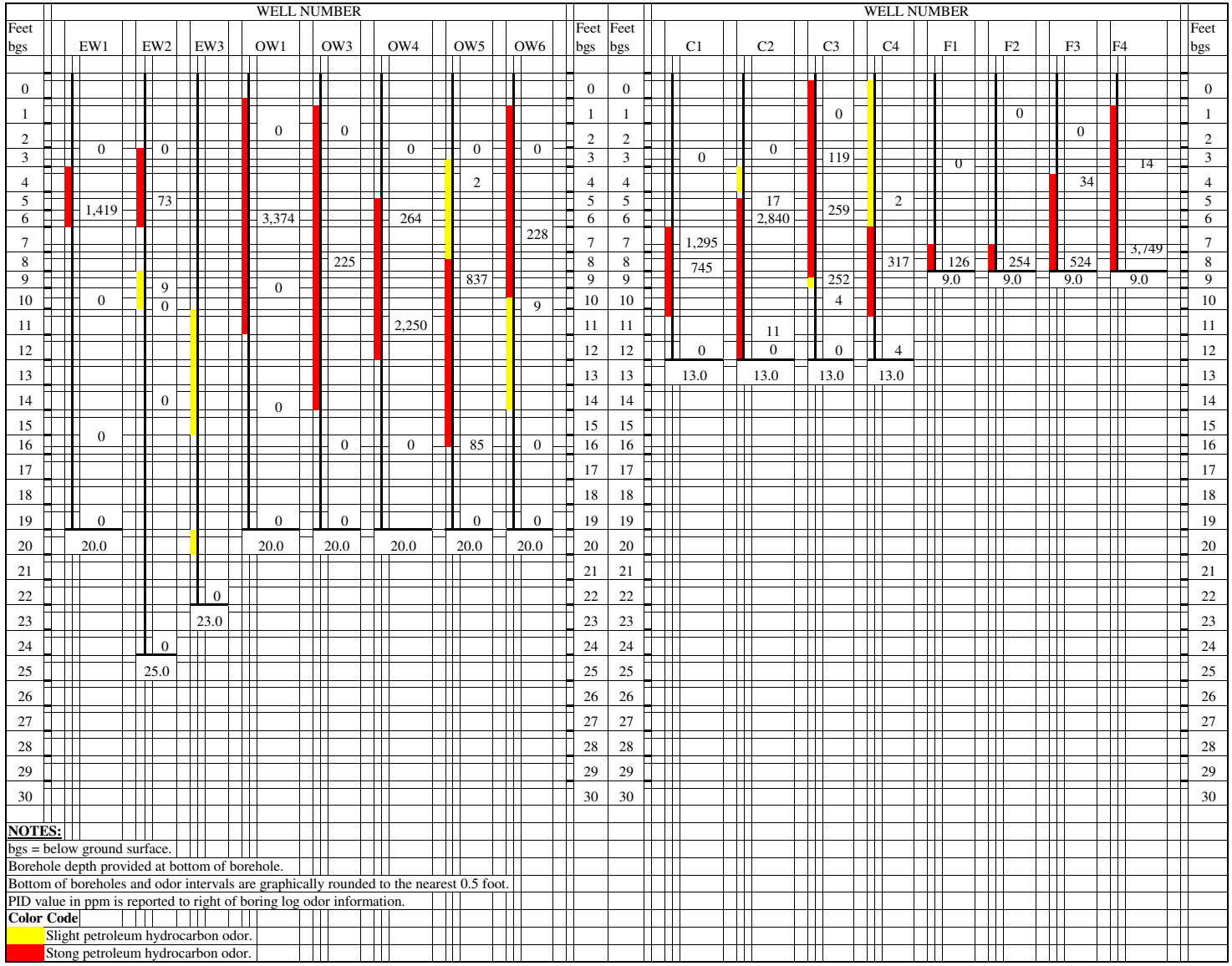


TABLE 2
Summary of Well Screen Length and Depth

Well	Total Depth (Ft)	Screen Length (Ft)	Screen Interval (Ft bgs)
MW1	20	13	7 to 20
MW2	20	13	7 to 20
MW3	20	13	7 to 20
EW1	20	10	10 to 20
EW2	23	10	10 to 20
EW3	23	10	10 to 20
OW1	20	15	5 to 20
OW3	20	15	5 to 20
OW4	20	15	5 to 20
OW5	20	15	5 to 20
OW6	20	15	5 to 20
C1	13	4	9 to 13
C2	13	4	9 to 13
C3	13	4	9 to 13
C4	13	4	9 to 13
F1	9	4	5 to 9
F2	9	4	5 to 9
F3	9	4	5 to 9
F4	9	4	5 to 9

NOTES:
Ft = Feet
Bgs = below ground surface

TABLE 3

SUMMARY OF WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)	Sheen	Odor
MW1						
	12/20/2010	183.61#	7.27	176.34	None	None
	6/17/2010		7.63	175.98	None	None
	11/25/2009		7.66	175.95	None	None
	2/26/2009		8.64	174.97	None	None
	8/13/2008		9.56	174.05	None	None
	2/19/2008		8.47	175.14	None	None
	8/16/2007		9.01	174.60	None	None
	2/13/2007		6.85	176.76	None	None
	8/9/2006		7.47	176.14	None	None
	1/31/2006		7.53	176.08	None	None
	7/29/2005		7.90	175.71	None	None
	1/31/2005		8.37	175.24	None	None
	7/14/2004		9.47	174.14	None	None
	12/18/2003		9.26	174.35	None	None
	6/19/2003		9.00	174.61	None	None
	12/21/2002		9.09	174.52	None	None
	4/30/2002		9.03	174.58	None	None
	10/16/2001		9.33	174.28	None	None
	11/8/2000		9.04	174.57	None	None
	5/24/2000		7.97	175.64	None	None
	9/10/1999		8.79	174.82	None	None
	2/10/1999		7.72	175.89	None	None
	2/24/1998		6.61	177.00	None	None
	11/18/1997		9.71	173.90	None	None
	8/12/1997		9.39	174.22	None	None
	4/25/1997		8.37	175.24	None	None
	1/31/1997		7.62	175.99	None	None
	7/19/1996		8.81	174.80	None	None
	4/23/1996		8.17	175.44	None	None
	1/17/1996		9.66	173.95	None	None
	10/26/1995		10.00	173.61	None	None
	8/15/1995		9.23	174.38	None	None
	5/2/1995		8.56	175.05	None	None
	1/30/1995		9.50	174.11	None	None
	10/31/1994		11.55	172.06	None	None
	7/29/1994		10.86	172.75	None	None
	4/25/1994		10.70	172.91	None	None
	11/16/1993		11.63	171.98	None	None
	11/12/93*		11.53	172.08	None	None

NOTES:

Elevations are in feet above Mean Sea Level (NAVD 1988).
Elevations are in feet above Mean Sea Level (NGVD 1929) prior to December 17, 2010 in all other reports.
(NAVD 1929 top of casing elevation for MW1, MW2, MW3 are 180.83, 179.70, and 178.98 feet, respectively.
ft. = Feet.
* = Depth to water measurements prior to groundwater monitoring well development.

TABLE 3

SUMMARY OF WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)	Sheen	Odor
MW2						
	12/20/2010	182.48#	7.10	175.38	None	None
	6/17/2010		7.33	175.15	None	None
	11/25/2009		7.43	175.05	None	None
	2/26/2009		8.00	174.48	None	None
	8/13/2008		9.20	173.28	None	None
	2/19/2008		8.15	174.33	None	None
	8/16/2007		8.45	174.03	None	None
	2/13/2007		7.56	174.92	None	None
	8/9/2006		7.28	175.20	None	None
	1/31/2006		7.10	175.38	None	None
	7/29/2005		7.70	174.78	None	None
	1/31/2005		7.94	174.54	None	None
	7/14/2004		9.14	173.34	None	None
	12/18/2003		8.76	173.72	None	None
	6/19/2003		8.68	173.80	None	None
	12/21/2002		7.95	174.53	None	None
	4/30/2002		8.76	173.72	None	None
	10/16/2001		9.76	172.72	None	None
	11/8/2000		8.63	173.85	None	None
	5/24/2000		7.65	174.83	None	None
	9/10/1999		8.48	174.00	None	None
	2/10/1999		7.05	175.43	None	None
	2/24/1998		6.20	176.28	None	None
	11/18/1997		9.26	173.22	None	None
	8/12/1997		9.06	173.42	None	None
	4/25/1997		8.10	174.38	None	None
	1/31/1997		7.22	175.26	None	None
	7/19/1996		8.57	173.91	None	None
	4/23/1996		7.85	174.63	None	None
	1/17/1996		8.94	173.54	None	None
	10/26/1995		9.68	172.80	None	None
	8/15/1995		8.91	173.57	None	None
	5/2/1995		8.17	174.31	None	None
	1/30/1995		8.68	173.80	None	None
	10/31/1994		10.99	171.49	None	None
	7/29/1994		10.34	172.14	None	None
	4/25/1994		10.04	172.44	None	None
	11/16/1993		11.10	171.38	None	None
	11/12/1993*		10.95	171.53	None	None

NOTES:

Elevations are in feet above Mean Sea Level (NAVD 1988).
Elevations are in feet above Mean Sea Level (NGVD 1929) prior to December 17, 2010 in all other reports.
(NAVD 1929 top of casing elevation for MW1, MW2, MW3 are 180.83, 179.70, and 178.98 feet, respectively.
ft. = Feet.
* = Depth to water measurements prior to groundwater monitoring well development.

TABLE 3

SUMMARY OF WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)	Sheen	Odor
MW3						
	12/20/2010	181.72#	7.07	174.65	None	Slight-Moderate
	6/17/2010		7.28	174.44	None	Slight
	11/25/2009		7.42	174.30	None	Slight-Moderate
	2/26/2009		7.85	173.87	None	Slight-Moderate
	8/13/2008		8.92	172.80	Yes	Moderate
	2/19/2008		7.99	173.73	Yes	Moderate
	8/16/2007		8.41	173.31	No	Slight-Moderate
	2/13/2007		7.21	174.51	Yes	Slight-Moderate
	8/9/2006		7.27	174.45	Yes	Yes
	1/31/2006		7.14	174.58	None	Moderate-Strong
	7/29/2005		7.68	174.04	None	Strong
	1/31/2005		7.86	173.86	None	Moderate
	7/14/2004		8.91	172.81	None	None
	12/18/2003		8.55	173.17	None	Slight
	6/19/2003		8.48	173.24	None	Moderate
	12/21/2002		7.88	173.84	None	Strong
	4/30/2002		8.56	173.16	None	Strong
	10/16/2001		10.14	171.58	Yes	Moderate
	11/8/2000		8.45	173.27	Yes	Moderate
	5/24/2000		7.62	174.10	None	Slight
	9/10/1999		8.34	173.38	None	Slight
	2/10/1999		7.12	174.60	None	Moderate
	2/24/1998		6.55	175.17	Yes	Not Described
	11/18/1997		8.97	172.75	None	None
	8/12/1997		8.85	172.87	None	Strong
	4/25/1997		7.99	173.73	None	None
	1/31/1997		7.30	174.42	None	Not Described
	7/19/1996		8.42	173.30	None	None
	4/23/1996		7.76	173.96	None	Not Described
	1/17/1996		8.61	173.11	None	None
	10/26/1995		9.39	172.33	None	Not Described
	8/15/1995		8.62	173.10	None	None
	5/2/1995		8.04	173.68	Yes	None
	1/30/1995		8.46	173.26	Yes	Not described
	10/31/1994		10.58	171.14	None	None
	7/29/1994		10.03	171.69	None	Yes
	4/25/1994		9.64	172.08	None	None
	11/16/1993		10.63	171.09	None	Not Described
	11/12/93*		10.66	171.06	None	Yes

NOTES:

Elevations are in feet above Mean Sea Level (NAVD 1988).
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ft. = Feet.
* = Depth to water measurements prior to groundwater monitoring well development.

TABLE 3

SUMMARY OF WELL MONITORING DATA

Well No	Date	Top Of Casing Elevation (ft.)**	Depth To Water (ft.)	Water Table Elevation (ft.)	Change in Water Table Elevation (ft.)	Sheen	Odor
EW1	12/20/2010	175.51	1.59	173.92	0.51	None	Slight
	12/17/2010*		2.10	173.41			
EW2	12/20/2010	176.65	2.74	173.91	0.44	None	Very Slight
	12/17/2010*		3.18	173.47			
EW3	12/20/2010	181.02	6.08	174.94	0.49	None	No
	12/17/2010*		6.57	174.45			
OW1	12/20/2010	174.20	1.88	172.32	0.82	Yes	Very Slight
	12/17/2010*		2.70	171.50			
OW3	12/20/2010	176.70	3.46	173.24	0.59	None	No
	12/17/2010*		4.05	172.65			
OW4	12/20/2010	180.74	5.75	174.99	0.40	None	Slight
	12/17/2010*		6.15	174.59			
OW5	12/20/2010	180.52	5.82	174.70	0.50	Yes	Moderate - Strong
	12/17/2010*		6.32	174.20			
OW6	12/20/2010	177.02	2.86	174.16	0.48	Yes	Moderate - Strong
	12/17/2010*		3.34	173.68			
C1	12/20/2010	177.37	3.24	174.13	0.37	Yes	Moderate - Strong
	12/17/2010*		3.61	173.76			
C2	12/20/2010	177.72	3.84	173.88	0.37	Yes	Slight - Moderate
	12/17/2010*		4.21	173.51			
C3	12/20/2010	176.41	3.02	173.39	0.08	None	Very Slight
	12/17/2010*		3.10	173.31			
C4	12/20/2010	180.06	5.41	174.65	0.49	Yes	Moderate - Strong
	12/17/2010*		5.90	174.16			
F1	12/20/2010	181.35	7.98	173.37	0.29	N/A	N/A
	12/17/2010*		8.27	173.08			
F2	12/20/2010	181.56	7.16	174.40	0.37	N/A	N/A
	12/17/2010*		7.53	174.03			
F3	12/20/2010	180.08	5.45	174.63	0.50	N/A	N/A
	12/17/2010*		5.95	174.13			
F4	12/20/2010	177.14	3.26	173.88	-0.98	N/A	N/A
	12/17/2010*		2.28	174.86			

NOTES:

Elevations are in feet above Mean Sea Level (NAVD 1988).
* = Prior to well development.
N/A = Not Applicable.

TABLE 4

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Sample ID	Sampling Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 8260B	EPA Method 8270C
MW1	12/20/2010	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	12/20/2010	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	12/20/2010	N/A	**1,000, a**	ND<20	**370**	5.5	28	**38**	All ND	All ND
MW1	6/17/2010	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	6/17/2010	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	6/17/2010	N/A	**1,200**	ND<45	**350**	9.7	**31**	**43**	All ND	All ND, except Naphthalene = 15
MW1	11/25/2009	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	11/25/2009	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	11/25/2009	N/A	**1,300**	ND<20	**320**	8.4	**36**	**41**	All ND	All ND, except Naphthalene = 12
MW1	2/26/2009	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	2/26/2009	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	2/26/2009	N/A	**2,400**	ND<50	**500**	14	**54**	**43**	All ND	All ND, except Naphthalene = **18**
MW1	8/13/2008	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	8/13/2008	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	8/13/2008	N/A	**8,700**	ND<90	**1,000**	31	**150**	**280**	All ND, except 1,2-DCA = **0.55**	All ND, except Naphthalene = **27**
MW1	2/19/2008	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	2/19/2008	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	2/19/2008	N/A	**4,200**	ND<100	**810**	28	**140**	**250**	All ND	All ND, except Naphthalene = **37**
MW1	8/16/2007	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	8/16/2007	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	8/16/2007	N/A	**4,300**	ND<50	**760**	30	**120**	**210**	All ND	All ND, except Naphthalene = **77**, Bis(2-ethylhexyl) Phthalate = **34**, 2-Methylnaphthalene = **35**
MW1	2/13/2007	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	2/13/2007	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	2/13/2007	N/A	**4,300**	ND<50	**610**	14	**94**	**130**	All ND, except Benzene = **790**, Ethylbenzene = **120**, Xylenes = **150**, Naphthalene = **22**, n-Butyl benzene = 28, n-Propyl benzene = 32, 1,2,4-Trimethylbenzene = 92, 1,3,5-Trimethylbenzene = 31	All ND, except Naphthalene = **22**
MW1	8/9/2006	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	8/9/2006	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	8/9/2006	N/A	**2,900**	ND<50	**580**	21	**100**	**130**	All ND	All ND, except Naphthalene = **29**, 2-Methylnaphthalene = **11**
MW1	1/31/2006	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	1/31/2006	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	1/31/2006	N/A	**2,000**	ND<15	**470**	14	**71**	**77**	All ND	All ND, except Naphthalene = 15,
MW1	7/29/2005	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	7/29/2005	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	7/29/2005	N/A	**11,000**	ND<110	**2,100**	**77**	**350**	**410**	All ND	All ND, except Naphthalene = **68**, 2-Methylnaphthalene = **23**

TABLE 4

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Sample ID	Sampling Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 8260B	EPA Method 8270C
MW1	1/31/2005	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	1/31/2005	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	1/31/2005	N/A	**2,900**	ND<50	**960**	13	**37**	**89**	All ND, except Benzene = **1,600**, Toluene = 28, Ethylbenzene = **190**, Xylenes = **140**, Naphthalene = **62**, MTBE = **21**, n-Propyl benzene = 46, 1,2,4-Trimethylbenzene = 43, Isopropylbenzene = 18	NA, All ND using EPA Method 8270D
MW1	7/14/2004	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	7/14/2004	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	7/14/2004	N/A	**4,100**	ND<50	**980**	37	**120**	**150**	All ND	NA, All ND using EPA Method 8270D, except Naphthalene = **55**, 2-Methylnaphthalene = **16**
MW1	12/18/2003	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	12/18/2003	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	12/18/2003	N/A	**9,700**	ND<100	**2,300**	**93**	**280**	**350**	NA, All ND using EPA Method 8021B	NA, All ND using EPA Method 8270D, except Naphthalene = **63**, 2-Methylnaphthalene = **21**
MW1	6/19/2003	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	6/19/2003	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	6/19/2003	N/A	**16,000, a**	ND<250	**3,500**	**110**	**430**	**640**	NA, All ND using EPA Method 8021B	NA, All ND using EPA Method 8270D, except Naphthalene = **56**, 2-Methylnaphthalene = **27**, Phenol = **24**
MW1	12/21/2002	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	12/21/2002	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	12/21/2002	N/A	**15,000, a**	ND<450	**3,300**	**180**	**480**	**1,000**	NA, All ND using EPA Method 8021B, except 1,2-DCA = **11**	NA, All ND using EPA Method 8270D, except Naphthalene = **35**, 2-Methylnaphthalene = **14**
MW1	4/30/2002	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	4/30/2002	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	4/30/2002	N/A	**11,000**	ND<200	**2,200**	**120**	**370**	**590**	NA, All ND using EPA Method 8021B	NA, All ND using EPA Method 8270D, except Naphthalene = **53**
MW1	10/16/2001	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	10/16/2001	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	10/16/2001	N/A	**2,100**	ND<20	**520**	30	**77**	**130**	NA, All ND using EPA Method 8010	NA, All ND using EPA Method 8270
MW1	11/8/2000	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A N/A	N/A
MW2	11/8/2000	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	11/8/2000	N/A	**540**	ND<10	**150**	6.9	18	**29**	NA, All ND using EPA Method 8010, except 1,2-DCA = **1.3**	NA, All ND using EPA Method 8270
MW1	5/24/2000	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	5/24/2000	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	5/24/2000	N/A	**2,100**	**32**	**470**	27	**62**	**130**	NA, All ND using EPA Method 8010, except 1,2-DCA = **1.7**	NA, All ND using EPA Method 8270
MW1	9/10/1999	N/A	ND<50	**49**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	9/10/1999	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	9/10/1999	N/A	**390**	ND<10	**98**	7.3	12	**28**	NA, All ND using EPA Method 8010, except 1,2-DCA = **2.0**	NA, All ND using EPA Method 8270
MW1	2/10/1999	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	2/10/1999	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	2/10/1999	N/A	**4,100**	ND<220	**1,700**	**96**	**270**	**420**	NA, All ND using EPA Method 8010, except 1,2-DCA = **2.8**	NA, All ND using EPA Method 8270, except Naphthalene = **21**
MW1	2/24/1998	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	2/24/1998	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	2/24/1998	N/A	**19,000, a**	ND<200	**4,600**	**330**	**650**	**1,800**	NA, All ND using EPA Method 8010, except 1,2-DCA = **11**	NA, All ND using EPA Method 8270B, except Naphthalene = **83**, 2-Methylnaphthalene = **19**, Phenol = **23**

TABLE 4

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Sample ID	Sampling Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 8260B	EPA Method 8270C
MW1	11/18/1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW2	11/18/1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW3	11/18/1997	N/A	**2,100**	ND<55	**480**	**52**	**71**	**190**	NA, All ND using EPA Method 8010, except 1,2-DCA = **2.1**	NA, All ND using EPA Method 8270B, except Naphthalene = **58**, 2-Methylnaphthalene = **26**
MW1	8/12/1997	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	8/12/1997	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	8/12/1997	N/A	**16,000**	ND<330	**4,200**	**450**	**540**	**1,900**	NA, All ND using EPA Method 8010, except 1,2-DCA = **9.1**	NA, All ND using EPA Method 8270B, except Naphthalene = **87**, Bis(2-ethylhexyl) Phthalate = **21**, 2-Methylnaphthalene = **24**
MW1	4/25/1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW2	4/25/1997	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW3	4/25/1997	N/A	**30,000, a**	ND<440	**5,300**	**520**	**950**	**3,000**	NA, All ND using EPA Method 8010, except 1,2-DCA = **12**	NA, All ND using EPA Method 8270A, except Naphthalene = **66**, 2-Methylnaphthalene = **15**, Phenol = 2.8, 2,4-Dimethylphenol = 2.8, 4-Methylphenol = 2.4
MW1	1/31/1997	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	1/31/1997	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	1/31/1997	N/A	**5,500**	**63**	**1,600**	**100**	**190**	**410**	NA, All ND using EPA Method 8010, except 1,2-DCA = **14**	NA, All ND using EPA Method 8270A, except Naphthalene = **31**, 2-Methylnaphthalene = **4.8**, Phenol = **9.4**, 2,4-Dimethylphenol = 2.8
MW1	7/19/1996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW2	7/19/1996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW3	7/19/1996	N/A	**18,000, b**	**210**	**4,800**	**610**	**760**	**2,800**	NA, All ND using EPA Method 8010	NA, All ND using EPA Method 8270, except Naphthalene = **100**, 2-Methylnaphthalene = **22**, 2,4-Dimethylphenol = 2.2
MW1	4/23/1996	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	4/23/1996	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	4/23/1996	N/A	**9,700**	**150**	**2,900**	**170**	**380**	**680**	NA, All ND using EPA Method 8010, except 1,2-DCA = **5.1**	NA, All ND using EPA Method 8270, except Naphthalene = **56**, Phenol = **25**
MW1	1/17/1996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW2	1/17/1996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW3	1/17/1996	N/A	**21,000**	**260**	**4,100**	**370**	**520**	**1,500**	NA, All ND using EPA Method 8010, except 1,2-DCA = **11**	NA, All ND using EPA Method 8270, except Naphthalene = **32**, Bis(2-ethylhexyl) Phthalate = **4.7**, 2-Methylnaphthalene = **10**, Phenol = 2.2, 2,4-Dimethylphenol = 2.9, 4-Methylphenol = 5.1
MW1	10/26/1995	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	10/26/1995	N/A	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	10/26/1995	N/A	**19,000**	**240**	**4,000**	**480**	**640**	**1,800**	NA, All ND using EPA Method 8010, except 1,2-DCA = **11**	NA, All ND using EPA Method 8270, except Naphthalene = **43**
MW1	8/15/1995	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW2	8/15/1995	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW3	8/15/1995	N/A	**7,000**	N/A	**2,400**	**230**	**260**	**730**	NA, All ND using EPA Method 8010, except 1,2-DCA = **9.1**	NA, All ND using EPA Method 8270, except Naphthalene = **19**, 2-Methylnaphthalene = **3.0**, 2,4-Dimethylphenol = 5.0, 4-Methylphenol = 3.0
MW1	5/2/1995	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	5/2/1995	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	5/2/1995	**840, c**	**18,000**	N/A	**5,400**	**390**	**650**	**1,700**	NA, All ND using EPA Method 8010, except 1,2-DCA = **14**	NA, All ND using EPA Method 3510, except Naphthalene = **62**, 2-Methylnaphthalene = **10**
MW1	1/30/1995	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	1/30/1995	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	1/30/1995	**700, c**	**24,000**	N/A	**7,600**	**350**	**900**	**2,200**	NA, All ND using EPA Method 8010, except 1,2-DCA = **18**	NA, All ND using EPA Method 3510, except Naphthalene = **110**, 2-Methylnaphthalene = **14**
MW1	10/31/1994	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A

