ELLIS PARTNERS LLC