TABLE 4

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Sample ID	Sampling Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	EPA Method 8260B	EPA Method 8270C
MW2	10/31/1994	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	10/31/1994	**600, c**	**8,700**	N/A	**2,600**	**260**	**320**	**920**	NA, All ND using EPA Method 8010, except 1,2-DCA = **19**	NA, All ND using EPA Method 3510, except Naphthalene = **47**, 2-Methylnaphthalene = **8**
MW1	7/29/1994	N/A	ND<50	N/A	**1.2**	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	7/29/1994	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	7/29/1994	**670, c**	**6,300**	N/A	**2,000**	**130**	**220**	**520**	NA, All ND using EPA Method 8010, except 1,2-DCA = **7.7**	NA, All ND using EPA Method 3510, except Naphthalene = **44**, 2-Methylnaphthalene = **8**
MW1	4/25/1994	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	4/25/1994	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	4/25/1994	**2,100, c**	**17,000**	NA	**4,800**	**470**	**290**	**1,600**	NA, All ND using EPA Method 8010, except 1,2-DCA = **280**	NA, All ND using EPA Method 8270, except Naphthalene = **84**, 2-Methylnaphthalene = **13**
MW1	11/16/1993	N/A	ND<50	N/A	**2.2**	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW2	11/16/1993	N/A	ND<50	N/A	ND<0.5	ND<0.5	ND<0.5	ND<0.5	N/A	N/A
MW3	11/16/1993	N/A	**12,000**	N/A	**3,300**	**660**	**240**	**1,600**	NA, All ND using EPA Method 8010, except 1,2-DCA = **27**	NA, All ND using EPA Method 625, except Naphthalene = **42**, 2-Methylnaphthalene = **15**, 2,4-Dimethylphenol = 7.0, Phenol = **9.0**, 4-Methylphenol = 5.0, 2-Methylphenol =6.0, Benzyl alcohol = 6.0
EW1	12/20/2010	N/A	**3,900, a**	ND<90	**770**	**58**	**220**	**440**	N/A	N/A
EW2	12/20/2010	N/A	99	ND<5.0	**6.5**	1.2	4.8	4.0	N/A	N/A
EW3	12/20/2010	N/A	**2,300**	ND<50	**190**	15	**31**	**72**	N/A	N/A
OW1	12/20/2010	N/A	**450**	ND<5.0	**17**	5.6	6.2	**29**	N/A	N/A
OW3	12/20/2010	N/A	**200, a**	ND<5.0	**2.1**	7.7	5.7	**35**	N/A	N/A
OW4	12/20/2010	N/A	**1,700, b,c**	ND<5.0	ND<0.5	8.2	60	**170**	N/A	N/A
OW5	12/20/2010	N/A	**47,000**	ND<500	**330**	**300**	**1,900**	**8,900**	N/A	N/A
OW6	12/20/2010	N/A	**18,000, a**	ND<250	**1,200**	**450**	**480**	**2,700**	N/A	N/A
C1	12/20/2010	N/A	**45,000**	ND<1,100	**5,600**	**1,900**	**1,600**	**10,000**	N/A	N/A
C2	12/20/2010	N/A	**20,000**	ND<100	**83**	**190**	**600**	**3,800**	N/A	N/A
C3	12/20/2010	N/A	**1,500**	ND<50	**280**	7.3	**47**	**72**	N/A	N/A
C4	12/20/2010	N/A	**47,000**	ND<800	**900**	**480**	**2,200**	**10,000**	N/A	N/A
F1	12/20/2010	Not Sampled.								
F2	12/20/2010	Not Sampled.								
F3	12/20/2010	Not Sampled.								
F4	12/20/2010	Not Sampled.								
ESL_1		*100*	*100*	*5.0*	*1.0*	*40*	*30*	*20*	*1,2-DCA = 0.5, Benzene = 1.0, Toluene = 40, Ethylbenzene = 30, Xylenes =20, Naphthalene = 17, MTBE = 5.0, n-Butyl benzene = None, n-Propyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None, Isopropylbenzene = None*	*Naphthalene = 17, 2-Methylnaphthalene = 2.1, 2,4-Dimethylphenol = 100, Phenol = 5.0, Bis(2-ethylhexyl) Phthalate = 4, 4-Methylphenol = None, 2-Methylphenol = None, Benzyl alcohol = None*
ESL_2		*Use Soil Gas*	*Use Soil Gas*	*24,000*	*540*	*380,000*	*170,000*	*160,000*	*1,2-DCA = 200, Benzene = 540, Toluene = 380,000, Ethylbenzene = 170,000, Xylenes =160,000, Naphthalene = 3,200, MTBE = 24,000, n-Butyl benzene = None, n-Propyl benzene = None, 1,2,4-Trimethylbenzene = None, 1,3,5-Trimethylbenzene = None, Isopropylbenzene = None*	*Naphthalene = 3,200, 2-Methylnaphthalene = 260,000, 2,4-Dimethylphenol = 2,500,000, Phenol = None, Bis(2-ethylhexyl) Phthalate = None, 4-Methylphenol = None, 2-Methylphenol = None, Benzyl alcohol = None*

NOTES:
TPH-D = Total Petroleum Hydrocarbons as Diesel.
TPH-G = Total Petroleum Hydrocarbons as Gasoline.
MTBE = Methyl-tert butyl Ether.
ND = Not Detected.
N/A = Not Analyzed.
1,2-DCA = 1,2-Dichloroethane.
a = Laboratory analytical note: lighter than water immiscible sheen/product present.
b = Laboratory analytical note: consists of strongly aged diesel or gasoline range compounds.
c = Laboratory analytical note: consistes of gasoline range compounds.
ESL_1 = Environmental Screening Level, developed by San Francisco Bay – Regional Water Quality Control Board (SF-RWQCB) updated May 2008, from Table A–Groundwater Screening Levels, Groundwater is a current or potential source of drinking water.
ESL_2 = Environmental Screening Level, developed by San Francisco Bay – Regional Water Quality Control Board (SF-RWQCB) updated May 2008, from Table E-1–Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns, Residential Land Use.
BOLD = Concentration in excess of applicable ESL_1 value.
Underlined = Concentration in excess of applicable ESL_2 value.
Results are in µg/L (micrograms per liter), unless otherwise indicated.

FIGURES

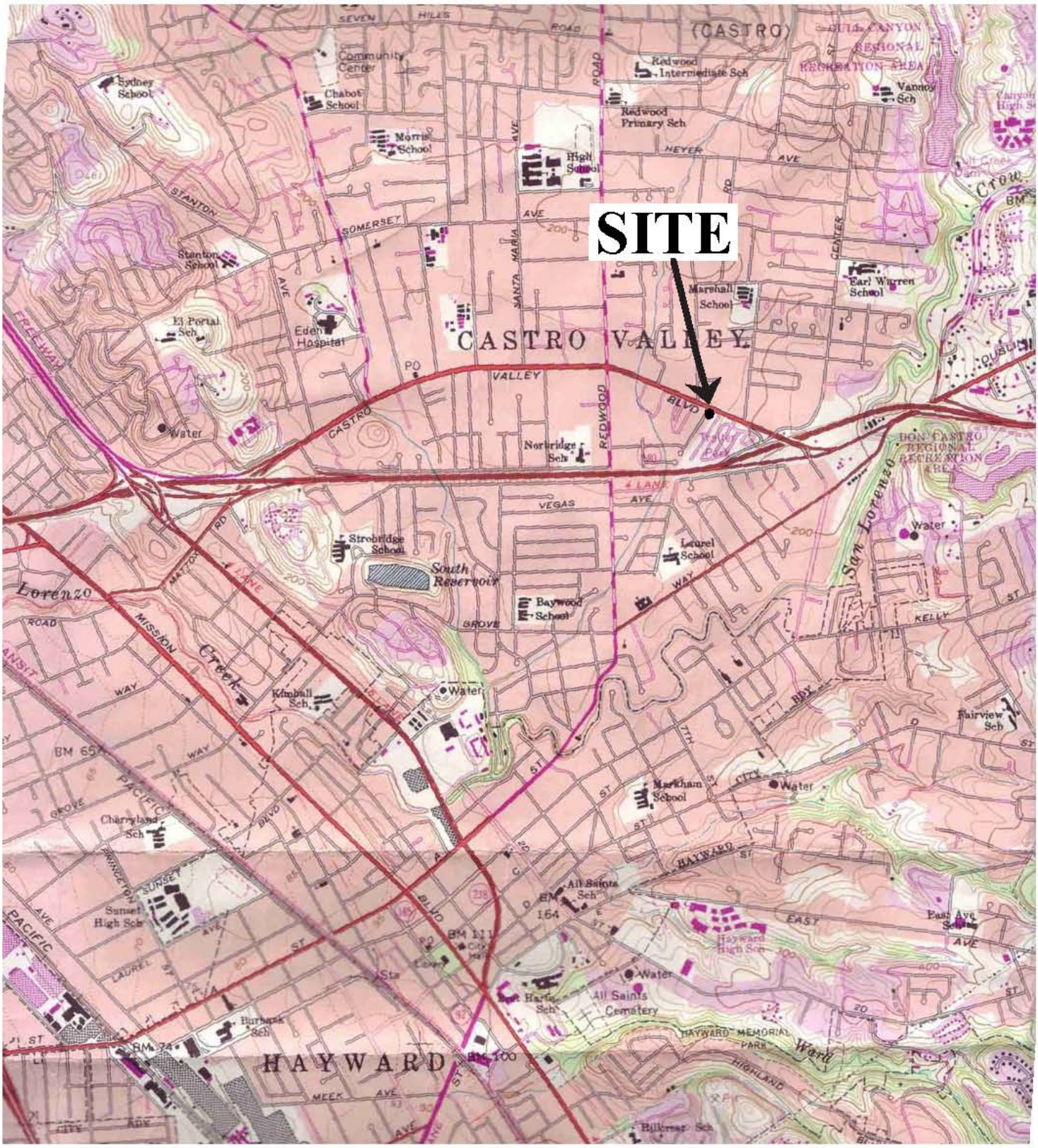


Figure 1
Site Location Map
3889 Castro Valley Boulevard
Castro Valley, California

N

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

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

0 1,000 2,000
APPROXIMATE SCALE IN FEET

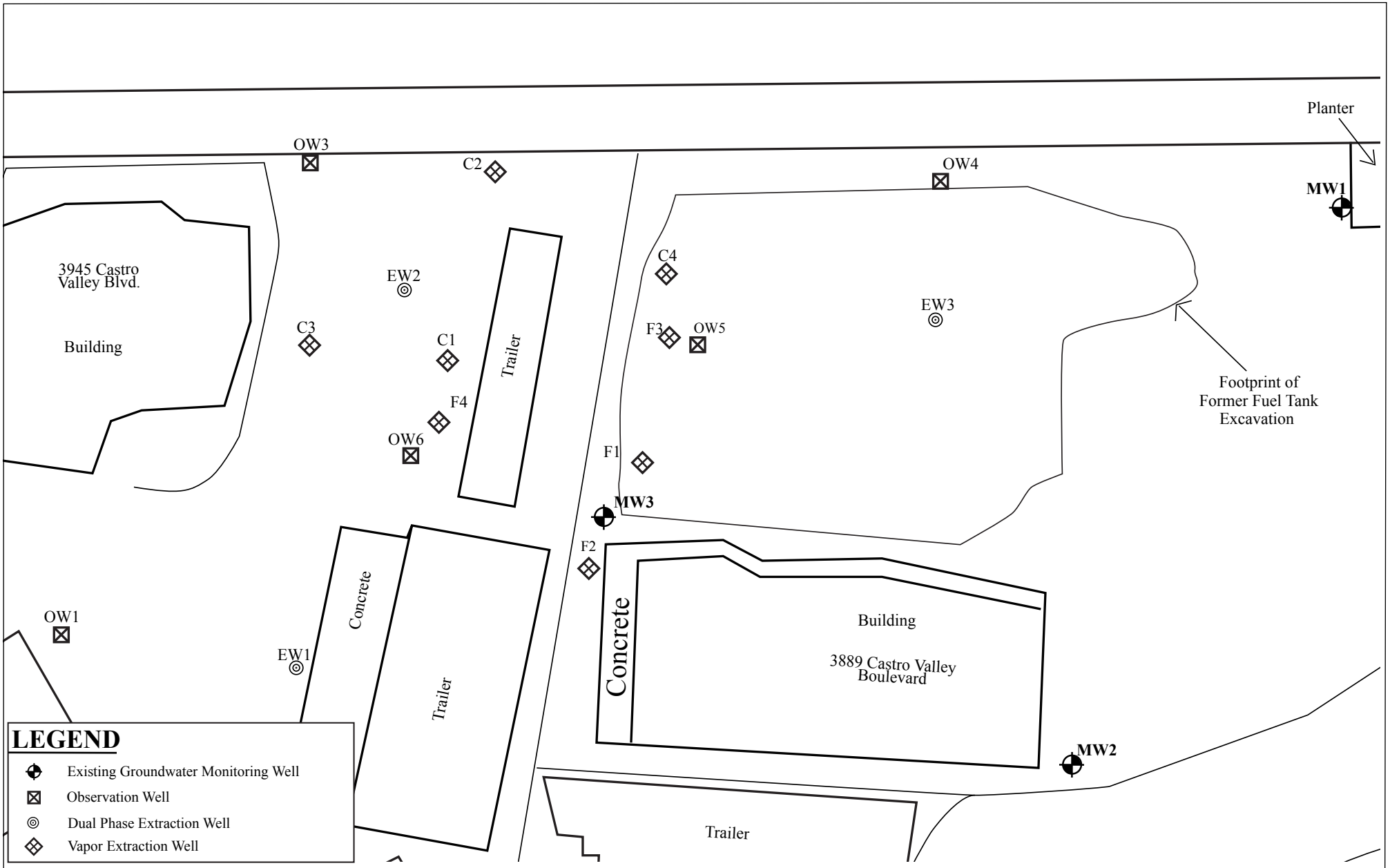


Figure 2
Site Vicinity Map Detail Showing Well Locations
3889 Castro Valley Boulevard
Castro Valley, California

Base Map from:	P&D Environmental, Inc.	0 10 20
P&D Environmental October 1993, January and June 1995, September 2008; Kier & Wright Inc. Survey, September 2001; and Google Earth, June 2007	55 Santa Clara Ave., Suite 240 Oakland, CA 94610	Approximate Scale in Feet

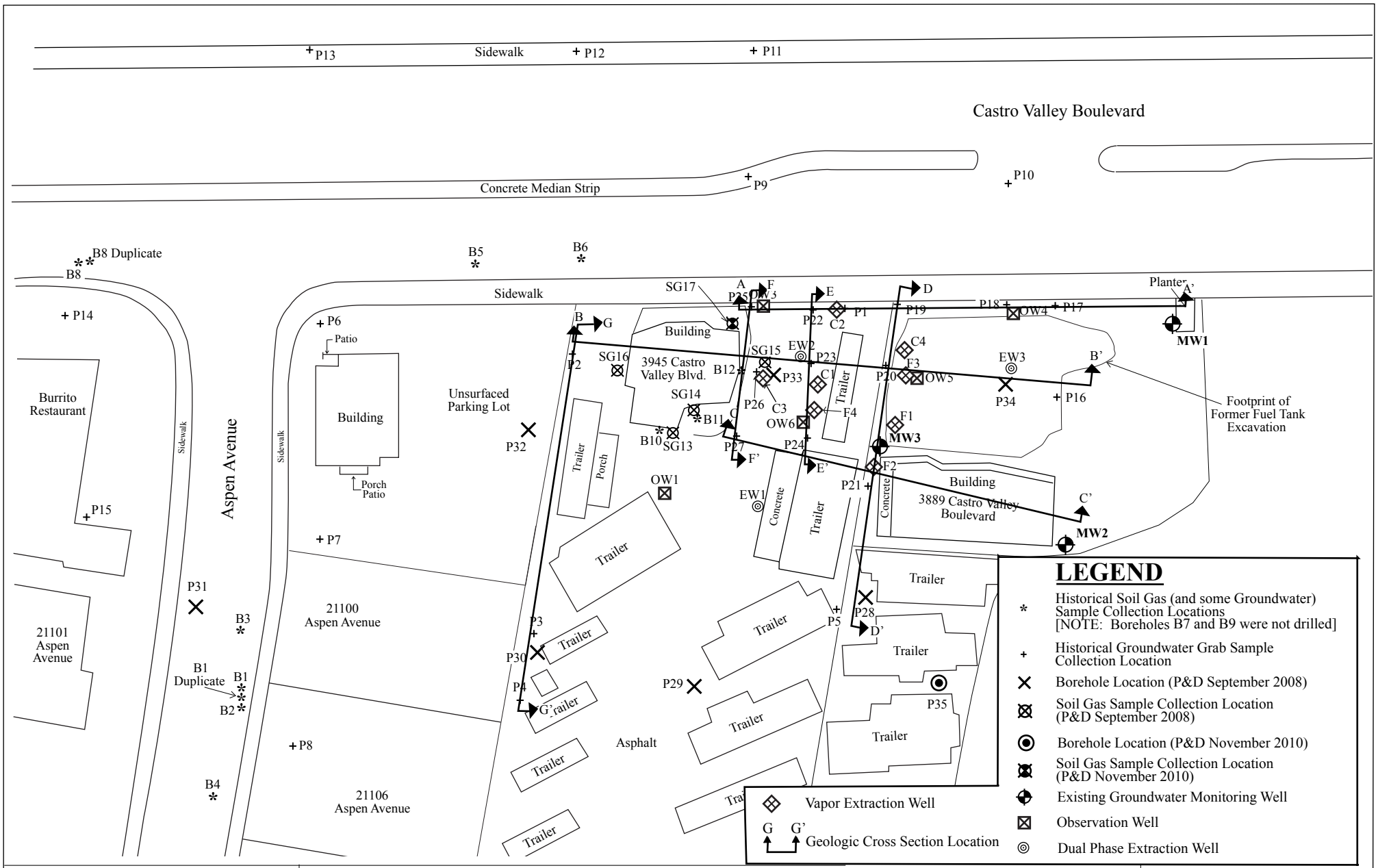


Figure 3
Site Vicinity Map Showing Sampling Locations, Wells, and Geologic Cross Section Locations
3889 Castro Valley Boulevard
Castro Valley, California

Base Map from:
P&D Environmental
October 1993, January and June 1995, September 2008;
Kier & Wright Inc. Survey, September 2001;
and Google Earth, June 2007

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

0 25 50
Approximate Scale in Feet

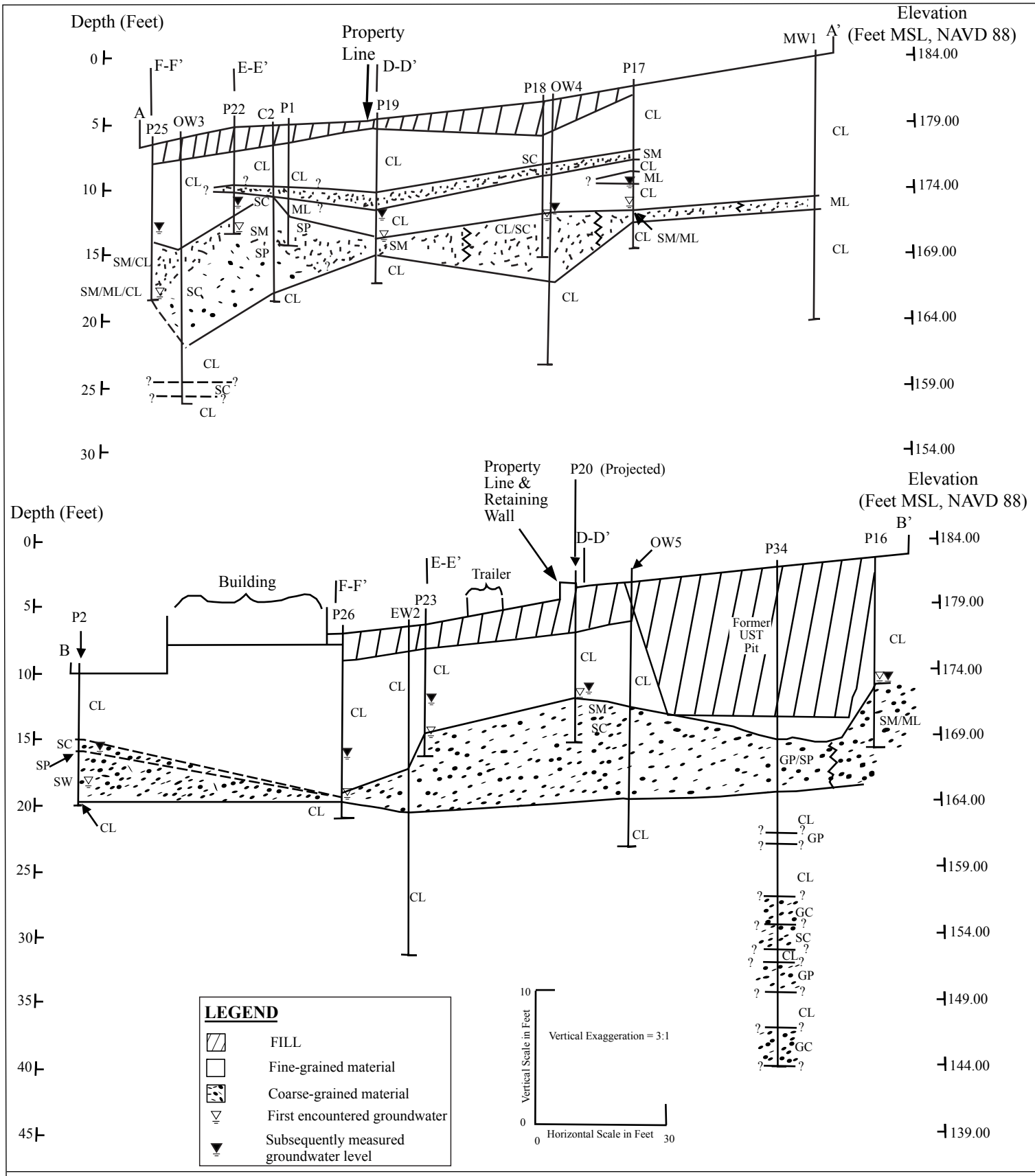


Figure 4
Geologic Cross Sections A-A' and B-B'
3889 Castro Valley Boulevard
Castro Valley, California

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

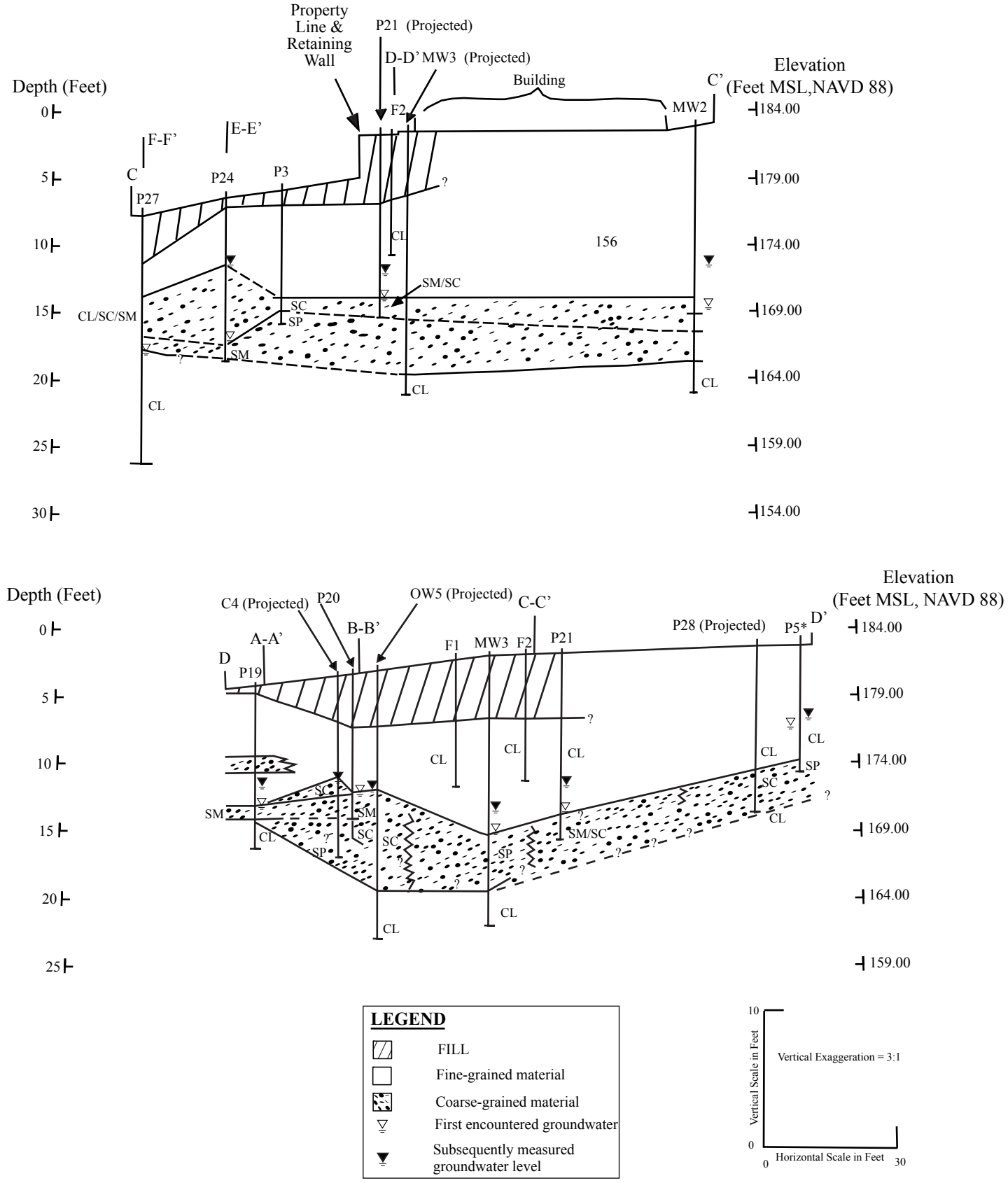


Figure 5
Geologic Cross Sections C-C' and D-D'
3889 Castro Valley Boulevard
Castro Valley, California

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

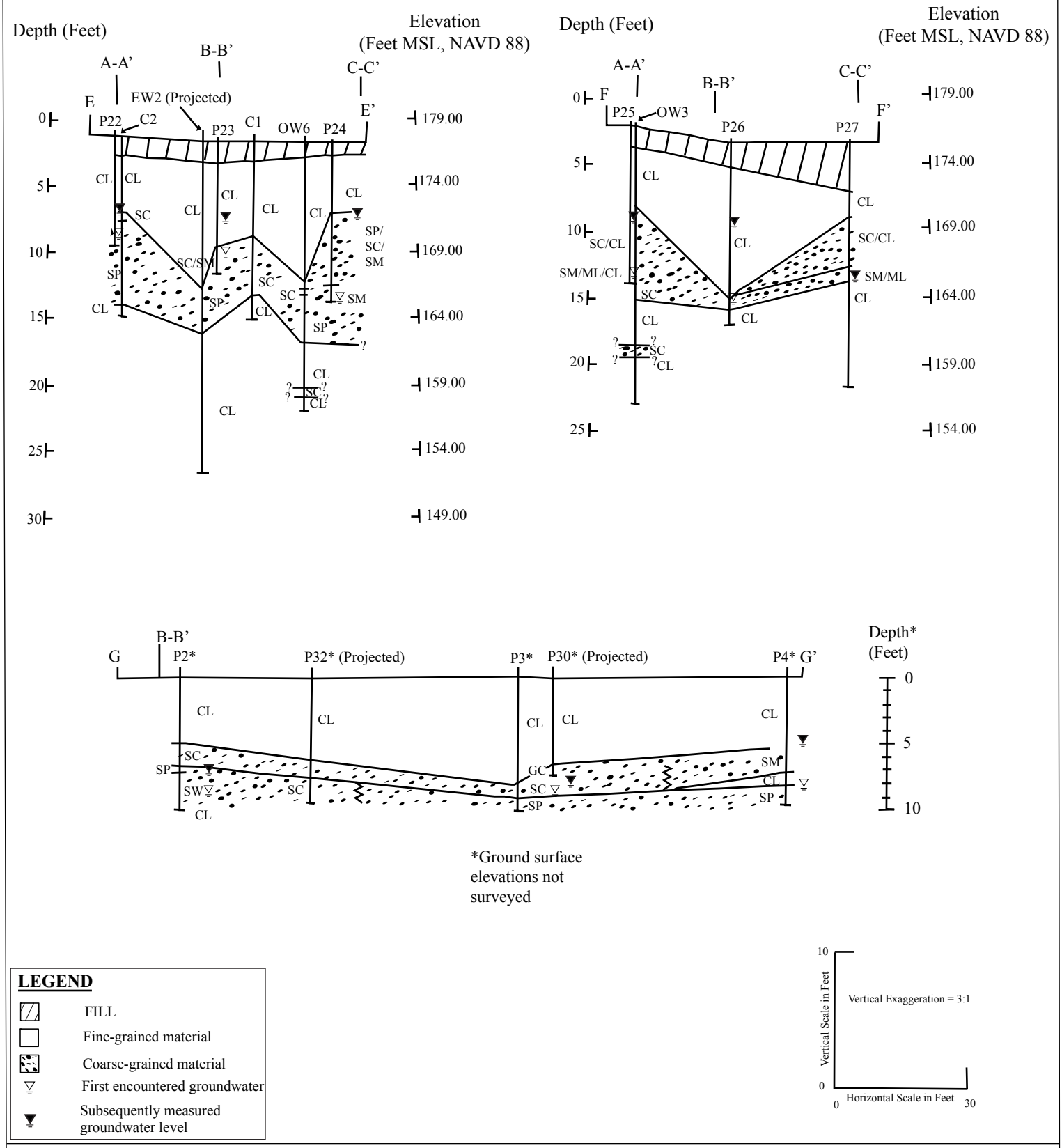


Figure 6
Geologic Cross Sections E-E', F-F', and G-G'
3889 Castro Valley Boulevard
Castro Valley, California

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

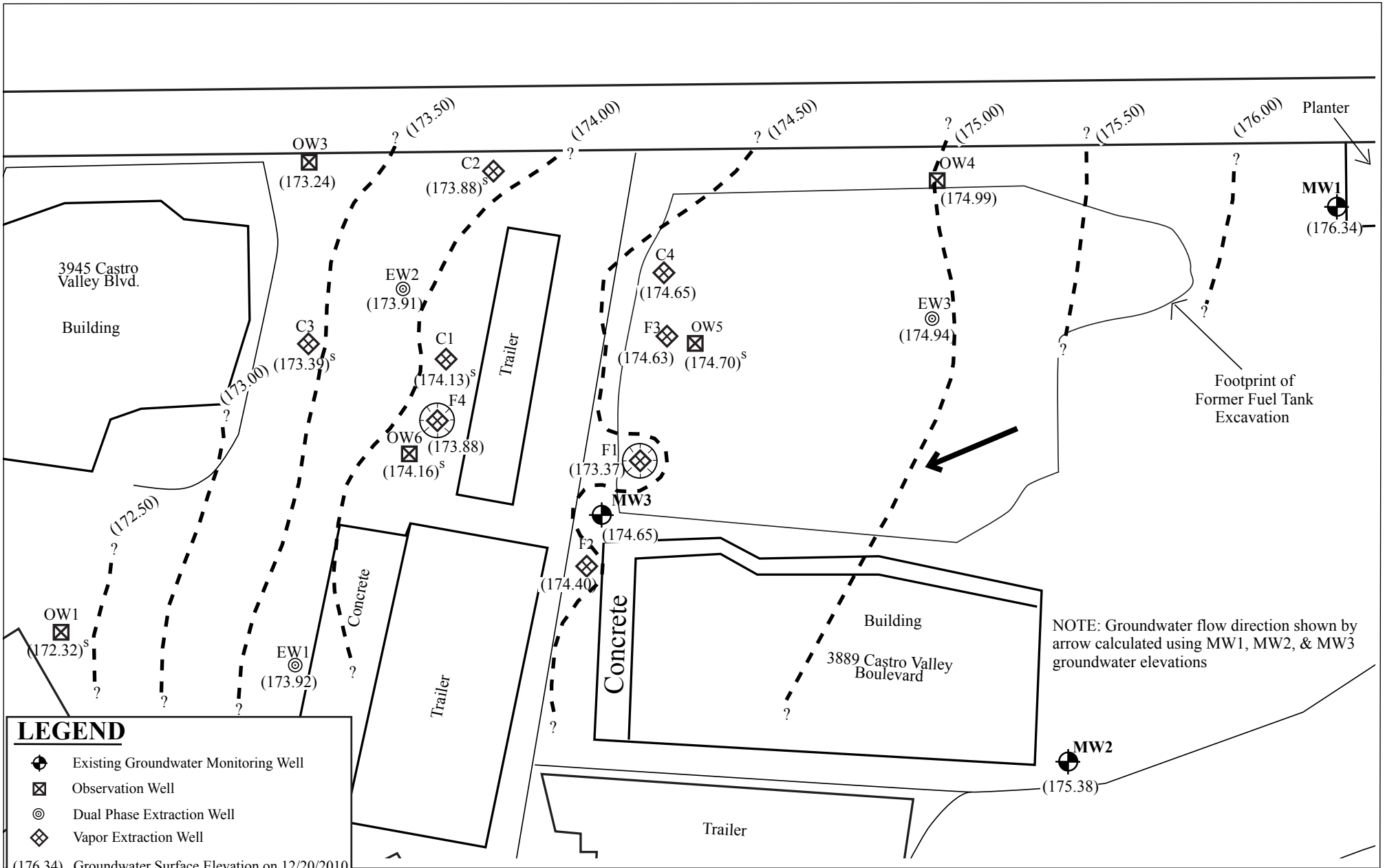


Figure 7
Site Vicinity Map Detail Showing Groundwater Surface Contours
3889 Castro Valley Boulevard
Castro Valley, California

Base Map from:
P&D Environmental
October 1993, January and June 1995, September 2008;
Kier & Wright Inc. Survey, September 2001;
and Google Earth, June 2007

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

0 10 20
Approximate Scale in Feet

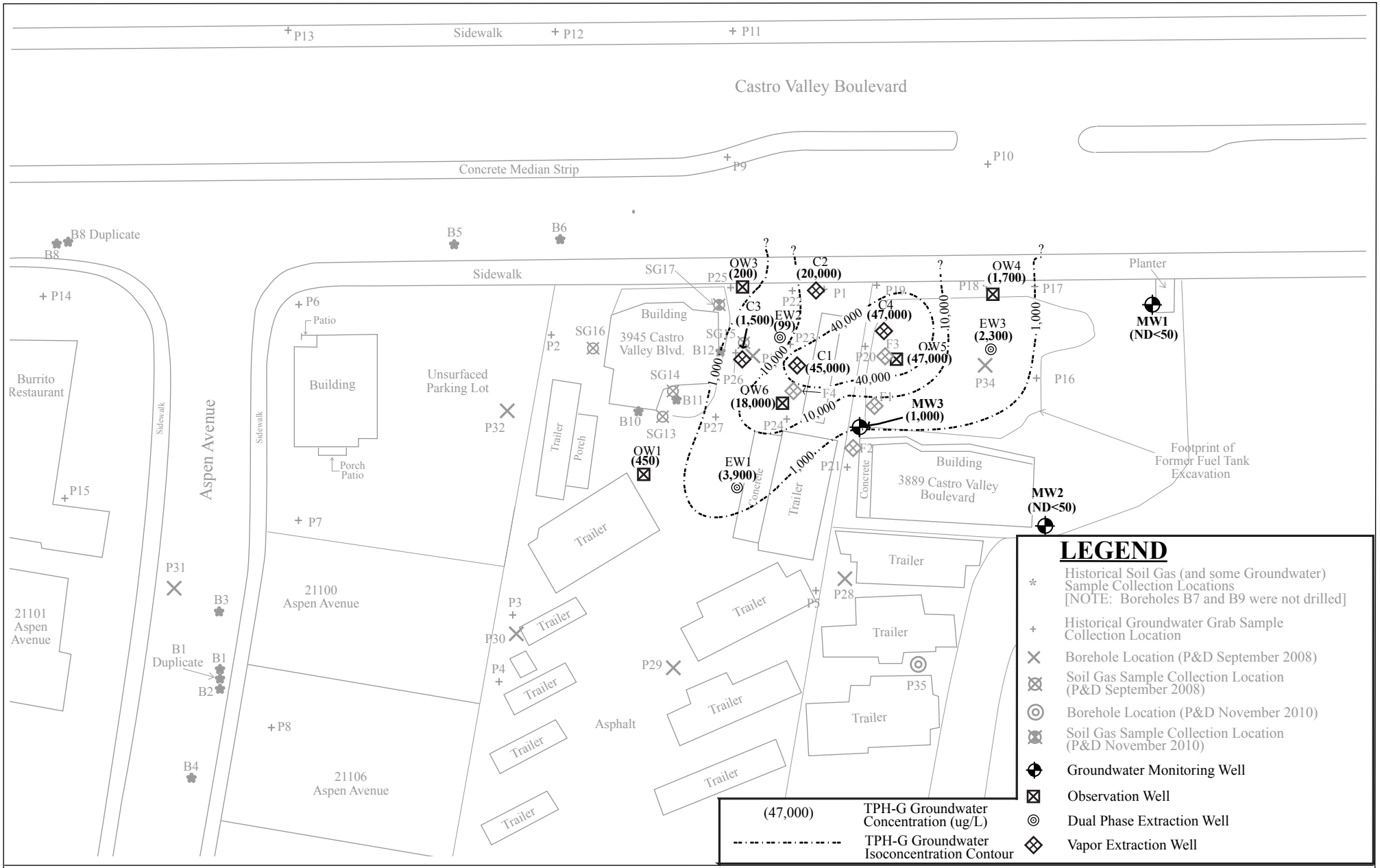


Figure 8
Site Vicinity Map Showing TPH-Gasoline Concentrations in Groundwater
3889 Castro Valley Boulevard
Castro Valley, California

Base Map from:
P&D Environmental
October 1993, January and June 1995, September 2008;
Kier & Wright Inc. Survey, September 2001;
and Google Earth, June 2007

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

0 25 50
Approximate Scale in Feet

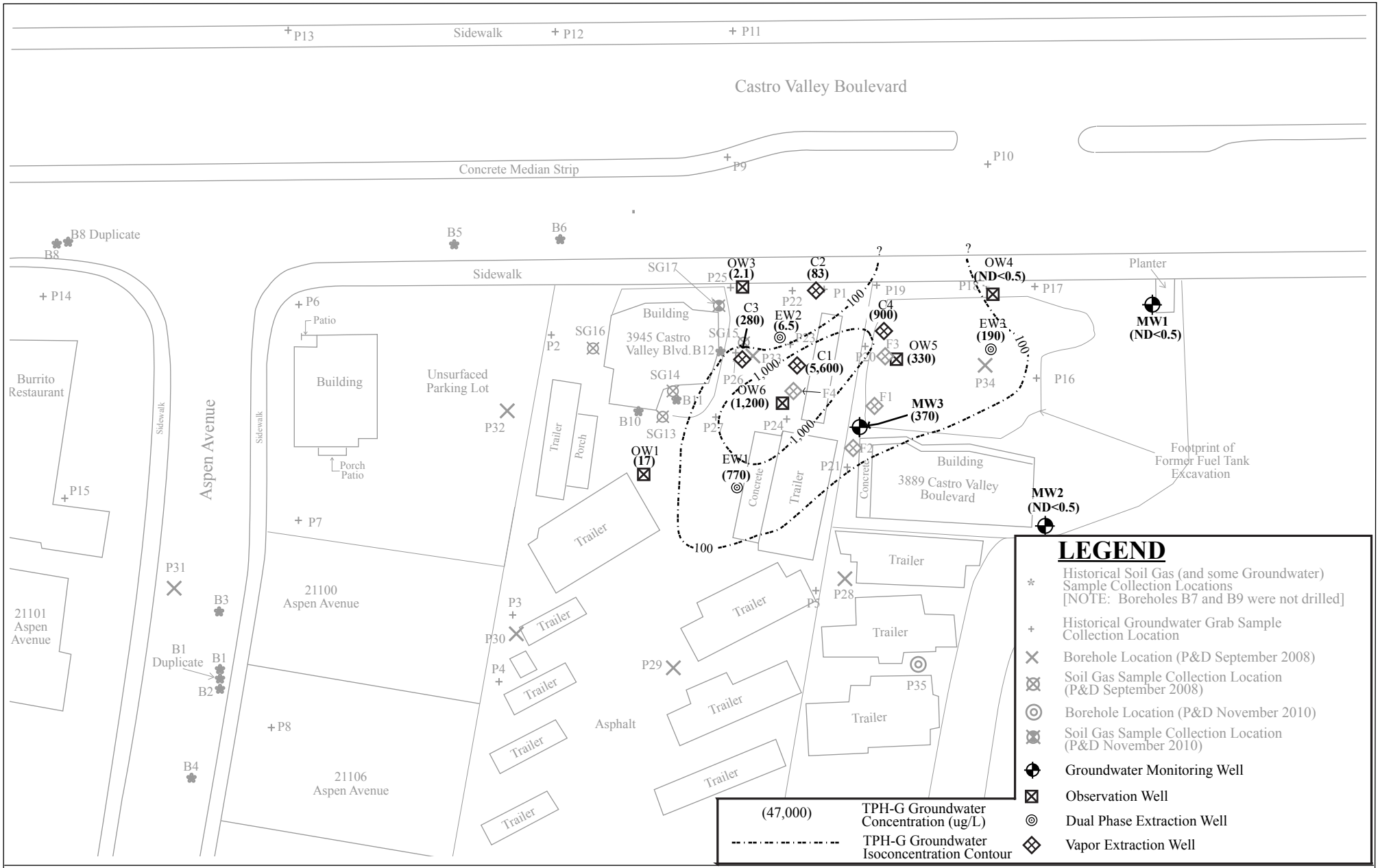


Figure 9
Site Vicinity Map Showing Benzene Concentrations in Groundwater
3889 Castro Valley Boulevard
Castro Valley, California

Base Map from:	P&D Environmental, Inc.	0 25 50
P&D Environmental October 1993, January and June 1995, September 2008; Kier & Wright Inc. Survey, September 2001; and Google Earth, June 2007	55 Santa Clara Ave., Suite 240 Oakland, CA 94610	Approximate Scale in Feet

APPENDIX A

Boring Logs

P&D ENVIRONMENTAL, INC.

BORING NO.: P34	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking lot in front of service station.			ELEVATION AND DATUM: None
DRILLING AGENCY: Vironex, Inc.		DRILLER: Tim/Manuel	DATE & TIME STARTED: 9/4/08 0840 / DATE & TIME FINISHED: 9/4/08 1100
DRILLING EQUIPMENT: Geoprobe 6600			
COMPLETION DEPTH: 38.0 Feet	BEDROCK DEPTH: Not Encountered		LOGGED BY: MLD / CHECKED BY: PMK
FIRST WATER DEPTH: 13.0 Feet	NO. OF SAMPLES: 2 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	0.0 to 0.5 ft. Asphalt and road base.		No Well Constructed		0	Borehole continuously cored from 0.0 to 38.0 ft.using a 5-foot long 2-inch O.D. Geoprobe Macrocore barrel sampler lined with 5-foot long 1.5-inch O.D. transparent PVC sleeves.
	0.5 to 6.0 ft. Dark brown sandy silt (FILL); stiff, dry, with minor gravel to 0.5 in. diameter. No Petroleum Hydrocarbon (PHC) odor.	FILL				
5					0	0 to 5 ft. 90% recovery
	6.0 to 9.0 ft. Grayish brown sandy clay (FILL); medium stiff, moist, with minor gravel to 0.25 in. diameter. No PHC odor.	FILL				5 to 10 ft. 90% recovery
10	9.0 to 11.0 ft. Orange brown clayey sand (FILL); medium dense, moist. No PHC odor. 10.0 ft. With gravel to 0.25 in. diameter.	FILL			0	10 to 15 ft. 70% recovery
	11.0 to 13.0 ft. Gray sandy clay (CL); soft, saturated. Slight PHC odor.	CL			13	
		▽				First water encountered during drilling at 13.0 ft depth.
	13.0 to 14.0 ft. Gray gravel (GP); very loose, wet, with gravel to 0.25 in. diameter. Slight PHC odor.	GP				
	14.0 to 15.0 ft. Gray sand (SP); loose, wet; change to orange-brown at 15.0 ft. Slight PHC odor.	SP				
15	15.0 to 16.0 ft. Gray gravel (GP); loose, wet, with gravel to 0.25 in. diameter. Slight PHC odor.	GP			17	15 to 20 ft. 90% recovery
	16.0 to 17.0 ft. Brown sand (SP); medium dense, moist. No PHC odor.	SP			22	
	17.0 to 20.0 ft. Brown silty clay (CL); stiff, moist, with black mottling. No PHC odor.	CL			0	
20	20.0 to 21.0 ft. Gray sandy gravel (GP); loose, wet. Slight PHC odor.	GP			55	20 to 25 ft. 100% recovery
	21.0 to 25.0 ft. Brown silty clay (CL); stiff, moist. No PHC odor.	CL			0	
25	25.0 to 27.0 ft. Brown sandy clayey gravel (GC); loose, wet. No PHC odor.	GC				25 to 30 ft. 100% recovery
	27.0 to 29.0 ft. Brown clayey sand (SC); loose, wet. No PHC odor. 28.0 ft. With some gravel to 0.25 in. diameter.	SC			0	
30	29.0 to 30.0 ft. Grayish brown silty clay (CL); stiff, moist, with black mottling. No PHC odor.	CL			0	

P&D ENVIRONMENTAL, INC.

BORING NO.: P34	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking lot in front of service station.		ELEVATION AND DATUM: None	
DRILLING AGENCY: Vironex, Inc.	DRILLER: Tim/Manuel	DATE & TIME STARTED: 9/4/08 0840	DATE & TIME FINISHED: 9/4/08 1100
DRILLING EQUIPMENT: Geoprobe 6600			
COMPLETION DEPTH: 38.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PMK
FIRST WATER DEPTH: 13.0 Feet	NO. OF SAMPLES: 2 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	WELL CONSTRUCTION LOG	BLOW COUNT PER 6"	PID	REMARKS
	30.0 to 32.5 ft. Gray sandy gravel (GP); loose, wet, with gravel mainly to 0.25 in. diameter. No PHC odor.	GP	No Well Constructed		0	30 to 35 ft. 90% recovery
	32.5 to 35.0 ft. Brown silty clay (CL); stiff, moist, with trace gravel to 0.25 in. diameter, and black mottling. No PHC odor.	CL			0	
35	35.0 to 38.0 ft. Brownish gray clayey gravel (GC); loose, wet, with gravel to 0.25 in. diameter. No PHC odor.	GC			0	35 to 38 ft. 100% recovery
	38.0 ft. Color change to bluish gray, and increased clay content.					Refusal at 38.0 ft., sample jammed in barrel.
40						Borehole terminated at 38.0 ft. on 9/4/08.
						Borehole grouted on 9/4/08 using neat cement grout.
						Soil conductivity probe pushed to 52.0 ft. for electrical conductivity logging on 9/4/08, approximately 1.5 feet from P34. Boring grouted on 9/4/08 using neat cement grout.
						For collection of groundwater samples, adjacent boring made in a separate borehole with Hydropunch on 9/11/08, approximately 1.5 feet from P34. Hydropunch pushed to 34.0 ft., then retracted to 30.0 ft., to collect water sample P34-30W at 12:35 a.m. A different Hydropunch was then pushed to 49.0 ft. in the same borehole, and retracted to 45.0 ft., to collect water sample P34-45W at 1350. Boring grouted on 9/11/08 using Hydropunch rods as tremie pipe, and neat cement grout. Ron Smalley of Alameda County Public Works Agency onsite to observe grouting.

P&D ENVIRONMENTAL, INC.

BORING NO.: EW1	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION:	Parking Space for Trailer # 1, Wagon Wheel Trailer Park	ELEVATION AND DATUM:	None
DRILLING AGENCY:	Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/8/10 0930 / DATE & TIME FINISHED: 12/8/10 1645
DRILLING EQUIPMENT:	Mobile B-40 Hollow Stem Auger Drill Rig		
COMPLETION DEPTH: 20.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 11.0 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 20.0 ft. using a truck-mounted 12-inch O.D. hollow stem auger drill rig.
	0.5 to 1.0 ft. Brown gravelly sand (FILL); loose, moist, with rounded gravel to 0.75-inch diameter.	FILL			0	
	1.0 to 10.0 ft. Bluish-gray silty clay (CL); stiff, moist. Strong Petroleum Hydrocarbon (PHC) odor between 4.0 to 7.0 ft.	CL	4 8 7		1,419	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5						
				▼		Water encountered during drilling at 11.0 ft.
10	10.0 to 11.0 ft. Bluish-gray clayey fine sand (SC); dense, moist. No PHC odor.	SC	12 19 15	▽	0	Water level measured at 8.7 ft. at 1640.
	11.0 to 13.5 ft. Brown silty fine sand (SM); dense, wet, with some subrounded gravel to 0.5-inch diameter. No PHC odor.	SM				The lower sand contact was estimated by driller at a depth of approximately 13.5 ft. due to dry resistance of auger in contact with gravel.
						Borehole terminated at 20.0 ft. on 12/8/10. Well constructed in borehole on 12/8/10.
15	13.5 to 20.0 ft. Brown clay (CL); very stiff, moist, with black mottling.	CL	5 8 9		0	
	18.5 to 20.0 ft. Color change to olive-brown.		7 11 17		0	
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: EW2	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Driveway of Wagon Wheel Trailer Park		ELEVATION AND DATUM: None	
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/9/10 1300	DATE & TIME FINISHED: 12/9/10 1530
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 25.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 10.0 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 25.0 ft. using a truck-mounted 12-inch O.D. hollow stem auger drill rig.
	0.5 to 2.0 ft. Brown gravelly sand (FILL); loose, dry, with abundant rounded gravel to 0.75-inch diameter.	FILL				
	2.0 to 10.5 ft. Bluish-gray clay (CL); very stiff, moist to wet, with abundant fine sand and black mottling. Strong Petroleum Hydrocarbon (PHC) odor between 3.0 to 7.0 ft..			▼	0	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	5.5 to 6.0 ft. Abundant fine sand.	CL	6 8 10		73	
10	Wet at 10.0 ft.		4	▽	9	
	10.5 to 14.5 ft. Bluish-gray fine sand (SP); medium dense, saturated. Slight PHC odor between 9.0 to 11.0 ft.	SP	6 9		0	Water encountered during drilling at 10.0 ft. Water level measured at 3.6 ft. at 1515.
15			6 7 12		0	Borehole terminated at 25.0 ft. on 12/9/10. Borehole backfilled with bentonite to 23.0 ft. Well constructed in borehole on 12/9/10.
	14.5 to 25.0 ft. Brown clay (CL); very stiff, moist, with black mottling. No PHC odor.	CL				
20			9 10 11			
25			8 12 12		0	
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: EW3	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking Lot in Front of service Station			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/9/10 0830	DATE & TIME FINISHED: 12/9/10 1145
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 23.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: N/A	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 23.0 ft. using a truck-mounted 12-inch O.D. hollow stem auger drill rig.
	0.5 to 6.0 ft. Dark brown sandy silt (FILL); stiff, dry, with minor gravel to 0.5-inch diameter. No Petroleum Hydrocarbon (PHC) odor.	FILL				Lithology reported based on adjacent continuously cored borehole P34. Note: Boring Log for P34 incorrectly identified FILL material to a depth of 11.0 ft. bgs as ML/CL/SC.
5						Soil collected for lithologic logging from 21.5 to 23.0 ft. to confirm depth of clay contact using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
	6.0 to 9.0 ft. Grayish-brown sandy clay (FILL); medium stiff, moist, with minor gravel to 0.25-inch diameter. No PHC odor.	FILL				
	9.0 to 11.0 ft. Orange-brown clayey sand (FILL); medium dense, moist. With gravel to 0.25-inch diameter. No PHC odor.	FILL				
10	11.0 to 13.0 ft. Gray sandy clay (CL); soft, saturated. Slight PHC odor.	CL				
	13.0 to 14.0 ft. Gray gravel (GP); wet, with gravel to 0.25-inch diameter. Slight PHC odor.	GP				
	14.0 to 15.0 ft. Gray sand (SP); loose, wet, with change to orange-brown at 15.0 ft. Slight PHC odor.	SP				
15	15.0 to 16.0 ft. Gray gravel (GP); wet, with gravel to 0.25-inch diameter. Slight PHC odor.	GP				Borehole terminated at 23.0 ft. on 12/9/10. Well constructed in borehole on 12/9/10.
	16.0 to 17.0 ft. Brown sand (SP); medium dense, moist. No PHC odor.	SP				
	17.0 to 20.0 ft. Brown silty clay (CL); stiff, moist, with black mottling. No PHC odor.	CL				
20	20.0 to 21.0 ft. Gray sandy gravel (GP); wet. Slight PHC odor.	GP				
	21.0 to 23.0 ft. Brown silty clay (CL); stiff, moist. No PHC odor.	CL	4 8 7		0	
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: OW1	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION:	Parking Space for Trailer #1, Wagon Wheel Trailer Park	ELEVATION AND DATUM:	None
DRILLING AGENCY:	Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/7/10 1630 / DATE & TIME FINISHED: 12/7/10 1740
DRILLING EQUIPMENT:	Mobile B-40 Hollow Stem Auger Drill Rig		
COMPLETION DEPTH: 20.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 19.0 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 20.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 1.0 ft. Brown gravelly sand (FILL); loose, moist, with rounded gravel to 0.75-inch diameter.	FILL			0	
						Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	1.0 to 12.0 ft. Bluish-gray silty clay (CL); stiff, moist, with increase in fine sand content at 6.0 ft. Strong Petroleum Hydrocarbon (PHC) odor.	CL	7 5 7		3,374	Water encountered during drilling at 19.0 ft. Water level measured at 19.4 ft. at 1730.
10					0	
	12.0 to 19.0 ft. Brown silty clay (CL); stiff, moist, with black mottling. No PHC odor.	CL	5 8 10		0	Borehole terminated at 20.0 ft. on 12/7/10. Well constructed in borehole on 12/7/10.
15						Ms. Vicky Hamlin with Alameda County Public Works Agency on site to observe and document pouring of the sanitary seal.
	19.0 to 19.5 ft. Brown clayey sand (SC); medium dense, wet, with minor subrounded gravel to 0.5-inchdiameter. No PHC odor.	SC	8	▽		
	19.5 to 20.0 ft. Brown silty clay (CL); hard, moist, with black mottling. No PHC odor.	CL	13 17		0	
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: OW3	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Driveway of Wagon Wheel Trailer Park			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/7/10 1500	DATE & TIME FINISHED: 12/7/10 1630
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 20.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PMK
FIRST WATER DEPTH: 18.5 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.					
	0.5 to 1.5 ft. Brown gravelly sand (FILL); loose, moist, with rounded gravel to 0.75-inch diameter. No Petroleum Hydrocarbon (PHC) odor.	FILL		See Well Construction Diagram	0	Borehole drilled from 0.0 to 20.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	1.5 to 8.0 ft. Bluish-gray sandy clay (CL); very stiff, moist, with some fine sand. Strong PHC odor.	CL				Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5				▼		Water encountered during drilling at 18.5 ft.
			7 12 15		225	Water level measured at 5.3 ft. at 1620.
	8.0 to 15.0 ft. Bluish-gray clayey sand (SC); medium dense, moist. Strong PHC odor.	SC				
10						
						Borehole terminated at 20.0 ft. on 12/7/10. Well constructed in borehole on 12/7/10.
15			7 11 15		0	
	15.0 to 18.5 ft. Brown clay (CL); very stiff, moist, with black mottling and rootlet holes. No PHC odor.	CL				Ms. Vicky Hamlin with Alameda County Public Works Agency on site to observe and document pouring of the sanitary seal.
				▽		
	18.5 to 19.5 ft. Brown clayey fine sand (SC); wet. No PHC odor.	SC	5 6			
	19.5 to 20.0 ft. Brown clay (CL); stiff, moist, with black mottling and rootlet holes.. No PHC odor.	CL	9		0	
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: OW4	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking Lot in Front of Service Station			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/8/10 1245	DATE & TIME FINISHED: 12/8/10 1400
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 20.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 10.5 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.					
	0.5 to 1.0 ft. Brown gravelly sand (FILL); loose, moist, with rounded gravel to 0.75-inch diameter.	FILL		See Well Construction Diagram		Borehole drilled from 0.0 to 20.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	1.0 to 5.0 ft. Brown clay (CL); stiff, moist. No Petroleum Hydrocarbon (PHC) odor.	CL			0	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	5.0 to 5.5 ft. Brown silty fine sand (SP); medium dense, moist. No PHC odor.	SP	4 5 7	▼	264	Water encountered during drilling at 10.5 ft.
						Water level measured at 6.4 ft. at 1400.
	5.5 to 13.0 ft. Bluish-gray clayey sand (SC); medium dense, moist to wet. Strong PHC odor.	SC				
10	Saturated at 10.5 ft.		5 6 6	▽	2,250	
						Borehole terminated at 20.0 ft. on 12/8/10. Well constructed in borehole on 12/8/10.
15	13.0 to 20.0 ft. Brown silty clay (CL); very stiff to hard, moist, with black and dark brown mottling. No PHC odor.	CL	6 9 10		0	
20			6 28 25			
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: OW5	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking Lot in Front of Service Station			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/6/10 1600	DATE & TIME FINISHED: 12/6/10 1730
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 20.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 11.5 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 20.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 3.5 ft. Brown gravelly sand (FILL); loose, moist, with angular gravel to 0.75-inch diameter. No Petroleum Hydrocarbon (PHC) odor.	FILL			0	
			4 4 7		2	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	3.5 to 8.5 ft. Brown clay (CL); stiff, moist. Slight PHC odor.	CL		▼		Water encountered during drilling at 11.5 ft. Water level measured at 6.7 ft. at 1715.
			4 5 5		837	
10	8.5 to 16.5 ft. Bluish-gray clayey fine sand (SC); loose, moist. Interbedded with layers of silty clay. Strong PHC odor. Wet at 11.5 ft.	SC		▽		
15			5 6 10		85	Borehole terminated at 20.0 ft. on 12/6/10. Well constructed in borehole on 12/6/10.
	16.5 to 20.0 ft. Brown silty clay (CL); very stiff, moist, with black mottling. No PHC odor.	CL				
20			8 8 10		0	
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: OW6	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking Space for Trailer # 62, Wagon Wheel Trailer Park		ELEVATION AND DATUM: None	
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/7/10 0845	DATE & TIME FINISHED: 12/7/10 1030
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 20.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 10.5 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 20.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 1.5 ft. Brown gravelly sand (FILL); loose, moist, with abundant rounded gravel to 0.75-inch diameter.	FILL			0	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	1.5 to 10.5 ft. Bluish-gray clay (CL); stiff, moist. Strong Petroleum Hydrocarbon (PHC) odor.	CL	5 5 7	▼	228	Water encountered during drilling at 10.5 ft. Water level measured at 4.3 ft. at 0945.
10	10.5 to 11.0 ft. Bluish-gray clayey fine sand (SC); loose, wet. Slight PHC odor.	SC	5 5 8	▽	9	
	11.0 to 15.0 ft. Bluish-gray fine sand (SP); medium dense, saturated. Slight PHC odor.	SP				Borehole terminated at 20.0 ft. on 12/7/10. Well constructed in borehole on 12/7/10.
15	15.0 to 18.5 ft. Brown clay (CL); very stiff, moist, with black mottling.	CL	6 8 14		0	
	18.5 to 19.0 ft. Brown clayey fine sand (SC); medium dense, wet. No PHC odor.	SC	8 8			
20	19.0 to 20.0 ft. Brown clay (CL); very stiff, moist with black mottling. No PHC odor.	CL	12		0	
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: C1	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION:	Parking Space for Trailer # 62, Wagon Wheel Trailer Park	ELEVATION AND DATUM:	None
DRILLING AGENCY:	Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/7/10 1100 / DATE & TIME FINISHED: 12/7/10 1200
DRILLING EQUIPMENT:	Mobile B-40 Hollow Stem Auger Drill Rig		
COMPLETION DEPTH:	13.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD / CHECKED BY: PHK
FIRST WATER DEPTH:	11.5 Feet	NO. OF SAMPLES: None	

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 13.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 1.5 ft. Brown gravelly sand (FILL); loose, moist, with rounded gravel to 0.75-inch diameter.	FILL				
	1.5 to 7.0 ft. Olive-gray clay (CL); stiff, moist. No Petroleum Hydrocarbon (PHC) odor.	CL		▼	0	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5						Water encountered during drilling at 11.5 ft.
						Water level measured at 4.2 ft. at 1145.
	7.0 to 7.5 ft. Brown coarse sand (SP); medium dense, moist, with minor subrounded gravel to 0.5-inch diameter. Strong PHC odor.	SP	6		1,295	
			7			
			10		745	Borehole terminated at 13.0 ft. on 12/7/10. Well constructed in borehole on 12/7/10.
	7.5 to 11.5 ft. Brown clayey fine sand (SC); medium dense, moist. Strong PHC odor.	SC				
10				▽		
	11.5 to 13.0 ft. Brown silty clay (CL); very stiff, wet, with black mottling. No PHC odor.	CL	5			
			7		0	
			11			
15						
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: C2	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION:	Parking Space for Trailer # 62, Wagon Wheel Trailer Park	ELEVATION AND DATUM:	None
DRILLING AGENCY:	Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/7/10 1300 / DATE & TIME FINISHED: 12/7/10 1430
DRILLING EQUIPMENT:	Mobile B-40 Hollow Stem Auger Drill Rig		
COMPLETION DEPTH: 13.0 Feet	BEDROCK DEPTH: Not Encountered		LOGGED BY: MLD / CHECKED BY: PHK
FIRST WATER DEPTH: 11.5 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 13.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 1.5 ft. Brown gravelly sand (FILL); loose, wet, with rounded gravel to 0.75-inch diameter.	FILL				
	1.5 to 5.5 ft. Bluish-gray silty clay (CL); stiff, moist. Slight Petroleum Hydrocarbon (PHC) odor between 4.0 to 5.0 ft.	CL			0	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5			5	▼	17	Water encountered during drilling at 11.5 ft.
	5.5 to 6.0 ft. Bluish-gray clayey sand (SC); loose, moist. Strong PHC odor.	SC	5		2,840	Water level measured at 5.5 ft. at 1410.
	6.0 to 12.5 ft. Bluish-gray fine sand (SP); medium dense, moist to saturated. Strong PHC odor between 6.0 to 10.0 ft. Increase in clay content at 11.0 ft. Saturated at 11.5 ft.	SP	7			Borehole terminated at 13.0 ft. on 12/7/10. Well constructed in borehole on 12/7/10.
10				▽	11	
	12.5 to 13.0 ft. Brown clay (CL); very stiff, moist, with black mottling. Strong PHC odor.	CL	8 12		0	
15						
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: C3	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Driveway of Wagon Wheel Trailer Park			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/8/10 1100	DATE & TIME FINISHED: 12/8/10 1230
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 13.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 9.5 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram	0	Borehole drilled from 0.0 to 13.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
					119	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	0.5 to 9.5 ft. Bluish-gray clay (CL); stiff, moist. Strong Petroleum Hydrocarbon (PHC) odor.	CL			259	Water encountered during drilling at 9.5 ft. Water level measured at 9.1 ft. at 1210.
			5	▽	252	Borehole terminated at 13.0 ft. on 12/8/10. Well constructed in borehole on 12/8/10.
10	9.5 to 10.0 ft. Bluish-gray clayey sand (SC); medium dense, wet. Slight PHC odor.	SC	6		4	
	10.0 to 13.0 ft. Bluish-gray clay (CL); very stiff, moist with black mottling. No PHC odor.	CL	5			
	11.5 to 13.0 ft. Color change to brown.		5 8 12		0	
15						
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: C4	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION:	Parking Lot in Front of Service Station	ELEVATION AND DATUM:	None
DRILLING AGENCY:	Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/6/10 1015 / DATE & TIME FINISHED: 12/6/10 1130
DRILLING EQUIPMENT:	Mobile B-40 Hollow Stem Auger Drill Rig		
COMPLETION DEPTH: 13.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 11.5 Feet	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 13.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 7.0 ft. Dark gray clay (CL); stiff, moist. Slight Petroleum Hydrocarbon (PHC) odor.	CL	3 6 7			Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	5.5 to 7.0 ft. Color change to bluish-gray.		3 4 8	▼	2	Water encountered during drilling at 11.5 ft.
						Water level measured at 6.4 ft. at 1130.
	7.0 to 11.5 ft. Bluish-gray clayey fine sand (SC); medium dense, moist. Strong PHC odor.	SC	3 7 6		317	Borehole terminated at 13.0 ft. on 12/6/10. Well constructed in borehole on 12/6/10.
10				▽		Ms. Vicki Hamlin with Alameda County Public Works Agency on site to observe and document pouring of sanitary seal.
	11.5 to 13.0 ft. Brown fine sand (SP); loose, wet to saturated at 12,0 ft. with minor subrounded gravel to 0.5-inch diameter. No PHC odor.	SP	4 5 5		4	
15						
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: F1	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking Lot in Front of Service Station			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/6/10 1500	DATE & TIME FINISHED: 12/6/10 1730
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 9.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: Not Encountered	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 9.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 5.0 ft. Brown gravelly sand (FILL); loose, moist, with angular gravel to 0.75-inch diameter, mottled orange. No Petroleum Hydrocarbon (PHC) odor.	FILL	4 4 5		0	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	5.0 to 9.0 ft. Dark brown clay (CL); stiff to medium stiff, moist, with brown mottling. No PHC odor.	CL				Water not encountered during drilling.
	7.5 to 9.0 ft. Changes color to bluish-gray. Strong PHC odor.		3 3 4		126	Borehole terminated at 9.0 ft. on 12/6/10. Well constructed in borehole on 12/6/10.
10						
15						
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: F2	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking Lot in Front of Service Station			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/6/10 1300	DATE & TIME FINISHED: 12/6/10 1730
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 9.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: Not Encountered	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram	0	Borehole drilled from 0.0 to 9.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 3.0 ft. Brown gravelly sand (FILL); medium dense, moist, with abundant angular gravel to 0.75-inch diameter. No Petroleum Hydrocarbon (PHC) odor.	FILL				Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
	3.0 to 9.0 ft. Dark brown clay (CL); stiff, moist, with brown mottling. No PHC odor.		6 7 7			Water not encountered during drilling.
5						
	7.5 to 9.0 ft. Changes color to brown with bluish-gray mottling. Strong PHC odor.	CL	4 6 6		254	Borehole terminated at 9.0 ft. on 12/6/10. Well constructed in borehole on 12/6/10.
10						
15						
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: F3	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION: Parking Lot in Front of Service Station			ELEVATION AND DATUM: None
DRILLING AGENCY: Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/6/10 1200	DATE & TIME FINISHED: 12/6/10 1730
DRILLING EQUIPMENT: Mobile B-40 Hollow Stem Auger Drill Rig			
COMPLETION DEPTH: 9.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: Not Encountered	NO. OF SAMPLES: None		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram	0	Borehole drilled from 0.0 to 9.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 9.0 ft. Dark brown clay (CL); stiff, moist, with olive-brown mottling. No Petroleum Hydrocarbon (PHC) odor.		4 5 8			Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches.
5	4.5 to 9.0 ft. Changes color to bluish-gray. Strong PHC odor.	CL			34	Water not encountered during drilling.
	8.0 to 8.5 ft. Increase in silt content.		3 4 5		524	Borehole terminated at 9.0 ft. on 12/6/10. Well constructed in borehole on 12/6/10.
10						
15						
20						
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: F4	PROJECT NO.: 0047	PROJECT NAME: VIP Service, Castro Valley	
BORING LOCATION:	Parking Space for Trailer #62, Wagon Wheel Trailer Park	ELEVATION AND DATUM:	None
DRILLING AGENCY:	Exploration Geoservices, Inc.	DRILLER: John	DATE & TIME STARTED: 12/7/10 1000 / DATE & TIME FINISHED: 12/7/10 1130
DRILLING EQUIPMENT:	Mobile B-40 Hollow Stem Auger Drill Rig		
COMPLETION DEPTH:	9.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD / CHECKED BY: PMK
FIRST WATER DEPTH:	Not Encountered	NO. OF SAMPLES: None	

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Asphalt (6 in.) and base rock.			See Well Construction Diagram		Borehole drilled from 0.0 to 9.0 ft. using a truck-mounted 8-inch O.D. hollow stem auger drill rig.
	0.5 to 1.5 ft. Brown gravelly sand (FILL); loose, moist, with abundant rounded gravel to 0.75-inch diameter. No Petroleum Hydrocarbon (PHC) odor.	FILL				
5	1.5 to 9.0 ft. Bluish-gray clay (CL); stiff to very stiff, moist, with brown mottling. Strong PHC odor.	CL	5 8 9		14	Soil collected for lithologic logging using a 2-1/2-inch O.D. California Modified split spoon sampler driven by a 140-pound down-hole hammer falling 30 inches. Water not encountered during drilling.
			5 6 8		3,749	Borehole terminated at 9.0 ft. on 12/7/10. Well constructed in borehole on 12/7/10.
10						
15						
20						
25						
30						

APPENDIX B

Well Construction Diagrams

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

WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

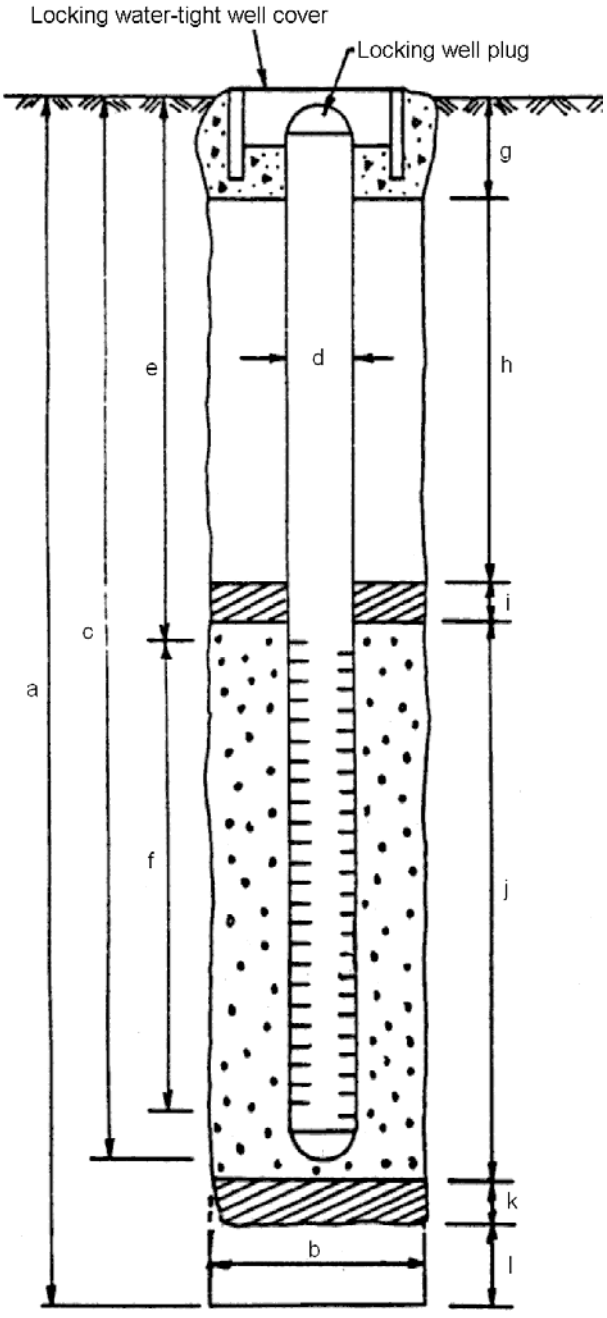
BORING/WELL NO. EW1

TOP OF CASING ELEV. 175.51

GROUND SURFACE ELEVATION 176.41

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/8/10



EXPLORATORY BORING

a. Total depth 20.0 ft.

b. Diameter 12.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 19.0 ft.

Material PVC Schedule 40

d. Diameter 4.0 in.

e. Depth to top of perforations 10.0 ft.

f. Perforated length 10.0 ft.

Perforated interval from 10.0 to 20.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.5 ft.

Seal material Concrete

h. Sanitary seal 6.5 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 11.0 ft.

Filter pack interval from 9.0 to 20.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

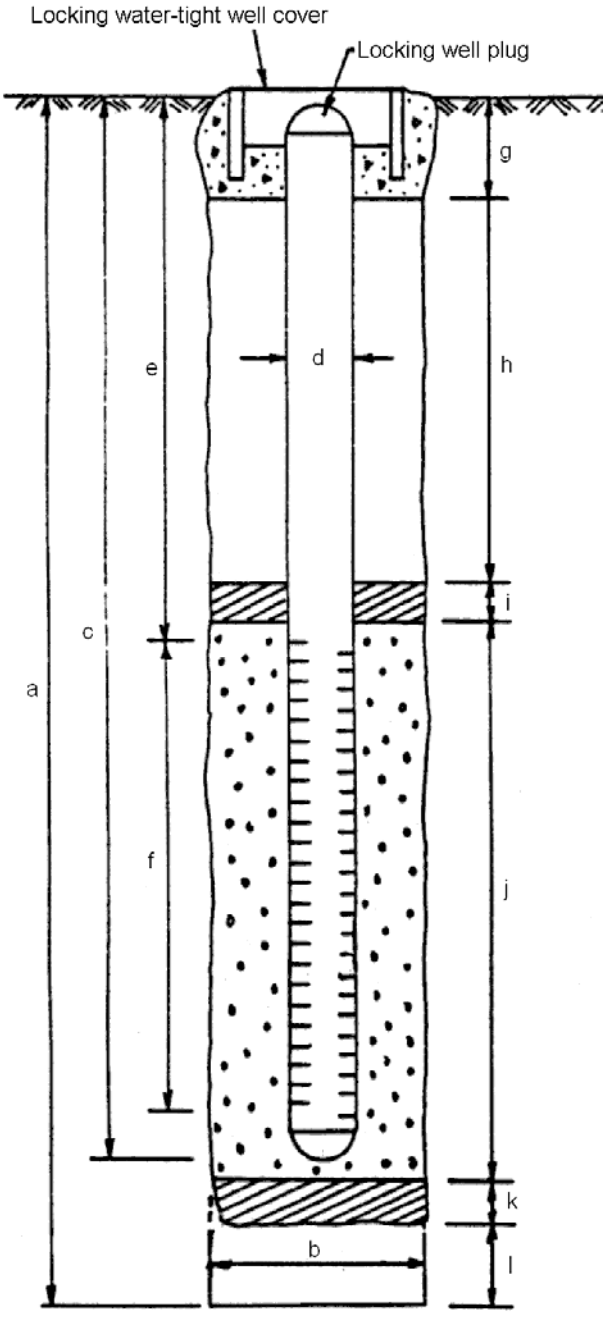
BORING/WELL NO. EW2

TOP OF CASING ELEV. 176.65

GROUND SURFACE ELEVATION 177.76

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/9/10



EXPLORATORY BORING

a. Total depth 25.0 ft.

b. Diameter 12.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 22.0 ft.

Material PVC Schedule 40

d. Diameter 4.0 in.

e. Depth to top of perforations 13.0 ft.

f. Perforated length 10.0 ft.

Perforated interval from 13.0 to 23.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.5 ft.

Seal material Concrete

h. Sanitary seal 9.5 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 11.0 ft.

Filter pack interval from 12.0 to 23.0 ft.

Pack material # 2/12 sand

k. Bottom seal 2.0 ft.

Seal material Bentonite Pellet

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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

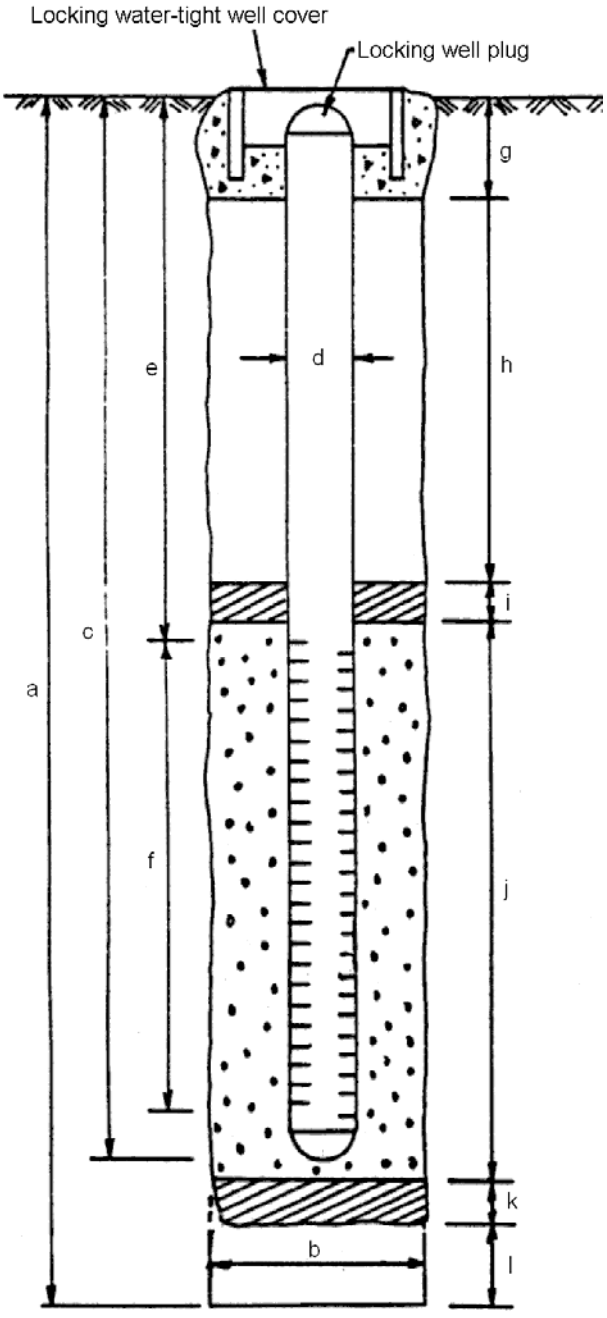
BORING/WELL NO. EW3

TOP OF CASING ELEV. 181.02

GROUND SURFACE ELEVATION 181.34

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/9/10



EXPLORATORY BORING

a. Total depth 23.0 ft.

b. Diameter 12.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 22.5 ft.

Material PVC Schedule 40

d. Diameter 4.0 in.

e. Depth to top of perforations 13.0 ft.

f. Perforated length 10.0 ft.

Perforated interval from 13.0 to 23.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.5 ft.

Seal material Concrete

h. Sanitary seal 9.5 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 11.0 ft.

Filter pack interval from 12.0 to 23.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0945

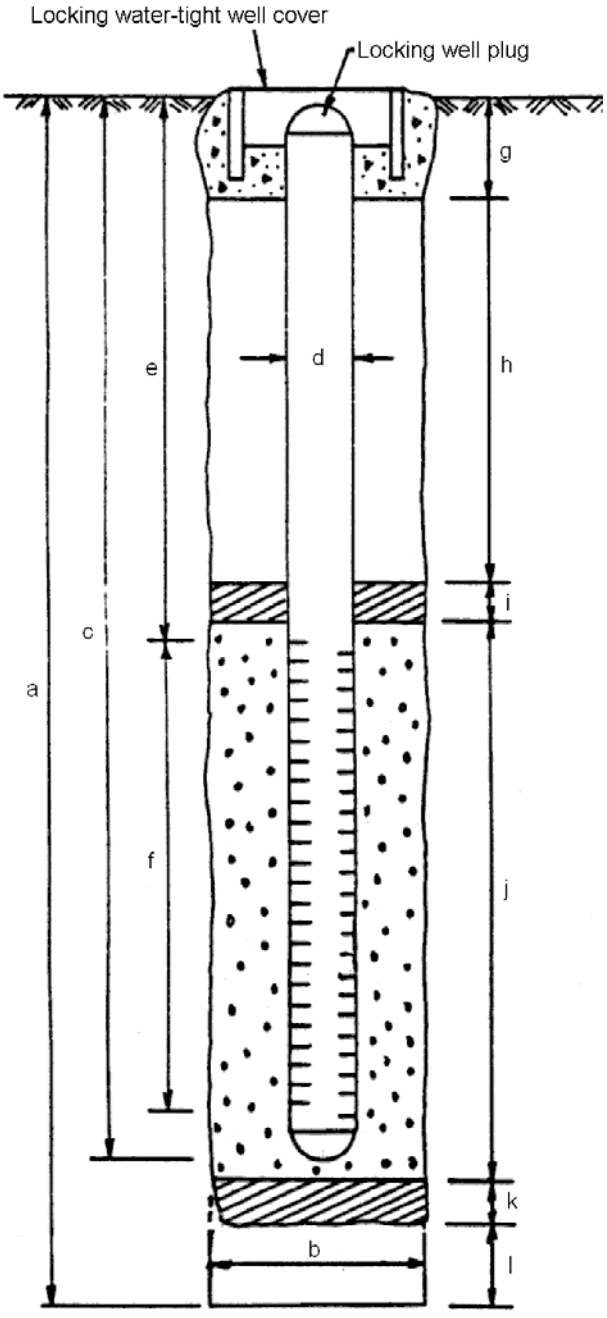
BORING/WELL NO. OW1

TOP OF CASING ELEV. 174.20

GROUND SURFACE ELEVATION 174.57

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/7/10



EXPLORATORY BORING

a. Total depth 20.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 19.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 15.0 ft.

Perforated interval from 5.0 to 20.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 16.0 ft.

Filter pack interval from 4.0 to 20.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0947

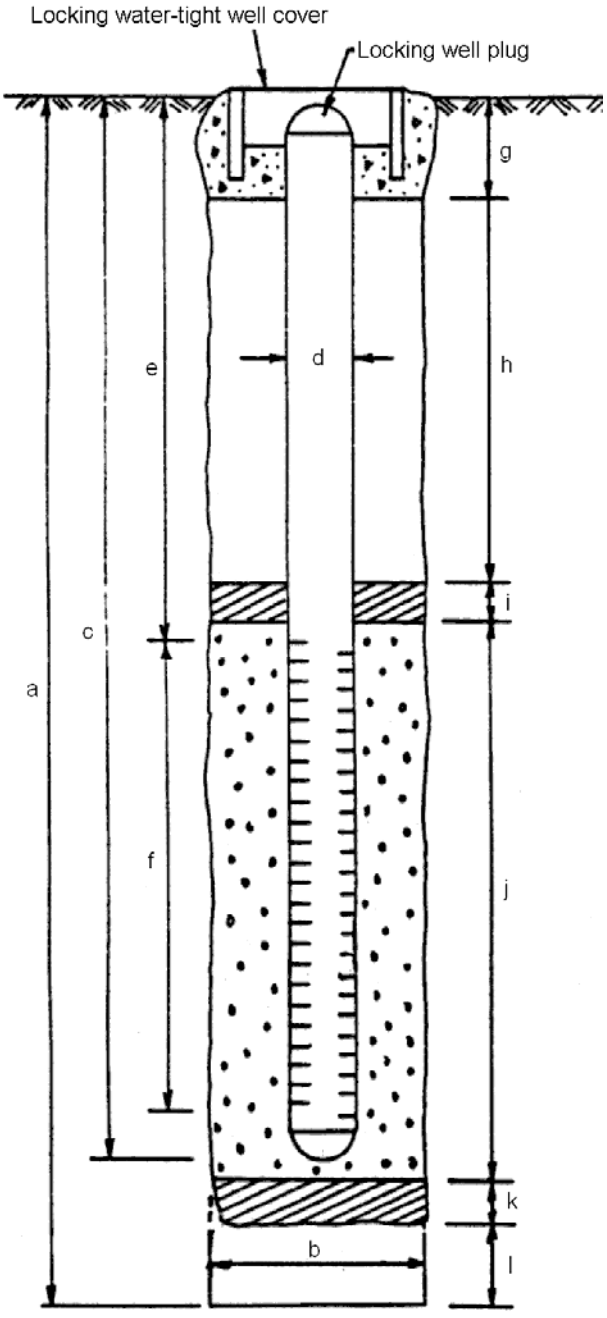
BORING/WELL NO. OW3

TOP OF CASING ELEV. 176.70

GROUND SURFACE ELEVATION 177.07

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/7/10



EXPLORATORY BORING

a. Total depth 20.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 19.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 15.0 ft.

Perforated interval from 5.0 to 20.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 16.0 ft.

Filter pack interval from 4.0 to 20.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0948

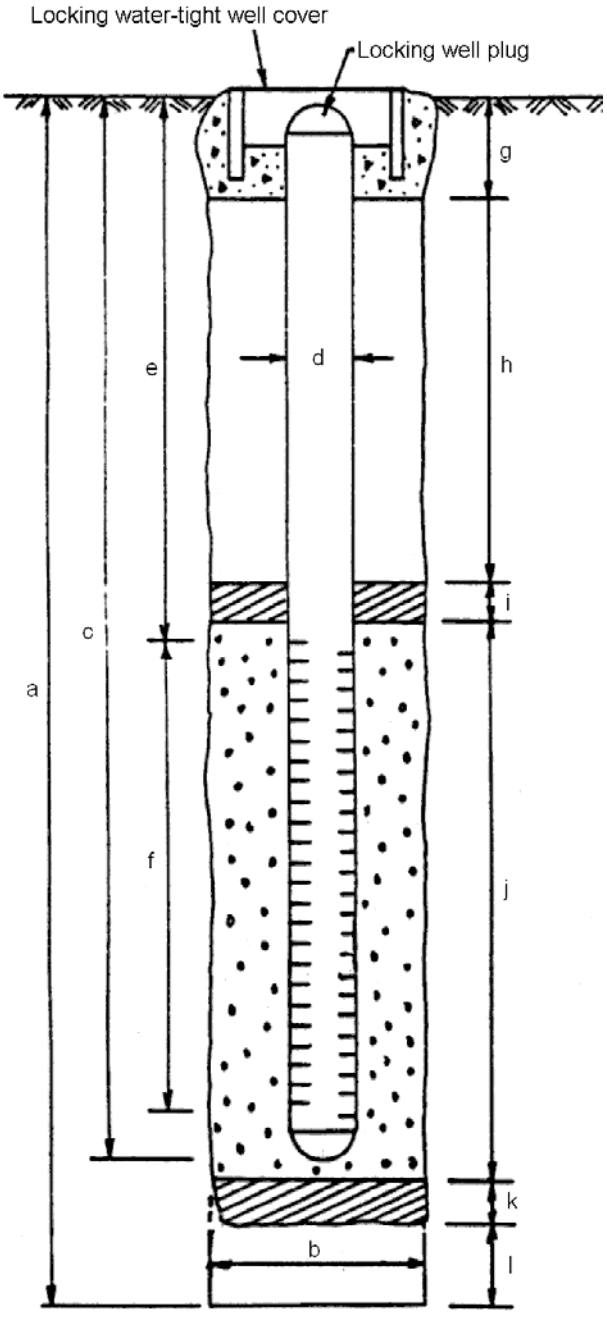
BORING/WELL NO. OW4

TOP OF CASING ELEV. 180.74

GROUND SURFACE ELEVATION 181.05

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/8/10



EXPLORATORY BORING

a. Total depth 20.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 19.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 15.0 ft.

Perforated interval from 5.0 to 20.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 16.0 ft.

Filter pack interval from 4.0 to 20.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0949

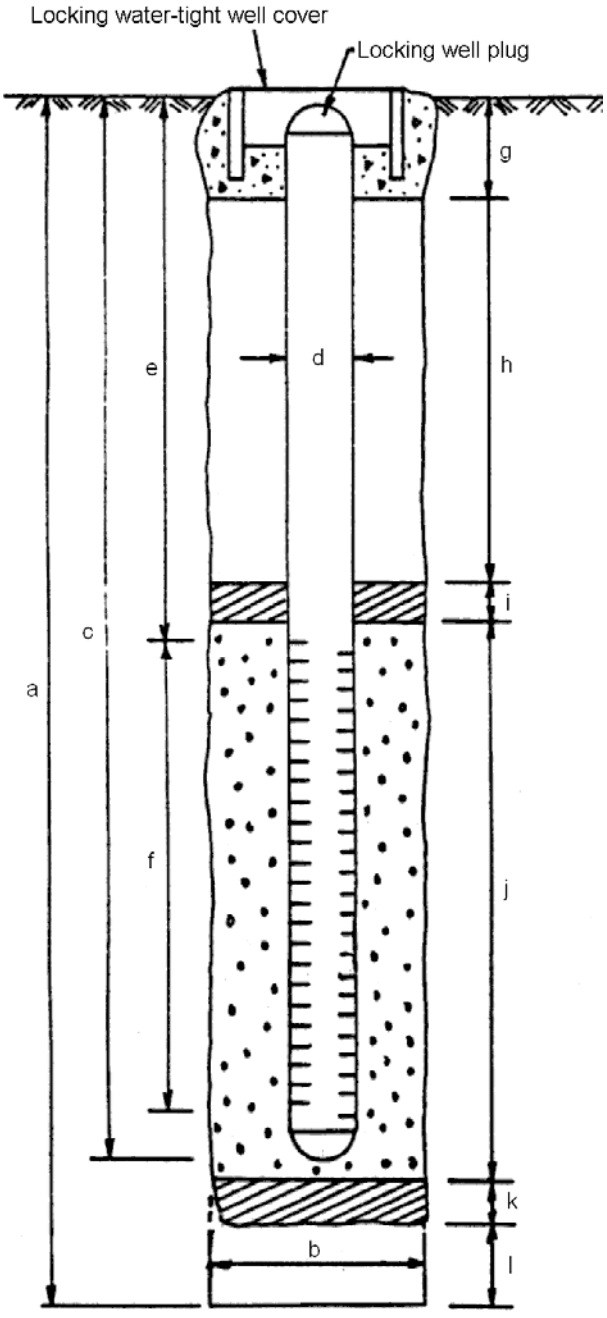
BORING/WELL NO. OW5

TOP OF CASING ELEV. 180.52

GROUND SURFACE ELEVATION 180.70

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/6/10



EXPLORATORY BORING

a. Total depth 20.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 19.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 15.0 ft.

Perforated interval from 5.0 to 20.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 16.0 ft.

Filter pack interval from 4.0 to 20.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0950

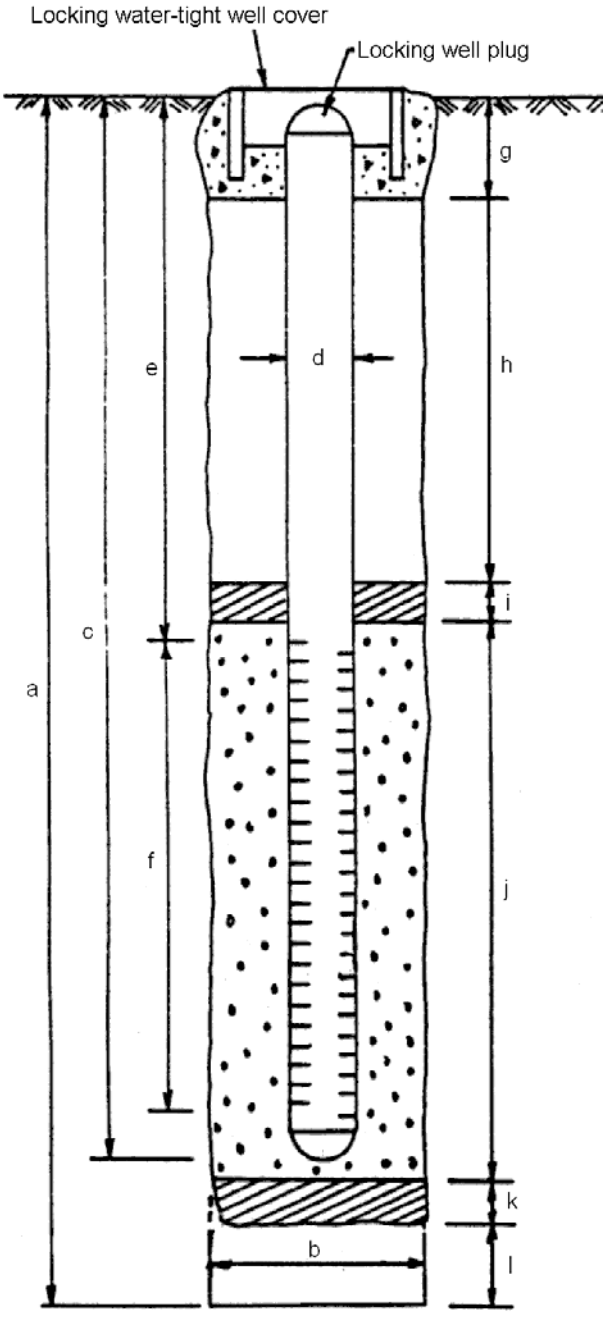
BORING/WELL NO. OW6

TOP OF CASING ELEV. 177.02

GROUND SURFACE ELEVATION 177.22

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/7/10



EXPLORATORY BORING

a. Total depth 20.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 19.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 15.0 ft.

Perforated interval from 5.0 to 20.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 16.0 ft.

Filter pack interval from 4.0 to 20.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

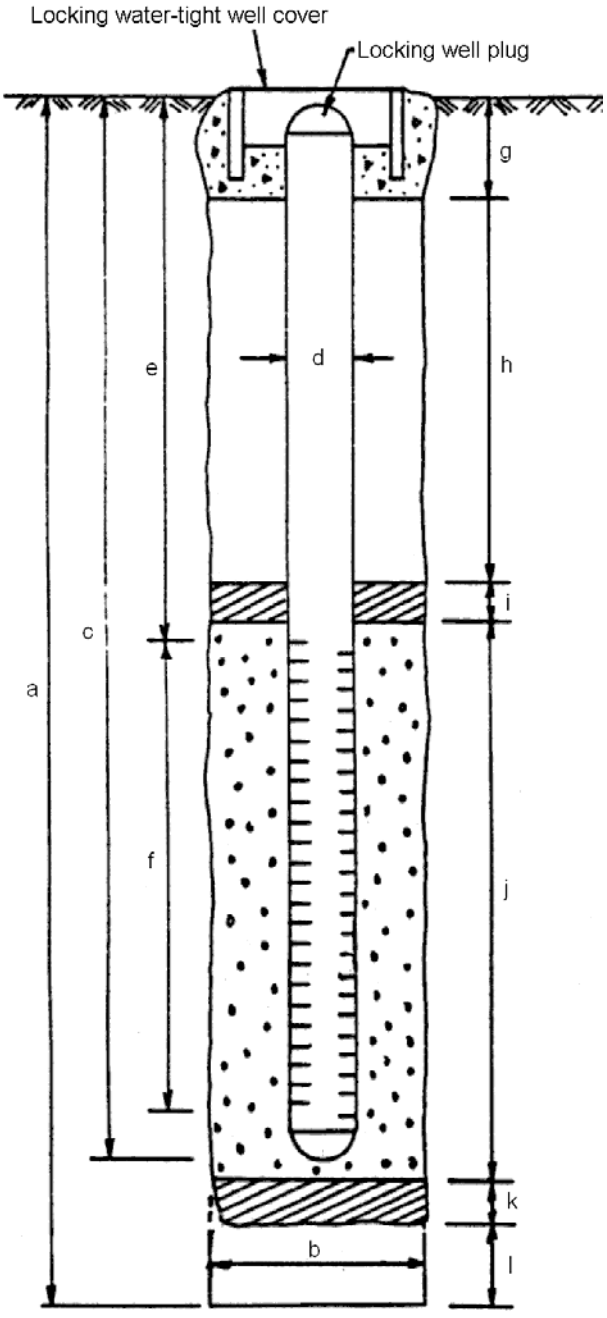
BORING/WELL NO. C1

TOP OF CASING ELEV. 177.37

GROUND SURFACE ELEVATION 177.78

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/7/10



EXPLORATORY BORING

a. Total depth 13.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 12.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 9.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 9.0 to 13.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 6.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 8.0 to 13.0 ft.

Pack material # 2/12 sand

k. Bottom seal 0 ft.

Seal material None

l. Sluff in bottom of borehole 0 ft.

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Oakland, CA 94610
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WELL CONSTRUCTION DIAGRAM

PROJECT NUMBER 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

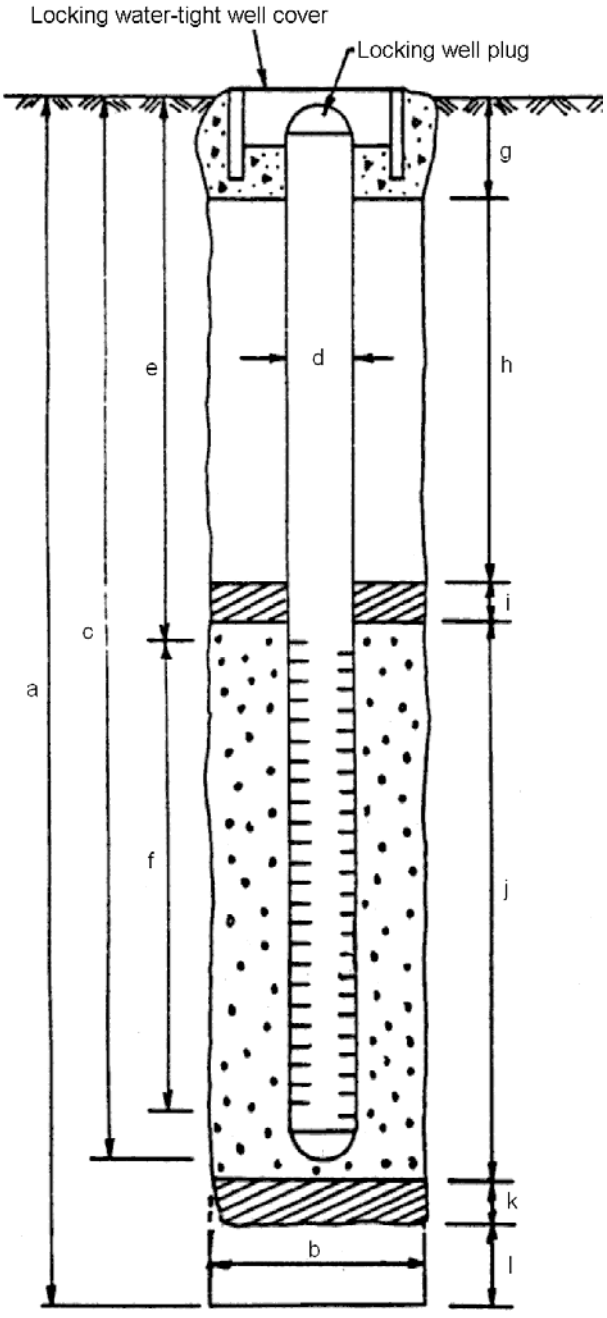
BORING/WELL NO. C2

TOP OF CASING ELEV. 177.72

GROUND SURFACE ELEVATION 178.03

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/7/10



EXPLORATORY BORING

a. Total depth 13.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 12.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 9.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 9.0 to 13.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 6.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 8.0 to 13.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

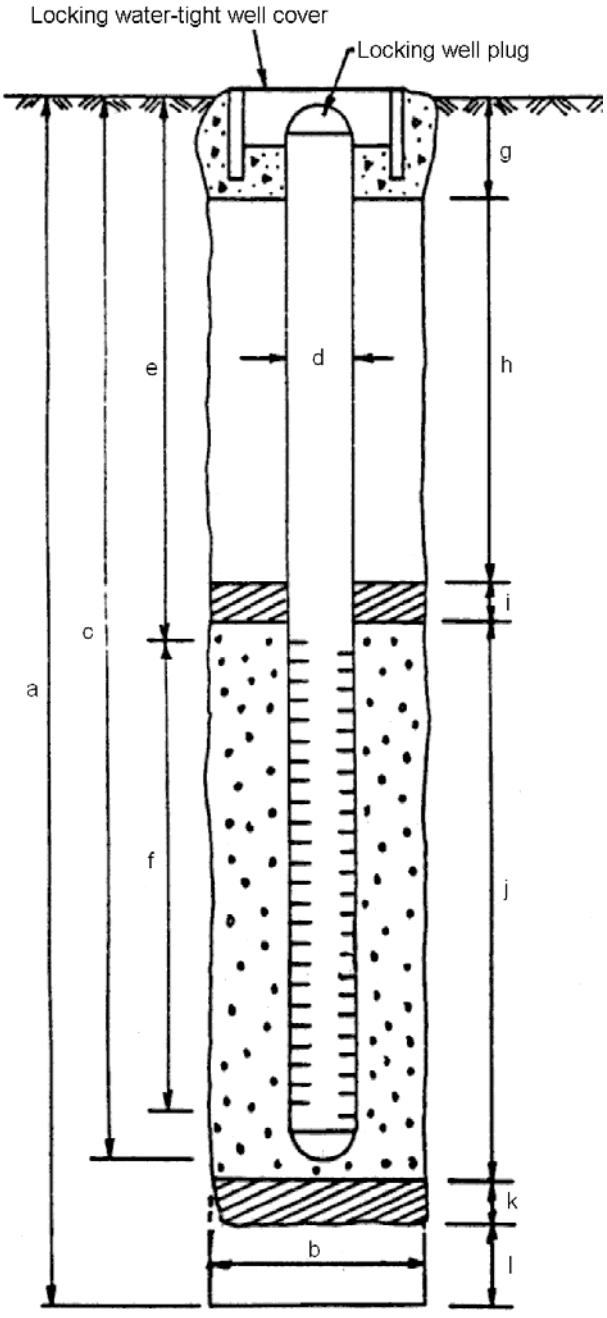
BORING/WELL NO. C3

TOP OF CASING ELEV. 176.41

GROUND SURFACE ELEVATION 176.76

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/8/10



EXPLORATORY BORING

a. Total depth 13.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 12.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 9.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 9.0 to 13.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 6.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 8.0 to 13.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

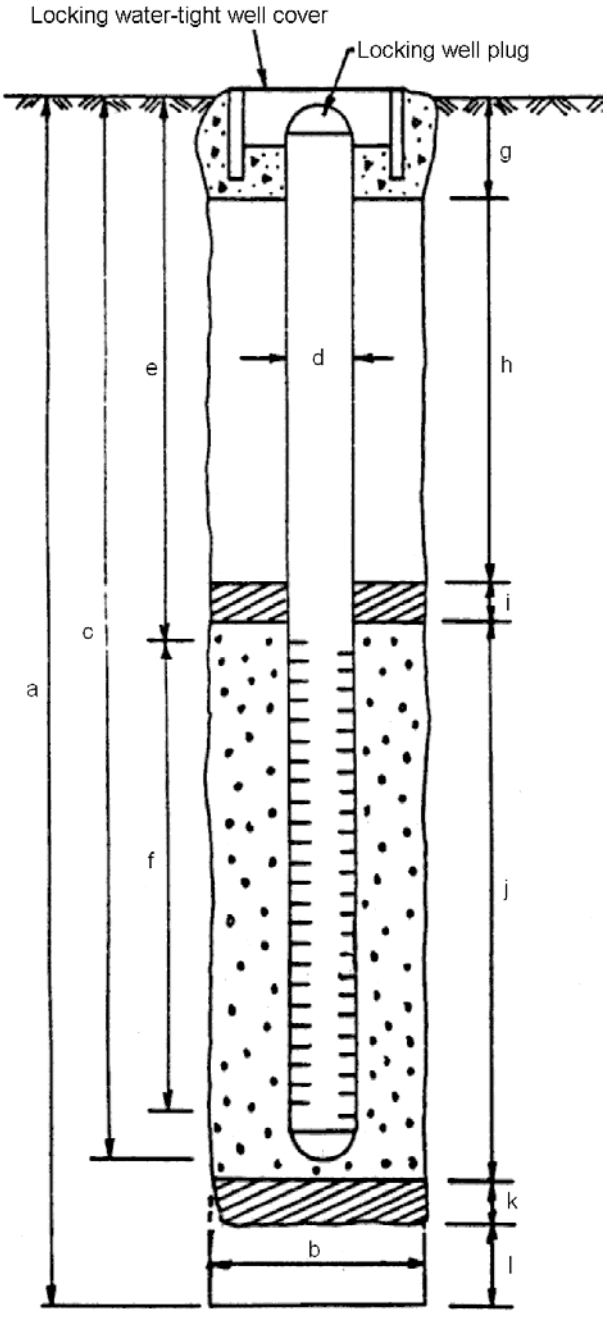
BORING/WELL NO. C4

TOP OF CASING ELEV. 180.06

GROUND SURFACE ELEVATION 180.29

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/6/10



EXPLORATORY BORING

a. Total depth 13.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 12.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 9.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 9.0 to 13.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 6.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 8.0 to 13.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

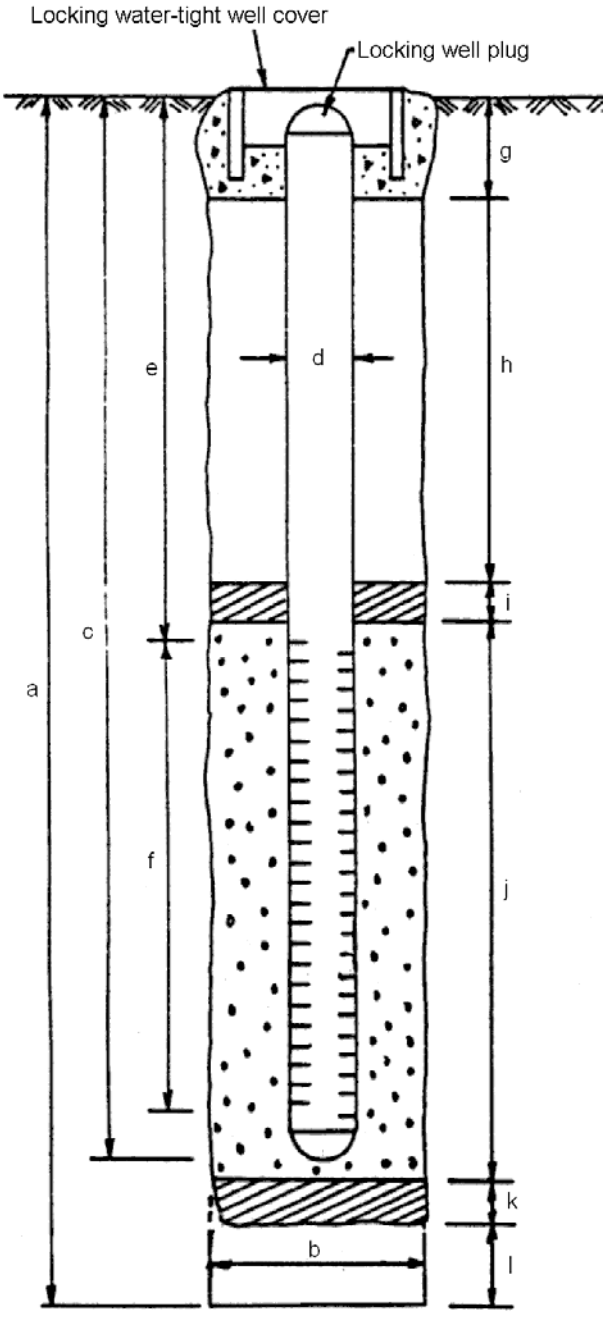
BORING/WELL NO. F1

TOP OF CASING ELEV. 181.35

GROUND SURFACE ELEVATION 181.59

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/6/10



EXPLORATORY BORING

a. Total depth 9.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 9.0 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 5.0 to 9.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 4.0 to 9.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

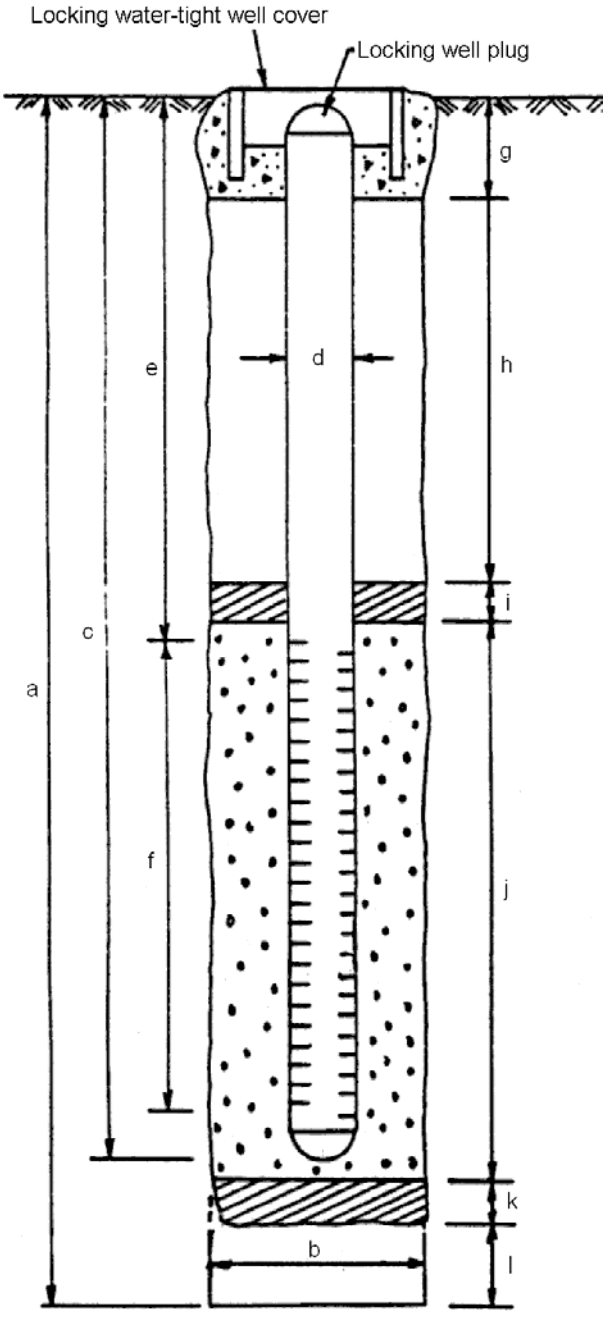
BORING/WELL NO. F2

TOP OF CASING ELEV. 181.56

GROUND SURFACE ELEVATION 181.86

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/6/10



EXPLORATORY BORING

a. Total depth 9.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 8.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 5.0 to 9.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 4.0 to 9.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

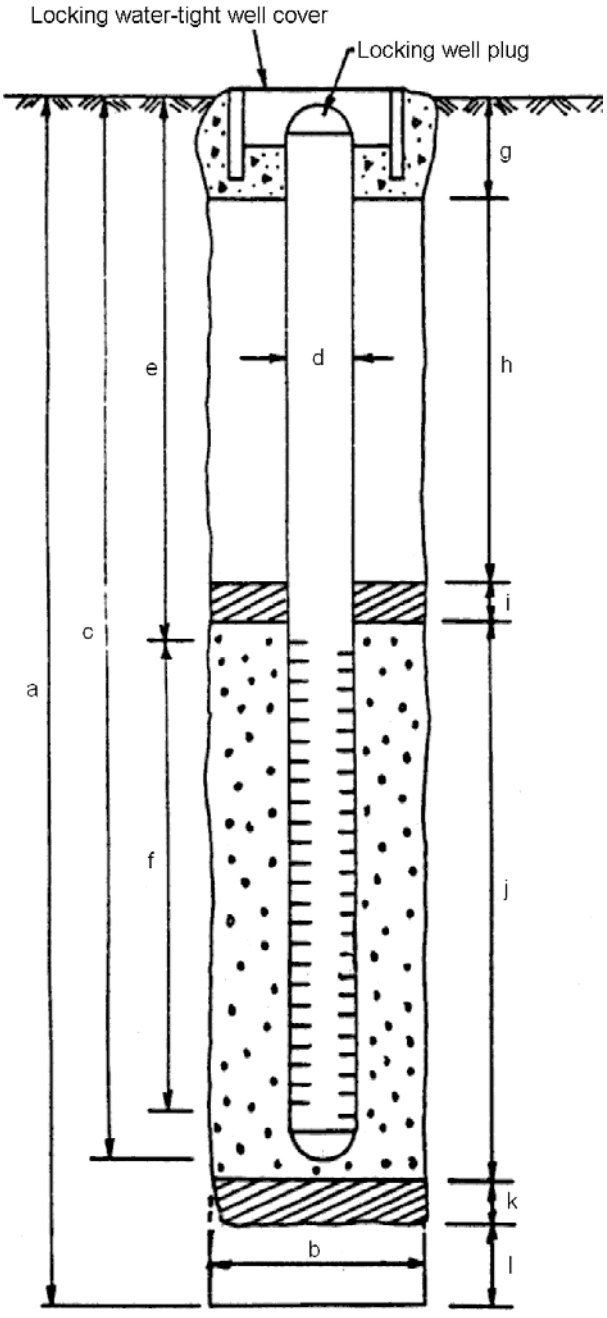
BORING/WELL NO. F3

TOP OF CASING ELEV. 180.08

GROUND SURFACE ELEVATION 180.62

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/6/10



EXPLORATORY BORING

a. Total depth 9.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 8.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 5.0 to 9.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 4.0 to 9.0 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 0047

PROJECT NAME VIP Service, Castro Valley

COUNTY Alameda

WELL PERMIT NO. 2010-0944

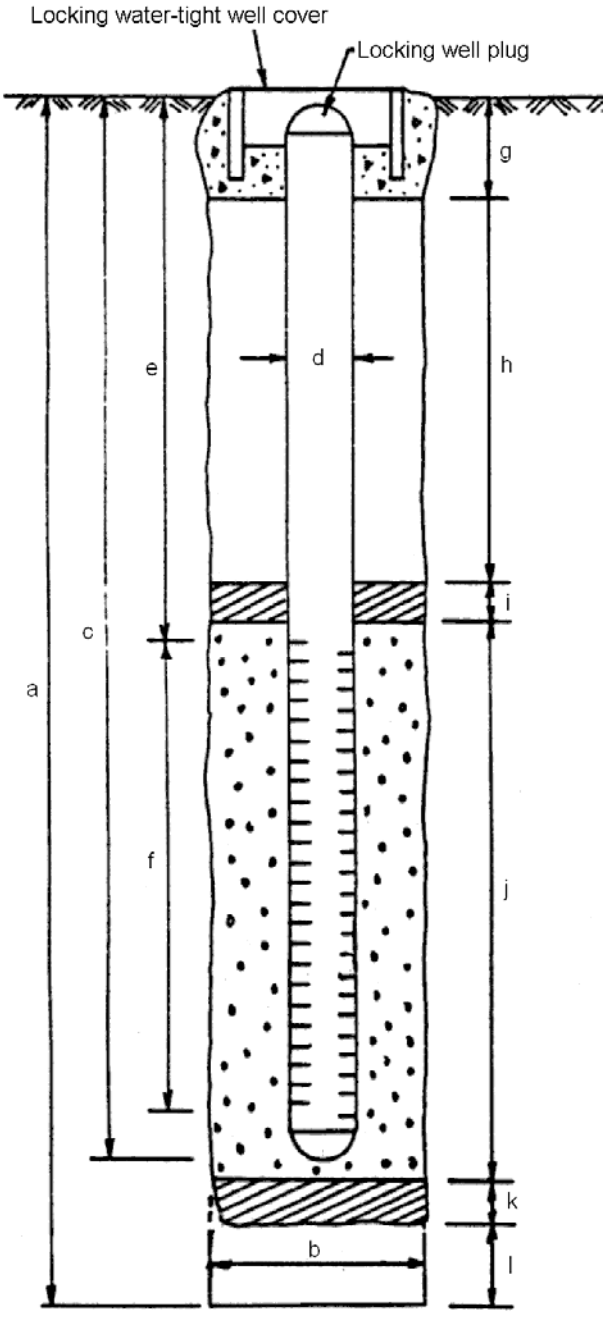
BORING/WELL NO. F4

TOP OF CASING ELEV. 177.14

GROUND SURFACE ELEVATION 177.47

DATUM 56.33 ft., NAVD88

DATE(S) CONSTRUCTED 12/7/10



EXPLORATORY BORING

a. Total depth 9.0 ft.

b. Diameter 8.0 in.

Drilling method Hollow-Stem Auger

WELL CONSTRUCTION

c. Casing length 8.5 ft.

Material PVC Schedule 40

d. Diameter 2.0 in.

e. Depth to top of perforations 5.0 ft.

f. Perforated length 4.0 ft.

Perforated interval from 5.0 to 9.0 ft.

Perforation type Factory Slotted PVC

Perforation size 0.020 in.

g. Surface sanitary seal 1.0 ft.

Seal material Concrete

h. Sanitary seal 2.0 ft.

Seal material Portland cement type I-II

i. Filter pack seal 1.0 ft.

Seal material Bentonite

j. Filter pack length 5.0 ft.

Filter pack interval from 4.0 to 9.0 ft.

Pack material # 2/12 sand

k. Bottom seal 0 ft.

Seal material None

l. Sluff in bottom of borehole 0 ft.

APPENDIX C

Survey Data

- **November 1993**
- **December 2010**
- **February 2011**

November 12, 1993
Job No. 93583

Table of Elevations

V.I.P. Service Station

3889 Castro Valley Boulevard

Castro Valley, California

Well No.	Elevation	
	@ Cut X N. Rim Box	@ Mark on PVC Casing
MW-1	181.12	180.83 (South side)
MW-2	180.01	179.70 (South side)
MW-3	179.28	178.98 (East side)

Benchmark: "CVB-ASPEN" An Alameda County disc stamped "CVB-ASPEN-1977" on Castro Valley Blvd. at Aspen Ave. Disc is in top of D.I. 3.0' Easterly of the Easterly return of the Southeasterly corner of Castro Valley Blvd. and Aspen Ave.

Elevation = 170.27 Feet M.S.L.

Kier & Wright Civil Engineers & Surveyors, Inc.
5880 West Las Positas Boulevard, Suite 34 ♦ Pleasanton, California ♦ (510) 734-8060 ♦ (510) 734-8064

TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS

P & D ENVIRONMENTAL

3889 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
EW-1	2078695.19	6108014.69	175.51	4" PVC NORTH SIDE
	N 37° 41' 35.74486"	W 122° 04' 04.66261"	176.44	RIM OF WELL
			176.41	PVMT. NORTH SIDE
EW-2	2078737.99	6108054.89	176.65	4" PVC NORTH SIDE
	N 37° 41' 36.17456"	W 122° 04' 04.17135"	177.77	RIM OF WELL
			177.76	PVMT. NORTH SIDE
EW-3	2078697.25	6108122.03	181.02	4" PVC NORTH SIDE
	N 37° 41' 35.78300"	W 122° 04' 03.32764"	181.4	RIM OF WELL
			181.34	PVMT. NORTH SIDE
F-1	2078693.69	6108070.91	181.35	2" PVC NORTH SIDE
	N 37° 41' 35.73931"	W 122° 04' 03.96282"	171.74	RIM OF WELL
			181.59	PVMT. NORTH SIDE
F-2	2078690.31	6108063.40	181.56	2" PVC NORTH SIDE
	N 37° 41' 35.70472"	W 122° 04' 04.05564"	181.92	RIM OF WELL
			181.86	PVMT. NORTH SIDE
F-3	2078710.20	6108081.99	180.08	2" PVC NORTH SIDE
	N 37° 41' 35.90437"	W 122° 04' 03.82854"	180.69	RIM OF WELL
			180.62	PVMT. NORTH SIDE
F-4	2078717.81	6108047.23	177.14	2" PVC NORTH SIDE
	N 37° 41' 35.97382"	W 122° 04' 04.26244"	177.48	RIM OF WELL
			177.47	PVMT. NORTH SIDE
C-1	2078724.79	6108052.01	177.37	2" PVC NORTH SIDE
	N 37° 41' 36.04362"	W 122° 04' 04.20450"	177.76	RIM OF WELL
			177.78	PVMT. NORTH SIDE
C-2	2078748.92	6108065.85	177.72	2" PVC NORTH SIDE
	N 37° 41' 36.28446"	W 122° 04' 04.03732"	178.08	RIM OF WELL
			178.03	PVMT. NORTH SIDE

Kier & Wright Civil Engineers & Surveyors

2850 Collier Canyon Road, Livermore, CA 94551

Phone: (925) 245-8788

Fax: (925) 245-8796

TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS

P & D ENVIRONMENTAL

3889 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

WELL ID #	NORTHING (FT.) / LATITUDE (D.M.S.)	EASTING (FT.) / LONGITUDE (D.M.S.)	ELEVATION (FT.)	DESCRIPTION
C-3	2078734.91	6108036.85	176.41	2" PVC NORTH SIDE
	N 37° 41' 36.14115"	W 122° 04' 04.39516"	176.76	RIM OF WELL
			176.76	PVMT. NORTH SIDE
C-4	2078719.39	6108088.11	180.06	2" PVC NORTH SIDE
	N 37° 41' 35.99621"	W 122° 04' 03.75426"	180.37	RIM OF WELL
			180.29	PVMT. NORTH SIDE
OW-1	2078711.51	6107984.47	174.20	2" PVC NORTH SIDE
	N 37° 41' 35.90121"	W 122° 04' 05.04194"	174.58	RIM OF WELL
			174.57	PVMT. NORTH SIDE
OW-3	2078759.14	6108047.26	176.70	2" PVC NORTH SIDE
	N 37° 41' 36.38246"	W 122° 04' 04.27076"	177.13	RIM OF WELL
			177.07	CONC. NORTH SIDE
OW-4	2078715.78	6108132.78	180.74	2" PVC NORTH SIDE
	N 37° 41' 35.96791"	W 122° 04' 03.19785"	181.06	RIM OF WELL
			181.05	PVMT. NORTH SIDE
OW-5	2078708.08	6108085.25	180.52	2" PVC NORTH SIDE
	N 37° 41' 35.88394"	W 122° 04' 03.78747"	180.77	RIM OF WELL
			180.7	PVMT. NORTH SIDE
OW-6	2078716.04	6108042.78	177.02	2" PVC NORTH SIDE
	N 37° 41' 35.95561"	W 122° 04' 04.31749"	177.23	RIM OF WELL
			177.22	PVMT. NORTH SIDE

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TABLE OF ELEVATIONS & COORDINATES
ON MONITORING WELLS

P & D ENVIRONMENTAL
3889 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 BLOSSSOM 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.

Kier & Wright Civil Engineers & Surveyors
2850 Collier Canyon Road, Livermore, CA 94551
Phone: (925) 245-8788
Fax: (925) 245-8796

KIER & WRIGHT
CIVIL ENGINEERS & SURVEYORS, INC
1233 Quarry Lane, Ste.145
Pleasanton, CA 94566
Phone (925) 249-6555
Fax (925) 249-6563
3350 Scott Blvd., Bldg. 22
Santa Clara, CA 95054
Phone: (408) 727-6665
Fax: (408) 727-5641

JOB # A07654-1 CREW PE/JR
DATE 2/12/11 INST
PAGE 1 OF 1

LEVEL NOTES

STA	+	HI	-	ROD	ELEV	DESCRIPTION
					180.07	KW 202
	6.01	186.08				
			3.93		182.15	MW-3 PV 1' NORTH
			3.98		182.10	RIM
			4.36		181.72	NOTCH
	4.82	186.54				
			3.65		182.89	MW-2 PV 1' NORTH
			3.73		182.81	RIM
			4.065		182.475	NOTCH
	3.985	186.46				
			2.37		184.09	MW-1 PV 1' NORTH
			2.41		184.05	RIM
			2.85		183.61	NOTCH
	2.64	186.25				
			6.18		180.07	KW 202 ✓

APPENDIX D

Well Development Data Sheets

Field Data Sheet

Date: 12/17/10 **Project Name:** Castro Valley Blvd. **Project Number:** _____

Technician: P. Arroyo **Location:** Castro Valley, CA **Global ID :** _____

Well ID	Casing Diameter	Total Depth	DTP	DTW	Thickness	Comments
C4	2"	12.8	-	5.9	-	
OW5	2"	19.7	-	6.32	-	
OW4	2"	18.15	-	6.15	-	
F3	2"	8.69	-	5.95	-	
F1	2"	8.63	-	8.27	-	NOT ENOUGH WATER TO DEVELOP
F2	2"	8.75	-	7.53	-	NOT ENOUGH WATER TO DEVELOP
EW3	4"	22.5	-	6.57	-	
EW2	4"	22.3	-	3.18	-	
OW6	2"	19.84	-	3.34	-	
F4	2"	8.75	-	2.28	-	
C1	2"	12.7	-	3.61	-	
EW1	4"	18.95	-	2.1	-	
C2	2"	12.6	-	4.21	-	
C3	2"	12.73	-	3.1	-	
OW1	2"	19.65	-	2.7	-	
OW3	2"	19.8	-	4.05	-	

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	EW1	Project Number:	47
Well Diameter:	4"	Purging Method:	Honda Pump
Initial Depth to Water:	2.1	Casing Volume:	11.12
Total Depth of Well:	18.95	Pump Depth:	18.95
Total Depth After Dvlp.:	18.95	Total Casing Vol. Removed:	7

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	959	-	1976	8.73	23.2	<1000	dark brown
12	1004	10.2	1997	7.8	20	<1000	dark brown
24	1009	17.6	2177	8.56	20.7	<1000	dry
36	1207	18.2	1928	7.12	20.7	<1000	brown
48	1211	dry	1843	7.22	18.9	<1000	dry
60	1452	13.26	1963	7.36	19.3	<1000	light brown
72	1459	dry	2012	7.24	20.1	<1000	dry
84							
96							
108							
120							

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/17/10
Well ID:	F3	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	5.95	Casing Volume:	0.46
Total Depth of Well:	8.69	Pump Depth:	8.69
Total Depth After Dvlp.:	8.69	Total Casing Vol. Removed:	5

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	144	-	1980	7.15	21.1	<1000	dark brown
1	1145	8.55	2479	7.1	20.8	<1000	dark brown
2	1147	dry	2376	7.23	22.5	<1000	dry
3	1236	-	2456	7.18	21.9	<1000	brown
4	1238	dry	2423	7.21	21.7	<1000	dry
5							
6							
7							
8							
9							
10							

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes: slight odor, slow recharge.

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/17/10
Well ID:	OW5	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	6.32	Casing Volume:	2.27
Total Depth of Well:	19.7	Pump Depth:	19.7
Total Depth After Dvlp.:	19.7	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1100	-	1017	7.13	15.6	<1000	dark gray
3	1102	8.4	2183	6.95	21.6	<1000	dark gray
6	1104	8.58	2000	6.98	20.9	<1000	dark gray
9	1106	8.39	1889	6.95	22.2	<1000	dark gray
12	1108	8.17	1822	6.96	22.7	<1000	cloudy
15	1111	8.32	1827	6.95	22.8	<1000	cloudy
18	1114	8.3	1850	6.96	21.9	893	clearing
21	1116	8.34	1832	6.96	22.1	716	clearing
24	1119	8.41	1818	6.96	22.9	236	clear
27	1122	8.46	1820	6.96	22.8	29.8	clear
30	1125	8.49	1819	6.96	22.9	19.3	clear

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/17/10
Well ID:	OW4	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	6.15	Casing Volume:	1.99
Total Depth of Well:	17.9	Pump Depth:	17.9
Total Depth After Dvlp.:	18.15	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1222	-	1987	7.26	19.1	<1000	dark brown
2	1223	8.14	1860	7.2	20.9	<1000	dark brown
4	1224	8.44	1766	7.11	21.4	<1000	dark brown
6	1226	8.53	1698	7.05	21.7	<1000	brown
8	1227	8.58	1677	7.02	21.8	<1000	brown
10	1228	8.6	1682	7.02	21.7	<1000	brown
12	1229	8.6	1680	7.01	21.8	<1000	light brown
14	1231	8.6	1675	7.02	21.9	<1000	light brown
16	1234	8.56	1648	7.03	21.3	<1000	clearing
18	1236	8.6	1690	6.99	21.9	891	clearing
20	1238	8.59	1708	7.1	21.3	793	clearing

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	EW2	Project Number:	47
Well Diameter:	4"	Purging Method:	Honda Pump
Initial Depth to Water:	3.18	Casing Volume:	12.62
Total Depth of Well:	22.3	Pump Depth:	22
Total Depth After Dvlp.:	22.3	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1055	-	1556	8.64	18.4	<1000	dark brown
13	1100	12.15	2210	7.28	20.2	<1000	brown
26	1105	12.32	2068	7.13	20.1	<1000	light brown
39	1110	12.32	2060	7.19	20.1	<1000	light brown
52	1116	12.32	2019	7.21	20.2	<1000	light brown
65	1121	15.2	1974	7.18	20.4	<1000	light brown
78	1127	15.42	1961	7.17	20	<1000	light brown
91	1134	15.6	1949	7.15	19.7	<1000	cloudy
104	1140	15.7	1915	7.14	20.2	367	clearing
117	1145	15.82	1903	7.11	20.2	438	clearing
130	1150	15.87	1899	7.14	19.5	359	clearing

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/17/10
Well ID:	EW3	Project Number:	47
Well Diameter:	4"	Purging Method:	Honda Pump
Initial Depth to Water:	6.57	Casing Volume:	9.56
Total Depth of Well:	21.05	Pump Depth:	21
Total Depth After Dvlp.:	22.5	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1349	-	1619	7.33	16.8	<1000	dark brown
10	1352	9.15	1607	7.28	21.2	<1000	dark brown
20	1355	9.02	2133	7.24	20.8	<1000	dark brown
30	1359	8.79	2026	7.16	21.8	<1000	brown
40	1403	8.98	2033	7.12	20.9	<1000	brown
50	1407	9.14	2033	7.08	21.1	<1000	brown
60	1412	9.29	2078	7.06	20.5	<1000	light brown
70	1417	9.2	2053	7.03	20.7	<1000	light brown
80	1422	9.5	2050	7.01	21	<1000	light brown
90	1427	9.62	2078	7	21	<1000	light brown
100	1432	9.69	1983	7.02	21	821	clearing

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/17/10
Well ID:	C4	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	5.9	Casing Volume:	0.88
Total Depth of Well:	11.1	Pump Depth:	11
Total Depth After Dvlp.:	12.8	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	957	-	1488	7.09	19	<1000	dark gray
1	959	9.9	1995	7.09	21.3	<1000	dark gray
2	1001	9.35	2040	7	23.4	<1000	dark gray
3	1003	9.32	2014	6.99	23.4	<1000	dark gray
4	1005	9.35	1981	6.97	23.7	<1000	dark gray
5	1007	9.38	1954	6.96	23.8	<1000	gray
6	1009	9.39	1932	7	23.3	<1000	gray
7	1011	9.45	1923	7.27	23.4	<1000	light gray
8	1013	9.44	1918	7.31	23	<1000	light gray
9	1015	9.46	1876	7.3	23.7	<1000	cloudy
10	1018	9.46	1859	7.31	23.9	<1000	cloudy

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes: slight odor. Removed large amounts of sand.

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	C1	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	3.61	Casing Volume:	1.54
Total Depth of Well:	12.7	Pump Depth:	12.7
Total Depth After Dvlp.:	12.7	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	837	-	1595	7.2	21.5	<1000	dark brown
2	839	7.75	858	7.26	19.1	<1000	dark brown
4	841	7.98	1721	6.86	19.5	<1000	dark brown
6	844	8.5	1822	6.89	20	<1000	dark brown
8	847	10.18	1877	6.82	20.2	<1000	brown
10	849	11.45	1879	6.86	19.8	<1000	light brown
12	851	11.3	1859	7.21	21.5	<1000	light brown
14	856	11.29	1873	7.19	22	927	cloudy
16	858	11.26	1885	7.13	21.3	816	clearing
18	902	11.2	1880	7.16	20.8	212	clear
20	905	11.21	1864	7.16	21.8	57.6	clear

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes: slight odor.

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/17/10
Well ID:	C2	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	4.21	Casing Volume:	1.43
Total Depth of Well:	12.6	Pump Depth:	12.6
Total Depth After Dvlp.:	12.6	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1550	-	1867	7.3	16.3	<1000	dark brown
2	1552	8.85	1824	7.21	18.8	<1000	dark brown
4	1553	-	1812	7.17	19.5	<1000	dark brown
6	1554	11.54	1736	7.15	20.1	<1000	dark brown
8	1556	11.87	1777	7.28	20.5	<1000	brown
10	1559	11.84	1761	7.32	20.5	<1000	light brown
12	1602	11.89	1758	7.25	20.8	<1000	cloudy
14	1605	11.92	1773	7.26	20.2	887	clearing
16	1608	11.92	1760	7.28	21.3	632	clearing
18	1611	11.9	1754	7.25	21.1	184	clear
20	1614	11.78	1753	7.25	21.1	59.2	clear

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	C3	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	3.1	Casing Volume:	1.63
Total Depth of Well:	12.73	Pump Depth:	12.73
Total Depth After Dvlp.:	12.73	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	815	-	2184	7.31	17.2	<1000	dark brown
2	818	10.79	2257	7.14	19.7	<1000	dark brown
4	820	12.15	2282	7.24	20.6	<1000	dry @ 5 gal.
6	915	8.59	1960	7.13	21.7	<1000	restart - cloudy
8	919	10.25	1947	7.01	22.7	<1000	cloudy
10	924	11.25	1957	7.1	23.9	<1000	cloudy
12	931	11.62	1902	7.35	26.2	<1000	cloudy
14	937	12.2	1890	7.11	27	<1000	cloudy
16	944	12.45	1890	7.42	25.9	<1000	cloudy
18	950	12.4	1890	7.39	25.6	<1000	cloudy
20	955	12.43	1890	7.41	25.2	<1000	cloudy

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes: slight odor.

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	OW6	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	3.34	Casing Volume:	2.8
Total Depth of Well:	19.82	Pump Depth:	19.82
Total Depth After Dvlp.:	19.84	Total Casing Vol. Removed:	10

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1243	-	1940	7.72	16.9	<1000	dark brown
3	1246	9.9	1292	7.27	19.3	<1000	dark brown
6	1248	12.38	1772	7.02	18.6	<1000	dark brown
9	1250	15.2	1723	7.06	19.4	<1000	dark brown
12	1252	17.45	1917	7.18	20	<1000	brown
15	1254	18.58	1992	7.15	20.6	<1000	brown
18	1257	18.69	2036	7.25	20.3	<1000	light brown
21	1301	18.39	2045	7.23	21	<1000	light brown
24	1307	18.25	2026	7.16	21.2	506	clearing
27	1311	18.24	2006	7.14	21.2	133	clear
30	1315	18.23	2015	7.14	21.2	58.5	clear

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	OW1	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	2.7	Casing Volume:	2.88
Total Depth of Well:	19.63	Pump Depth:	19.63
Total Depth After Dvlp.:	19.65	Total Casing Vol. Removed:	7

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1218	-	2346	7.85	21.5	<1000	dark brown
3	1221	8.23	2557	8.51	19.4	<1000	dark brown
6	1224	15.65	2725	7.58	19.4	<1000	dark brown
9	1227	dry	2752	7.52	20.7	<1000	dry @ 10 gal.
12	1332	-	2553	7.73	19.1	<1000	restart - brown
15	1336	dry	2501	7.57	20.7	<1000	dry @ 14 gal. Cloudy
18	1406	-	2526	7.49	20.1	851	cloudy
21	1415	dry	2541	7.53	20.6	412	dry @ 19 gal.
24							
27							
30							

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes: _____

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	F4	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	2.28	Casing Volume:	1.09
Total Depth of Well:	8.75	Pump Depth:	8.75
Total Depth After Dvlp.:	8.75	Total Casing Vol. Removed:	5

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1326	-	2127	7.25	23.5	<1000	dark brown
1	1327	-	2468	7.12	18.5	<1000	dark brown
2	1328	8.1	2561	7.06	18.1	<1000	dark brown
3	1330	dry	2601	7.29	17.5	<1000	dry @ 3 gal.
4	1344	8.2	2686	7.51	15.3	<1000	restart - brown
5	1347	dry	2567	7.61	18	<1000	dry @ 5 gal.
6							
7							
8							
9							
10							

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes: _____

Environmental Field Services

Well Development Record

Project Name:	Castro Valley Blvd.	Date:	12/18/10
Well ID:	OW3	Project Number:	47
Well Diameter:	2"	Purging Method:	Honda Pump
Initial Depth to Water:	4.05	Casing Volume:	2.67
Total Depth of Well:	19.8	Pump Depth:	19.8
Total Depth After Dvlp.:	19.8	Total Casing Vol. Removed:	7

Volume Purged (gal.)	Time	DTW	Conductivity (uS/cm)	pH	Temp. °C	Turbidity (NTU)	Comments:
Initial	1359	-	2240	7.74	23.6	<1000	dark brown
3	1401	10.2	2511	7.35	20.5	<1000	dark brown
6	1405	10.41	2441	7.27	20.7	<1000	brown
9	1407	16.15	2485	7.35	20.9	<1000	brown
12	1409	dry	2190	7.28	21.3	<1000	brown - dry
15	1430	12.1	2236	7.32	20.8	<1000	restart - brown
18	1434	15.32	2242	7.34	21.1	<1000	brown
21	1440	dry	2238	7.33	20.8	<1000	light brown - dry
24							
27							
30							

pH Calibration

Buffer Solution: HI 7031, HI 7007, HI 7004

Notes:

Daily Field Report

Date: 12/17/2010

Company: P & D Environmental

Contact: Paul King

Project Name: Castro Valley Blvd.

Location: Castro Valley, Ca

Prepared by:

Environmental Field Services, LLC

Peter Arroyo

227 Palomino Way

Patterson Ca, 95363
(209)321-6255
Fax: (209) 892-1190

Notes:

Arrive on-site, locate & open well, allow well to equilibrate.

Wells were gauged using a Solonist water level meter(TD & DTW). Well were surged with a 3.66" & 1.66" surge block depending on diameter of well for approximately 10 minutes.

All equipment was decontaminated before arriving and between each use using Alcanox & water.

Monitoring wells were purged with a Honda pump, speed controlled with a ball valve.

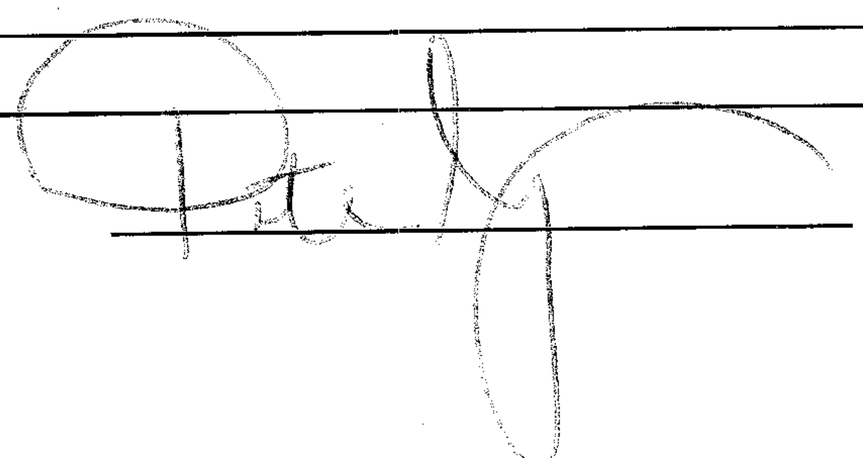
Dedicated 1/2" poly tubing was used in the wells & disposed of after use.

Purge water was contained in 55 gallon poly drums that were sealed and labelled (Non Hazardous)

9 drums were left on-site.

All wells / drums were sealed before departure, all trash generated by EFS was removed as well.

Signature:



APPENDIX E

Well Monitoring/Purge Data Sheets

ND

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Well No. MW1
Job No. 0047
Date 12/20/10
TOC to Water (ft.) 7.27
Sheen None
Well Depth (ft.) 20.0
Free Product Thickness Ø
Well Diameter 2" (0.16)
Sample Collection Method
Gal./Casing Vol. 2.1
Disposable bailer
3 vol = 6.3

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1159	0.7	7.15	19.1	1,594
1201	1.4	6.85	19.3	1,555
1203	2.1	sic. ~~6.73~~ 6.59	19.7	1,527
1204	2.8	6.56	19.8	1,516
1206	3.5	6.55	19.9	1,505
1207	4.2	6.56	19.9	1,502
1209	4.9	6.56	20.0	1,498
1211	5.6	6.57	20.1	1,485
1213	6.3	6.57	19.8	1,476

NOTES: No sheen + no odor. Sample time ⇒ 1227 hrs

PURGE10.92

(ND)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 7.10
Well Depth (ft.) 20.0
Well Diameter 2" (0.16)
Gal./Casing Vol. 2.1
3 vol = 6.3

Well No. MW2
Date 12/20/10
Sheen NO
Free Product Thickness 0
Sample Collection Method Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1231	0.7	6.93	18.4	1,437
1232	1.4	6.80	18.9	1,442
1234	2.1	6.73	18.9	1,454
1235	2.8	6.71	18.9	1,460
1237 ~~1236~~ gal	3.5	6.70	19.0	1,457
1238	4.2	6.72	19.1	1,454
1239	4.9	6.74	19.2	1,452
1241	5.6	6.79	19.3	1,456
1243	6.3	6.77	19.4	1,446

NOTES: No sheen + no odor. Sample time = 1250 hrs

PURGE10.92

(4)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIPService

Well No. MW3

Job No. 0047

Date 12/20/10

TOC to Water (ft.) 7.07

Sheen No

Well Depth (ft.) 20.0

Free Product Thickness

Well Diameter 2" (0.16)

Sample Collection Method Disposable bailer

Gal./Casing Vol. 2.1

3vol = 6.3

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µS/cm
1257	0.7	6.81	17.5	1,608
1259	1.4	6.79	18.2	1,616
1301	2.1	6.84	18.5	1,610
1304	2.8	6.85	18.5	1,610
1305	3.5	6.94	18.8	1,612
1307	4.2	7.02	19.2	1,610
1308	4.9	7.03	19.1	1,610
1309	5.6	7.04	19.0	1,611
1311	6.3	7.04	19.2	1,615

NOTES: No sheen - ~~mod~~ sl ~~[illegible]~~ phc odor - Slight - mod sampletime => 1315

PURGE10.92

(6)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 1.59
Well Depth (ft.) (20.0) 19.0 ft
Well Diameter 4.0 (0.646)
Gal./Casing Vol. 11.3
3 vol = 33.9

Well No. EW1
Date 12/20/10
Sheen No
Free Product Thickness Ø
Sample Collection Method
Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1539	3.7	~~8~~ 8.18	17.2	4066
1543	7.5	7.83	18.6	4,182
1547	11.3	7.41	19.1	4,552
1551	15.0	7.28	19.4	4645
1555	18.8	7.23	19.3	4,679
1559	22.6	7.15	19.4	4,701
1606	26.3	7.09	19.3	4,696
1610	30.1	7.13	19.2	4,702
1615	33.9	7.13	19.4	4,710

NOTES: N. sheen; slight phc odor
sample time = 1620

PURGE10.92

(14)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Well No. EW2
Job No. 0047
Date 12/20/10 Sampled 12/21/10
TOC to Water (ft.) 2.74
Sheen No
Well Depth (ft.) (25.0) PBTD 23.3
Free Product Thickness 0
Well Diameter 4.0 (0.646)
Sample Collection Method
Gal./Casing Vol. 12.7
Disposable bailer
3 vol = 38.1

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm	
0935	4.2	7.11	17.7	1,723	draw down
0940	8.5	7.39	18.6	1,676	
0944	12.7	7.30	18.8	1,662	
0950	16.9	7.28	19.0	1,653	
0954	21.2	7.32	19.1	1,682	
1005	25.4	7.39	19.2	~~1,671~~ 1,663	sl
1009	29.6	7.53	19.2	1,682	
1015	33.9	7.81	19.4	1,697	
1026	38.1	7.76	~~19.2~~ 19.3	1,690	sl
1028	38.4	7.79	19.2	1,685	

NOTES: Very slight (~~if any~~) phe odor @ 1st ~~then nothing~~
no sheen Sample time @ 1040 hrs

PURGE10.92

(3)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 6.08
Well Depth (ft.) (23.0) 22.5 PA
Well Diameter 4.0 (0.646)
Gal./Casing Vol. 10.7
3 vol = 32.1

Well No. EW3
Date 12/20/10 sampled ⇒ 12/21/10
Sheen No
Free Product Thickness 0
Sample Collection Method
Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1201	3.5	7.29	20.6	1,669
1204	7.1	7.15	21.4	1,628
1207	10.7	7.15	21.4	1,630
1211	14.2	7.13	21.3	1,629
1215	17.8	7.08	21.3	1,656
1219	21.4	7.07	21.4	1,654
1222	24.9	6.76	21.4	1,671
1229	28.5	6.96	21.3	1,674
1233	32.1	7.08	21.2	1,669
1234	32.4	7.04	21.2	1,678
1235	32.7	7.02	21.3	1,668

NOTES: No Sheen + no odo.-
Sample flow ⇒ 1240hrs

PURGE10.92

(5)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 1.88
Well Depth (ft.) (20.0) PA 19.7
Well Diameter 2.0 (0.16)
Gal./Casing Vol. 2.9
3 vol = 8.7

Well No. OW1
Date 12/20/10
Sheen Yes
Free Product Thickness 0
Sample Collection Method
Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1342	0.9	7.09	16.7	1,977 SI = 1905
1345	1.9	7.22	17.2	1,848
1346	2.9	7.49	17.3	1,811
1347	3.8	7.44	17.7	1,868
1349	4.8	7.36	18.3	1,906
1351	5.8	7.33	18.8	1,938
1353	6.7	7.32	19.1	1,965
1357	7.7	7.35	19.4	2,036
1403	8.7	7.39	19.2	2,047

NOTES: Sheen (oil like) + very slight phs odor
Sampling @ MSL

PURGE10.92

(8)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 3.46
Well Depth (ft.) (20.0) BA 19.8
Well Diameter 2.0 (0.16)
Gal./Casing Vol. 2.7
3 vol = 8.1

Well No. OW3
Date 12/20/10 sampled → 12/21/10
Sheen No
Free Product Thickness 0
Sample Collection Method
Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1408	0.9	6.96	17.9	1,764
1410	1.8	6.95	18.6	1,828
1411	2.7	6.97	18.7	1,877
1412	3.6	SI 7.08	19.1	1,871
1414	4.5	7.26	19.6	1,866
1415	5.4	7.31	19.6	1,886
1417	6.3	7.32	19.6	1,900
1421	7.2	7.28	19.8	1,823
1423	8.1	7.28	19.8	1,834

NOTES: No odor + no sheen
Sample time = 1430 hrs

PURGE10.92

(9)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 5.75
Well Depth (ft.) (20.0) NA 14.7
Well Diameter 2.0 (0.16)
Gal./Casing Vol. 2.0
3 vol = 6.0

Well No. OW4
Date 12/20/10 sampled 12/21/10
Sheen No
Free Product Thickness 0
Sample Collection Method
Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1127	~~0~~ 0.6	7.30	20.1	1,570
1128	1.3	7.37	20.3	1,592
1130	2.0	7.23	20.8	1,560
1131	2.6	7.15	20.9	1,568
1133	3.3	7.13	21.0	1,562
1134	4.0	7.13	21.0	1,554
1135	4.6	7.13	21.0	1,552
1137	5.3	7.15	20.7	1,554
1139	6.0	7.08	20.6	1,552

NOTES: No sheen; Possible slight PHC odor
sample time @ 1145

PURGE10.92

(11)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Well No. OW5
Job No. 0047
Date 12/20/10 sampled 12/21/10
TOC to Water (ft.) 5.83
Sheen yes
Well Depth (ft.) (20.0) PA 19.7
Free Product Thickness 0
Well Diameter 2.0 (0.16)
Sample Collection Method
Gal./Casing Vol. 2.3
Disposable bailer
3 vol = 6.9

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1303	0.7	6.98	19.8	1,747
1305	1.5	7.17	20.6	1,779
1307	2.3	7.04	21.1	1,753
1308	3.0	7.04	21.1	1749
1310	3.8	7.03	21.1	1,723
1311	4.6	7.03	21.1	1,691
1313	5.3	7.03	21.1	1,689
1314	6.1	7.05	21.1	1,685
1316	6.9	7.05	21.3	1,676

NOTES: sheen + mod - strong petr odor
sample time @ 1325

PURGE10.92

10

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Well No. OW6
Job No. 0047
Date 12/20/10
TOC to Water (ft.) 2.86
Sheen yes
Well Depth (ft.) (20.0) BR 19.8
Free Product Thickness 0
Well Diameter 2.0 (0.16)
Sample Collection Method
Gal./Casing Vol. 2.8
Disposable bailer
3 vol = 8.4

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1424	0.9	7.10	16.4	1,605
1426	1.9	6.97	17.5	1,716
1427	2.8	7.19	17.8	1,707
1429	3.7	7.17	17.9	1,719
1431	4.7	7.14	18.0	1,727
1432	5.7	7.11	18.0	1731
1433	6.6	7.08	18.0	1737
1435	7.6	7.07	18.4	1,730
1437	8.4	7.07	18.4	1,733

NOTES: slight mod phi odor
Sample time => 1445hrs

PURGE10.92

(13)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name: VIP Service
Well No.: C1
Job No.: 0047
Date: 12/20/10
TOC to Water (ft.): 3.24
Sheen: yes
Well Depth (ft.): (13.0) PA 12.7
Free Product Thickness: Ø
Well Diameter: 2.0 (0.16)
Sample Collection Method: Disposable bailer
Gal./Casing Vol.: 1.6
3 vol = 4.8

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µS/cm
1457	~~0.6~~ 0.5	6.77	16.6	1,759
1459	~~1.1~~ 1.1	6.95	17.4	1,825
1500	~~1.6~~ 1.6	6.88	17.8	1,831
1502	~~2.2~~ 2.1	6.88	17.8	1,833
1503	~~2.7~~ 2.7	6.87	17.9	1,829
1504	~~3.2~~ 3.2	6.87	18.1	1,813
1505	~~3.8~~ 3.7	6.87	18.3	1,793
1507	~~4.5~~ 4.3	6.87	18.4	1,778
1508	~~5.0~~ 4.8	6.89	18.	1,806

NOTES: Sheen, ~~mod~~ mod-strong phc odor
Sample time → 1515

PURGE10.92

(15)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 3.84
Well Depth (ft.) (13.0) PA 12.6
Well Diameter 2.0 (0.16)
Gal./Casing Vol. 1.5
3 vol = 4.5

Well No. C2
Date 12/20/10 & Sampled 12/21/10
Sheen yes
Free Product Thickness Ø
Sample Collection Method
Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1440	0.5	7.06	17.9	1,548
1442	1.0	7.21	18.6	1,573
1444	1.5	7.24	19.0	1,574
1445	2.0	7.24	19.1	1,578
1446	2.5	7.23	19.3	1,572
1447	3.0	7.21	19.3	1,578
1448	3.5	7.21	19.4	1,580
1449	4.0	7.19	19.5	1,577
1450	4.5	7.20	19.5	1,578

NOTES: Sheen & ~~if not~~ slight-mod petr odor
Sample time = 1500

PURGE10.92

(7)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Well No. C3
Job No. 0047
Date 12/20/10 sampled 12/21/10
TOC to Water (ft.) 3.07
Sheen No
Well Depth (ft.) (13.0) PA 13.7
Free Product Thickness Ø
Well Diameter 2.0 (0.16)
Sample Collection Method
Gal./Casing Vol. 1.6
Disposable bailer
3 vol = 4.8

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1336	0.5	6.83	17.9	1,733
1338	1.1	6.75	18.5	1,737
1339	1.6	7.10	19.0	1,745
1340	2.1	7.08	19.2	1,759
1341	2.7	7.07	19.3	1,756
1342	3.2	7.08	19.3	1,758
1343	3.7	7.09	19.3	1,756
1345	4.3	7.09	19.5	1,760
1347	4.8	7.10	19.6	1,767

NOTES: No sheen, very slight phenolic odor
Sample time @ 1400

PURGE10.92

(12)

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 5.41
Well Depth (ft.) (13.0) PA 12.8
Well Diameter 2.0 (0.16)
Gal./Casing Vol. 1.7
3 vol = 5.6

Well No. C4
Date 12/20/10 Sampled 12/21/10
Sheen yes
Free Product Thickness Ø
Sample Collection Method S/C
Disposable bailer

TIME	GAL. PURGED	pH	TEMPERATURE °C	ELECTRICAL CONDUCTIVITY µs/cm
1056	0.4	7.31	19.3	1,650
1058	0.8	7.50	20.0	1,655
1059	1.2	7.37	20.7	1,665
1100	1.6	7.28	20.8	1,670
1101	2.0	7.23	20.8	1,685
1102	2.4	7.20	20.9	1,675
1103	2.8	7.18	21.0	1,687
1104	3.2	7.17	21.0	1,659
1105	3.6	7.13	20.8	1,674

NOTES: sheen + mod-strong chem odor
Sample time = 1115 hrs

PURGE10.92

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 7.98
Well Depth (ft.) 9.0
Well Diameter 2"
Gal./Casing Vol.

Well No. F1
Date 12/20/10
Sheen N/A
Free Product Thickness 00
Sample Collection Method
Not Sampled

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
			SIC	

NOTES: Monitored Only; No Sample Collected

PURGE10.92

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Well No. F2
Job No. 0047
Date 12/20/10
TOC to Water (ft.) 7.16
Sheen N/A
Well Depth (ft.) 9.0
Free Product Thickness Ø
Well Diameter 2"
Sample Collection Method
Gal./Casing Vol. N/A
Not Sampled

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
		SIC		

NOTES: Monitored only; No samples collected.

PURGE10.92

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name VIP Service
Job No. 0047
TOC to Water (ft.) 5.45
Well Depth (ft.) 9.0
Well Diameter 2" (0.16)
Gal./Casing Vol. N/A

Well No. F3
Date 12/20/10
Sheen N/A
Free Product Thickness Ø
Sample Collection Method
Not Sampled

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
		51 c		

NOTES: Monitored only; No Sample Collected.

PURGE10.92

P&D ENVIRONMENTAL
GROUNDWATER MONITORING/WELL PURGING
DATA SHEET

Site Name: VIP Service
Well No.: F4
Job No.: 0047
Date: 12/20/10
TOC to Water (ft.): 3.26
Sheen: N/A
Well Depth (ft.): 9.0
Free Product Thickness: 0
Well Diameter: 2"
Sample Collection Method: Not Sampled
Gal./Casing Vol.: N/A

TIME	GAL. PURGED	pH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
		S/C		

NOTES: Monitored Only; No sample Collected.

PURGE10.92

APPENDIX F

Drum Disposal Documentation

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.		2. Page 1 of 1	3. Document Number 09686

4. Generator's Name and Mailing Address VIP Service
3889 Castro Valley Blvd.
Castro Valley, CA

Generator's Phone

5. Transporter Company Name	6. US EPA ID Number	7. Transporter Phone
CLEARWATER ENVIRONMENTAL	CAR000007013	(510) 476-1740

8. Designated Facility Name and Site Address	9. US EPA ID Number	10. Facility's Phone
Alviso Independent Oil 5002 Archer Street Alviso, CA 95002	CAL 000 161 743	510-476-1740

GENERATOR

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-Hazardous waste – Liquid	011	dm	500	G
b. Non-Hazardous waste - Solid	022	dm	19,000	P

15. Special Handling Instructions and Additional Information

Wear PPE
Emergency Contact
(510) 476-1740
Attn: Charles Seaton

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	Signature	Month	Day	Year
Signed on behalf of Generator	Will Clark	12	27	10

TRANSPORTER

17. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
William Clark	Will Clark	12	27	10

FACILITY

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	Signature	Month	Day	Year
Charles Seaton	[signature]	12	28	10

WHITE–ORIGINAL (Return to Generator) YELLOW–TSDF (Retain Copy) PINK–TRANSPORTER COPY GOLDENROD-GENERATOR'S COPY

APPENDIX G

Laboratory Analytical Reports and Chain of Custody Documentation

- **Field Date 12/9/2010 Comp A and Comp B soil samples for drum disposal McCampbell Work Order #1012368**
- **Field Date 12/9/2010 Comp A and Comp B soil samples for drum disposal Chromium STLC McCampbell Work Order #1012368_addon_A**
- **Field Date 12/20/2010 MW1, MW2, and MW3 Groundwater samples McCampbell Work Order # 1012798**
- **Field Date 12/20-21/2010 EW1-EW3, OW1, OW3-OW6, and C1-C4 Groundwater samples McCampbell Work Order # 1012807**

McCampbell Analytical, Inc.
"When Quality Counts"

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

P & D Environmental	Client Project ID: #0047; Vip Service	Date Sampled: 12/09/10
		Date Received: 12/10/10
55 Santa Clara, Ste.240	Client Contact: Michael Deschenes	Date Reported: 12/17/10
Oakland, CA 94610	Client P.O.:	Date Completed: 12/16/10

WorkOrder: 1012368

December 17, 2010

Dear Michael:

Enclosed within are:

1) The results of the **2** analyzed samples from your project: **#0047; Vip Service,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

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

1012368

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0047	VIP SERVICE 3889 CASTRO VALLEY BLVD CASTRO VALLEY

SAMPLED BY: (PRINTED AND SIGNATURE)
MICHAEL DESCHENES

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-G	BTEX	LUFT 5 METALS				PRESERVATIVE	REMARKS
COMP A1	12/9/10	1000	SOIL	PLEASE COMPOSITE PRIOR TO ANALYSIS	1	X	X					ICE	NORMAL TURN AROUND
COMP A2		1010			1	X	X						
COMP A3		1020			1	X	X						
COMP A4		1030			1	X	X						
COMP B1	12/9/10	1045	SOIL	PLEASE COMPOSITE PRIOR TO ANALYSIS	1	X	X					ICE	NORMAL TURN AROUND
COMP B2		1100			1	X	X						
COMP B3		1110			1	X	X						
COMP B4		1400			1	X	X						

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Michael Deschenes	12/10/10	1454	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
	12/10/10	1610	Fernando Cruz 12/10/10 16:10
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)

TOTAL NO. OF SAMPLES (THIS SHIPMENT): 2
TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 8

LABORATORY: MC CAMPBELL ANALYTICAL
LABORATORY CONTACT: ANGELA RYDELIUS
LABORATORY PHONE NUMBER: (877) 252-9262

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

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

REMARKS: COMPOSITE PRIOR TO ANALYSIS

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1012368 **ClientCode: PDEO**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

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

Email: lab@pdenviro.com
cc:
PO:
ProjectNo: #0047; Vip Service

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

Requested TAT: 5 days

Date Received: **12/10/2010**
Date Printed: **12/10/2010**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1012368-001	COMP A1, 2, 3, 4	Soil	12/9/2010 10:00	☐	A	A										
1012368-002	COMP B1, 2, 3, 4	Soil	12/9/2010 10:45	☐	A	A										

Test Legend:

1	G-MBTEX_S	2	LUFT_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

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

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

Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **12/10/2010 4:18:31 PM**

Project Name: **#0047; Vip Service**

Checklist completed and reviewed by: Zoraida Cortez

WorkOrder N°: **1012368** Matrix Soil

Carrier: Derik Cartan (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 4.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

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

Client contacted: Date contacted: Contacted by:

Comments:

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

P & D Environmental	Client Project ID: #0047; Vip Service	Date Sampled: 12/09/10
		Date Received: 12/10/10
55 Santa Clara, Ste.240	Client Contact: Michael Deschenes	Date Extracted: 12/10/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 12/15/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1012368

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	COMP A1, 2, 3, 4	S	120	---	0.11	0.48	0.82	4.8	10	88	d7,d9
002A	COMP B1, 2, 3, 4	S	37	---	0.071	0.14	0.65	3.0	10	92	d2

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

%SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

d2) heavier gasoline range compounds are significant (aged gasoline?)
d7) strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9) no recognizable pattern

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
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P & D Environmental	Client Project ID: #0047; Vip Service	Date Sampled: 12/09/10
		Date Received: 12/10/10
55 Santa Clara, Ste.240	Client Contact: Michael Deschenes	Date Extracted: 12/10/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 12/14/10

LUFT 5 Metals*

Extraction method: SW3050B Analytical methods: SW6010B Work Order: 1012368

Lab ID	Client ID	Matrix	Extraction Type	Cadmium	Chromium	Lead	Nickel	Zinc	DF	% SS	Comments
001A	COMP A1, 2, 3, 4	S	TOTAL	ND	54	7.2	60	48	1	102	
002A	COMP B1, 2, 3, 4	S	TOTAL	ND	50	6.2	49	42	1	99	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	NA	NA	NA	NA	NA
	S	TOTAL	1.5	1.5	5.0	1.5	5.0	mg/Kg

*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/method detection limit; N/A means not applicable to this sample or instrument.

TOTAL = Hot acid digestion of a representative sample aliquot.
TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.
DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 54907 WorkOrder 1012368

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1012259-011A**

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	110	105	4.08	110	114	3.24	70 - 130	20	70 - 130	20
MTBE	ND	0.10	95.5	94.8	0.725	98.6	95.7	3.03	70 - 130	20	70 - 130	20
Benzene	ND	0.10	93.9	95.9	2.10	92	91.7	0.333	70 - 130	20	70 - 130	20
Toluene	ND	0.10	92.7	94.9	2.39	93.7	93.9	0.254	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	93.7	96.2	2.59	95.6	95.9	0.306	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	97	98.5	1.47	98.8	99.1	0.310	70 - 130	20	70 - 130	20
%SS:	100	0.10	94	96	2.85	95	94	1.01	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 54907 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012368-001A	12/09/10 10:00 AM	12/10/10	12/15/10 9:32 PM	1012368-002A	12/09/10 10:45 AM	12/10/10	12/15/10 11:31 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.

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

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QC SUMMARY REPORT FOR 6010B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 1012368

EPA Method SW6010B	Extraction SW3050B	BatchID: 54960	Spiked Sample ID: 1012337-012A

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
Cadmium	4.1	50	97.4	105	6.95	10	88.8	82.4	7.48	75 - 125	25	75 - 125	25
Chromium	38	50	97.6	97.8	0.144	10	97.9	100	2.50	75 - 125	25	75 - 125	25
Lead	ND	50	91.4	92.2	0.686	10	107	107	0	75 - 125	25	75 - 125	25
Nickel	46	50	97.1	95	1.10	10	98.6	102	3.07	75 - 125	25	75 - 125	25
Zinc	ND	500	94.9	99.7	3.67	100	111	112	1.23	75 - 125	25	75 - 125	25
%SS:	97	250	101	110	8.79	250	108	104	3.96	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 54960 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012368-001A	12/09/10 10:00 AM	12/10/10	12/14/10 4:39 AM	1012368-002A	12/09/10 10:45 AM	12/10/10	12/14/10 4:50 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.

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 content.

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

P & D Environmental	Client Project ID: #0047; Vip Service	Date Sampled: 12/09/10
		Date Received: 12/10/10
55 Santa Clara, Ste.240	Client Contact: Michael Deschenes	Date Reported: 12/20/10
Oakland, CA 94610	Client P.O.:	Date Completed: 12/20/10

WorkOrder: 1012368 A

December 20, 2010

Dear Michael:

Enclosed within are:

1) The results of the **2** analyzed samples from your project: **#0047; Vip Service,**
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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

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

1012368

RUSH

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: 0047

PROJECT NAME: VIP SERVICE 3889 CASTRO VALLEY BLVD CASTRO VALLEY

SAMPLED BY: (PRINTED AND SIGNATURE) MICHAEL DESCHENES [signature]

ANALYSIS(ES): TPH-G BTEX; LUFT 5 METALS; SILICA gel cleanup / 12/17/10 PER S.C. [illegible]

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	TPH-G BTEX	LUFT 5 METALS	SILICA GEL	PRESERVATIVE	REMARKS
COMP A1	12/9/10	1000	SOIL	PLEASE COMPOSITE PRIOR TO ANALYSIS	1	X	X	X	ICE	NORMAL TURN AROUND
COMP A2	↓	1010	↓		1	X	X	X	↓	↓
COMP A3	↓	1020	↓		1	X	X	X	↓	↓
COMP A4	↓	1030	↓		1	X	X	X	↓	↓
COMP B1	12/9/10	1045	SOIL	PLEASE COMPOSITE PRIOR TO ANALYSIS	1	X	X	X	ICE	NORMAL TURN AROUND
COMP B2	↓	1100	↓		1	X	X	X	↓	↓
COMP B3	↓	1110	↓		1	X	X	X	↓	↓
COMP B4	↓	1400	↓		1	X	X	X	↓	↓

ICE/t° 4.6 ✓
GOOD CONDITION ___ APPROPRIATE CONTAINERS ✓
HEAD SPACE ABSENT ___
DECHLORINATED IN LAB ___ PRESERVED IN LAB ___
PRESERVATION ___ VOAS | O & G | METALS | OTHER

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)		
[signature]	12/10/10	1454	[signature]	TOTAL NO. OF SAMPLES (THIS SHIPMENT): 2	LABORATORY: McCAMPBELL ANALYTICAL
				TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 8	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT:	LABORATORY PHONE NUMBER:
[signature]	12/10/10	1610	[signature] 12/10 16:10	ANGELA RYDELIUS	(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: COMPOSITE PRIOR TO ANALYSIS

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1012368 A **ClientCode: PDEO**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

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

Email: lab@pdenviro.com
cc:
PO:
ProjectNo: #0047; Vip Service

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

Requested TAT: 5 days
Date Received: **12/10/2010**
Date Add-On: **12/17/2010**
Date Printed: **12/17/2010**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1012368-001	COMP A1, 2, 3, 4	Soil	12/9/2010 10:00	☐	A											
1012368-002	COMP B1, 2, 3, 4	Soil	12/9/2010 10:45	☐	A											

Test Legend:

1	STLC_METALS_S	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments: STLC Cr added on 12/17/10 std tat per S.C

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

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

P & D Environmental	Client Project ID: #0047; Vip Service	Date Sampled: 12/09/10
		Date Received: 12/10/10
55 Santa Clara, Ste.240	Client Contact: Michael Deschenes	Date Extracted: 12/18/10-12/20/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 12/20/10

ICP Metals*

Extraction method: CA Title 22 Analytical methods: SW6010B Work Order: 1012368

Lab ID	Client ID	Matrix	Extraction Type	Chromium	DF	% SS	Comments
1012368-001A	COMP A1, 2, 3, 4	S	WET	0.092	1	N/A	
1012368-002A	COMP B1, 2, 3, 4	S	WET	0.11	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	NA	µg/L
	S	WET	0.05	mg/L

*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/method detection limit; N/A means not applicable to this sample or instrument.

WET = Waste Extraction Test, i.e., STLC (Soluble Threshold Limit Concentration).
DI WET = Waste Extraction Test using DI water (DI STLC).

%SS = Percent Recovery of Surrogate Standard
DF = Dilution Factor

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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

QC SUMMARY REPORT FOR SW6010B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 55011 WorkOrder 1012368

EPA Method SW6010B **Extraction CA Title 22** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Chromium	N/A	1	N/A	N/A	N/A	101	103	1.28	N/A	N/A	75 - 125	25

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

BATCH 55011 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012368-001A	12/09/10 10:00 AM	12/18/10	12/20/10 3:10 PM	1012368-002A	12/09/10 10:45 AM	12/18/10	12/20/10 3:12 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 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 content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental	Client Project ID: #0047; VIP Service Castro Valley	Date Sampled: 12/20/10
		Date Received: 12/22/10
55 Santa Clara, Ste.240	Client Contact: Steve Carmack	Date Reported: 12/30/10
Oakland, CA 94610	Client P.O.:	Date Completed: 12/30/10

WorkOrder: 1012798

December 30, 2010

Dear Steve:

Enclosed within are:

1) The results of the **3** analyzed samples from your project: **#0047; VIP Service 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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

1012798

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

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER: 0047

PROJECT NAME: VIP Service Castro Valley

SAMPLED BY: (PRINTED AND SIGNATURE) Steve Carmack

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-G + MBTEX by 8021	HVOCs by 8260B	SVOCs by 8270	PRESERVATIVE	REMARKS
MW 1	12/20/10	1225	H2O		5	X			ICE	Normal Turnaround
MW 2	↓	1250	↓		5	X			↓	↓
MW 3	↓	1315	↓		7	X	X	X	↓	↓

ICE/t° 2.8
GOOD CONDITION ✓ APPROPRIATE
HEAD SPACE ABSENT ✓ CONTAINERS ✓
DECHLORINATED IN LAB ___ PRESERVED IN LAB
PRESERVATION ✓ VOAS | O & G | METALS | OTHER

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
	12/20/10	1445	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
	12/22	1620	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)

TOTAL NO. OF SAMPLES (THIS SHIPMENT): 3
TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 17
LABORATORY: McCampbell Analytical
LABORATORY CONTACT: Angela Rydelius
LABORATORY PHONE NUMBER: (877) 252-9262
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.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1012798 **ClientCode: PDEO**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

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

Email: lab@pdenviro.com
cc:
PO:
ProjectNo: #0047; VIP Service Castro Valley

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

Requested TAT: 5 days

Date Received: **12/22/2010**
Date Printed: **12/22/2010**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1012798-001	MW-1	Water	12/20/2010 12:25	☐			A									
1012798-002	MW-2	Water	12/20/2010 12:50	☐			A									
1012798-003	MW-3	Water	12/20/2010 13:15	☐	B	C	A									

Test Legend:

1	8010BMS_W	2	8270D_W	3	G-MBTEX_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

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

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

Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **12/22/2010 5:22:04 PM**

Project Name: **#0047; VIP Service Castro Valley**

Checklist completed and reviewed by: Zoraida Cortez

WorkOrder N°: **1012798** Matrix Water

Carrier: Benjamin Yslas (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: 2.8°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

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

Client contacted: Date contacted: Contacted by:

Comments:

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

P & D Environmental	Client Project ID: #0047; VIP Service Castro Valley	Date Sampled: 12/20/10
		Date Received: 12/22/10
55 Santa Clara, Ste.240	Client Contact: Steve Carmack	Date Extracted: 12/23/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 12/23/10

Halogenated Volatile Organics by P&T and GC-MS (8010 Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 1012798

					Reporting Limit for DF =1	
Lab ID	1012798-003B					
Client ID	MW-3					
Matrix	W				S	W
DF	5					

Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND<2.5				NA	0.5
Bromoform	ND<2.5				NA	0.5
Bromomethane	ND<2.5				NA	0.5
Carbon Tetrachloride	ND<2.5				NA	0.5
Chlorobenzene	ND<2.5				NA	0.5
Chloroethane	ND<2.5				NA	0.5
Chloroform	ND<2.5				NA	0.5
Chloromethane	ND<2.5				NA	0.5
Dibromochloromethane	ND<2.5				NA	0.5
1,2-Dibromoethane (EDB)	ND<2.5				NA	0.5
1,2-Dichlorobenzene	ND<2.5				NA	0.5
1,3-Dichlorobenzene	ND<2.5				NA	0.5
1,4-Dichlorobenzene	ND<2.5				NA	0.5
Dichlorodifluoromethane	ND<2.5				NA	0.5
1,1-Dichloroethane	ND<2.5				NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<2.5				NA	0.5
1,1-Dichloroethene	ND<2.5				NA	0.5
cis-1,2-Dichloroethene	ND<2.5				NA	0.5
trans-1,2-Dichloroethene	ND<2.5				NA	0.5
1,2-Dichloropropane	ND<2.5				NA	0.5
cis-1,3-Dichloropropene	ND<2.5				NA	0.5
trans-1,3-Dichloropropene	ND<2.5				NA	0.5
Freon 113	ND<50				NA	10
Methylene chloride	ND<2.5				NA	0.5
1,1,1,2-Tetrachloroethane	ND<2.5				NA	0.5
1,1,2,2-Tetrachloroethane	ND<2.5				NA	0.5
Tetrachloroethene	ND<2.5				NA	0.5
1,1,1-Trichloroethane	ND<2.5				NA	0.5
1,1,2-Trichloroethane	ND<2.5				NA	0.5
Trichloroethene	ND<2.5				NA	0.5
Trichlorofluoromethane	ND<2.5				NA	0.5
Vinyl Chloride	ND<2.5				NA	0.5
Surrogate Recoveries (%)						
%SS1:	97					
%SS2:	99					
%SS3:	88					
Comments	a3,b6					

* 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/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or surrogate coelutes with another peak.

a3) sample diluted due to high organic content.
b6) lighter than water immiscible sheen/product is present

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

P & D Environmental	Client Project ID: #0047; VIP Service Castro Valley	Date Sampled: 12/20/10
		Date Received: 12/22/10
55 Santa Clara, Ste.240	Client Contact: Steve Carmack	Date Extracted: 12/22/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 12/24/10

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

Extraction Method: SW3510C Analytical Method: SW8270C Work Order: 1012798

Lab ID	1012798-003C
Client ID	MW-3
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acenaphthene	ND	1.0	10	Acenaphthylene	ND	1.0	10
Acetochlor	ND	1.0	10	Anthracene	ND	1.0	10
Benzidine	ND	1.0	50	Benzoic Acid	ND	1.0	50
Benzo(a)anthracene	ND	1.0	10	Benzo(b)fluoranthene	ND	1.0	10
Benzo(k)fluoranthene	ND	1.0	10	Benzo(g,h,i)perylene	ND	1.0	10
Benzo(a)pyrene	ND	1.0	10	Benzyl Alcohol	ND	1.0	50
1,1-Biphenyl	ND	1.0	10	Bis (2-chloroethoxy) Methane	ND	1.0	10
Bis (2-chloroethyl) Ether	ND	1.0	10	Bis (2-chloroisopropyl) Ether	ND	1.0	10
Bis (2-ethylhexyl) Phthalate	ND	1.0	20	4-Bromophenyl Phenyl Ether	ND	1.0	10
Butylbenzyl Phthalate	ND	1.0	10	4-Chloroaniline	ND	1.0	20
4-Chloro-3-methylphenol	ND	1.0	10	2-Chloronaphthalene	ND	1.0	10
2-Chlorophenol	ND	1.0	10	4-Chlorophenyl Phenyl Ether	ND	1.0	10
Chrysene	ND	1.0	10	Dibenzo(a,h)anthracene	ND	1.0	10
Dibenzofuran	ND	1.0	10	Di-n-butyl Phthalate	ND	1.0	10
1,2-Dichlorobenzene	ND	1.0	10	1,3-Dichlorobenzene	ND	1.0	10
1,4-Dichlorobenzene	ND	1.0	10	3,3-Dichlorobenzidine	ND	1.0	20
2,4-Dichlorophenol	ND	1.0	10	Diethyl Phthalate	ND	1.0	10
2,4-Dimethylphenol	ND	1.0	10	Dimethyl Phthalate	ND	1.0	10
4,6-Dinitro-2-methylphenol	ND	1.0	50	2,4-Dinitrophenol	ND	1.0	50
2,4-Dinitrotoluene	ND	1.0	10	2,6-Dinitrotoluene	ND	1.0	10
Di-n-octyl Phthalate	ND	1.0	10	1,2-Diphenylhydrazine	ND	1.0	10
Fluoranthene	ND	1.0	10	Fluorene	ND	1.0	10
Hexachlorobenzene	ND	1.0	10	Hexachlorobutadiene	ND	1.0	10
Hexachlorocyclopentadiene	ND	1.0	50	Hexachloroethane	ND	1.0	10
Indeno (1,2,3-cd) pyrene	ND	1.0	10	Isophorone	ND	1.0	10
2-Methylnaphthalene	ND	1.0	10	2-Methylphenol (o-Cresol)	ND	1.0	10
3 &/or 4-Methylphenol (m,p-Cres	ND	1.0	10	Naphthalene	ND	1.0	10
2-Nitroaniline	ND	1.0	50	3-Nitroaniline	ND	1.0	50
4-Nitroaniline	ND	1.0	50	Nitrobenzene	ND	1.0	10
2-Nitrophenol	ND	1.0	50	4-Nitrophenol	ND	1.0	50
N-Nitrosodiphenylamine	ND	1.0	10	N-Nitrosodi-n-propylamine	ND	1.0	10
Pentachlorophenol	ND	1.0	50	Phenanthrene	ND	1.0	10
Phenol	ND	1.0	10	Pyrene	ND	1.0	10
1,2,4-Trichlorobenzene	ND	1.0	10	2,4,5-Trichlorophenol	ND	1.0	10
2,4,6-Trichlorophenol	ND	1.0	10				

Surrogate Recoveries (%)

%SS1:	84	%SS2:	65
%SS3:	82	%SS4:	63
%SS5:	68	%SS6:	73

Comments: b6

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

ND means not detected at or above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS means Percent Recovery of Surrogate Standard; DF means Dilution Factor

#) surrogate diluted out of range or surrogate coelutes with another peak.

b6) lighter than water immiscible sheen/product is present

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P & D Environmental	Client Project ID: #0047; VIP Service Castro Valley	Date Sampled: 12/20/10
		Date Received: 12/22/10
55 Santa Clara, Ste.240	Client Contact: Steve Carmack	Date Extracted: 12/24/10-12/28/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 12/24/10-12/28/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1012798

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1	W	ND	ND	ND	ND	ND	ND	1	110	
002A	MW-2	W	ND	ND	ND	ND	ND	ND	1	105	
003A	MW-3	W	1000	ND<20	370	5.5	28	38	1	98	d1,b6

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

%SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b6) lighter than water immiscible sheen/product is present
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 55256 WorkOrder 1012798

EPA Method SW8260B **Extraction SW5030B** **Spiked Sample ID: 1012800-003A**

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
Chlorobenzene	ND	10	110	112	1.69	111	114	2.53	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	99.8	103	2.72	104	95.8	8.06	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	96.7	97.5	0.808	115	109	5.62	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	115	118	3.16	121	119	2.08	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	113	118	4.44	110	111	0.508	70 - 130	30	70 - 130	30
%SS1:	91	25	94	96	1.88	96	98	2.45	70 - 130	30	70 - 130	30
%SS2:	100	25	99	98	0.324	102	101	0.496	70 - 130	30	70 - 130	30
%SS3:	86	2.5	95	97	2.04	108	95	12.9	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 55256 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012798-003B	12/20/10 1:15 PM	12/23/10	12/23/10 6:05 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.

Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 55270 WorkOrder 1012798

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1012833-003A**

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(btex)£	ND	60	118	119	0.662	120	121	0.955	70 - 130	20	70 - 130	20
MTBE	ND	10	80	83.1	3.86	81.6	80.9	0.917	70 - 130	20	70 - 130	20
Benzene	ND	10	114	119	4.89	116	114	1.13	70 - 130	20	70 - 130	20
Toluene	ND	10	110	116	4.89	116	116	0	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	118	124	4.93	120	118	1.35	70 - 130	20	70 - 130	20
Xylenes	1.7	30	113	120	5.25	121	120	0.513	70 - 130	20	70 - 130	20
%SS:	104	10	103	102	0.708	103	98	5.43	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 55270 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012798-001A	12/20/10 12:25 PM	12/24/10	12/24/10 12:08 AM	1012798-002A	12/20/10 12:50 PM	12/24/10	12/24/10 12:38 AM
1012798-003A	12/20/10 1:15 PM	12/27/10	12/27/10 8:16 PM	1012798-003A	12/20/10 1:15 PM	12/28/10	12/28/10 9:27 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.

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

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

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QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 55271 WorkOrder 1012798

EPA Method SW8270C **Extraction SW3510C** **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
Acenaphthene	N/A	50	N/A	N/A	N/A	57	60.5	6.02	N/A	N/A	30 - 130	20
4-Chloro-3-methylphenol	N/A	100	N/A	N/A	N/A	76.5	76.3	0.242	N/A	N/A	30 - 130	20
2-Chlorophenol	N/A	100	N/A	N/A	N/A	74.3	74.1	0.209	N/A	N/A	30 - 130	20
1,4-Dichlorobenzene	N/A	50	N/A	N/A	N/A	46.5	46.1	0.713	N/A	N/A	30 - 130	20
2,4-Dinitrotoluene	N/A	50	N/A	N/A	N/A	63	70.5	11.2	N/A	N/A	30 - 130	20
4-Nitrophenol	N/A	100	N/A	N/A	N/A	71.4	74.2	3.88	N/A	N/A	30 - 130	20
N-Nitrosodi-n-propylamine	N/A	50	N/A	N/A	N/A	71.5	74.3	3.89	N/A	N/A	30 - 130	20
Pentachlorophenol	N/A	100	N/A	N/A	N/A	67.6	69.3	2.54	N/A	N/A	30 - 130	20
Phenol	N/A	100	N/A	N/A	N/A	76.1	76.8	0.824	N/A	N/A	30 - 130	20
Pyrene	N/A	50	N/A	N/A	N/A	58.4	57.6	1.47	N/A	N/A	30 - 130	20
1,2,4-Trichlorobenzene	N/A	50	N/A	N/A	N/A	45.8	45.1	1.50	N/A	N/A	30 - 130	20
%SS1:	N/A	5000	N/A	N/A	N/A	87	92	5.96	N/A	N/A	30 - 130	20
%SS2:	N/A	5000	N/A	N/A	N/A	87	83	4.28	N/A	N/A	30 - 130	20
%SS3:	N/A	5000	N/A	N/A	N/A	88	91	2.52	N/A	N/A	30 - 130	20
%SS4:	N/A	5000	N/A	N/A	N/A	70	75	7.17	N/A	N/A	30 - 130	20
%SS5:	N/A	5000	N/A	N/A	N/A	92	86	6.89	N/A	N/A	30 - 130	20
%SS6:	N/A	5000	N/A	N/A	N/A	72	68	5.14	N/A	N/A	30 - 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 55271 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012798-003C	12/20/10 1:15 PM	12/22/10	12/24/10 11:30 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.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS ELAP Certification 1644

QA/QC Officer

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

P & D Environmental	Client Project ID: #0047; VIP Service, Castro Valley	Date Sampled: 12/20/10-12/21/10
		Date Received: 12/22/10
55 Santa Clara, Ste.240	Client Contact: Paul King	Date Reported: 12/28/10
Oakland, CA 94610	Client P.O.:	Date Completed: 12/28/10

WorkOrder: 1012807

December 28, 2010

Dear Paul:

Enclosed within are:

1) The results of the **12** analyzed samples from your project: **#0047; VIP Service, 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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

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

1012807

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0047	VIP Service Castro Valley

SAMPLED BY: (PRINTED AND SIGNATURE) Steve Carmack

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-G & BTEX by 8015	PRESERVATIVE	REMARKS
C1	12/20/10	1515	H_2O		5	X	ICE	Normal Turnaround
C2	12/21/10	1500			5	X		
C3	↓	1400			5	X		
C4	↓	1115			5	X		
EW1	12/20/10	1620			5	X		
EW2	12/21/10	1040			5	X		
EW3	↓	1240			5	X		
OW1	12/20/10	1415			5	X		
OW3	12/21/10	1430			5	X		
OW4	↓	1145			5	X		
OW5	↓	1325			5	X		
OW6	12/20/10	1445	↓		5	X		

ICE t° ✓
GOOD CONDITION ___ APPROPRIATE
HEAD SPACE ABSENT ___ CONTAINERS ___
DECHLORINATED IN LAB ___ PRESERVED IN LAB ___
VOA'S | O & G | METALS | OTHER

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
	12/22/10	1445	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
	12/22	1622	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)

TOTAL NO. OF SAMPLES (THIS SHIPMENT): 12
TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 60

LABORATORY: McCampbell Analytical
LABORATORY CONTACT: Angela Rydelius
LABORATORY PHONE NUMBER: (877) 252-9262

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

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

REMARKS: VOAs preserved w/ HCL

* Sample labeled EW1, Sample Confirmed by Time. 12/22/10

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1012807 **ClientCode: PDEO**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

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

Email: lab@pdenviro.com
cc:
PO:
ProjectNo: #0047; VIP Service, Castro Valley

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

Requested TAT: 5 days

Date Received: **12/22/2010**
Date Printed: **12/22/2010**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1012807-001	C1	Water	12/20/2010 15:15	☐	A											
1012807-002	C2	Water	12/21/2010 15:00	☐	A											
1012807-003	C3	Water	12/21/2010 14:00	☐	A											
1012807-004	C4	Water	12/21/2010 11:15	☐	A											
1012807-005	EW1	Water	12/20/2010 16:20	☐	A											
1012807-006	EW2	Water	12/21/2010 10:40	☐	A											
1012807-007	EW3	Water	12/21/2010 12:40	☐	A											
1012807-008	OW1	Water	12/20/2010 14:15	☐	A											
1012807-009	OW3	Water	12/21/2010 14:30	☐	A											
1012807-010	OW4	Water	12/21/2010 11:45	☐	A											
1012807-011	OW5	Water	12/21/2010 13:25	☐	A											
1012807-012	OW6	Water	12/20/2010 14:45	☐	A											

Test Legend:

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

Prepared by: Ana Venegas

Comments:

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

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

Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **12/22/2010 6:28:39 PM**

Project Name: **#0047; VIP Service, Castro Valley**

Checklist completed and reviewed by: Ana Venegas

WorkOrder N°: **1012807** Matrix Water

Carrier: Benjamin Yslas (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: 3.2°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

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

Client contacted: Date contacted: Contacted by:

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

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

P & D Environmental	Client Project ID: #0047; VIP Service, Castro Valley	Date Sampled: 12/20/10-12/21/10
		Date Received: 12/22/10
55 Santa Clara, Ste.240	Client Contact: Paul King	Date Extracted: 12/23/10-12/27/10
Oakland, CA 94610	Client P.O.:	Date Analyzed: 12/23/10-12/27/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1012807

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	C1	W	45,000	ND<1100	5600	1900	1600	10,000	100	107	d1,b1
002A	C2	W	20,000	ND<100	83	190	600	3800	20	122	d1,b1
003A	C3	W	1500	ND<50	280	7.3	47	72	10	114	d1,b1
004A	C4	W	47,000	ND<800	900	480	2200	10,000	20	116	d1,b1
005A	EW1	W	3900	ND<90	770	58	220	440	10	113	d1,b6
006A	EW2	W	99	ND	6.5	1.2	4.8	4.0	1	115	d1,b1
007A	EW3	W	2300	ND<50	190	15	31	72	10	101	d1,b1
008A	OW1	W	450	ND	17	5.6	6.2	29	1	109	d1,b1
009A	OW3	W	200	ND	2.1	7.7	5.7	35	1	116	d1,b6,b1
010A	OW4	W	1700	ND	ND	8.2	60	170	1	101	d2,d9,b1
011A	OW5	W	47,000	ND<500	330	300	1900	8900	100	104	d1,b1
012A	OW6	W	18,000	ND<250	1200	450	480	2700	50	112	d1,b6,b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

%SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

b1) aqueous sample that contains greater than ~1 vol. % sediment
b6) lighter than water immiscible sheen/product is present
d1) weakly modified or unmodified gasoline is significant
d2) heavier gasoline range compounds are significant (aged gasoline?)
d9) no recognizable pattern

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 55270 WorkOrder 1012807

EPA Method SW8021B/8015Bm **Extraction SW5030B** **Spiked Sample ID: 1012833-003A**

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(btex)£	ND	60	118	119	0.662	120	121	0.955	70 - 130	20	70 - 130	20
MTBE	ND	10	80	83.1	3.86	81.6	80.9	0.917	70 - 130	20	70 - 130	20
Benzene	ND	10	114	119	4.89	116	114	1.13	70 - 130	20	70 - 130	20
Toluene	ND	10	110	116	4.89	116	116	0	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	118	124	4.93	120	118	1.35	70 - 130	20	70 - 130	20
Xylenes	1.7	30	113	120	5.25	121	120	0.513	70 - 130	20	70 - 130	20
%SS:	104	10	103	102	0.708	103	98	5.43	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 55270 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1012807-001A	12/20/10 3:15 PM	12/23/10	12/23/10 2:10 PM	1012807-002A	12/21/10 3:00 PM	12/23/10	12/23/10 2:40 PM
1012807-003A	12/21/10 2:00 PM	12/23/10	12/23/10 3:10 PM	1012807-004A	12/21/10 11:15 AM	12/24/10	12/24/10 4:07 AM
1012807-005A	12/20/10 4:20 PM	12/27/10	12/27/10 8:46 PM	1012807-006A	12/21/10 10:40 AM	12/27/10	12/27/10 7:16 PM
1012807-007A	12/21/10 12:40 PM	12/24/10	12/24/10 5:37 AM	1012807-008A	12/20/10 2:15 PM	12/24/10	12/24/10 6:06 AM
1012807-009A	12/21/10 2:30 PM	12/24/10	12/24/10 2:08 AM	1012807-010A	12/21/10 11:45 AM	12/24/10	12/24/10 3:37 AM
1012807-011A	12/21/10 1:25 PM	12/24/10	12/24/10 3:16 AM	1012807-012A	12/20/10 2:45 PM	12/24/10	12/24/10 3:47 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.

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

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

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QA/QC Officer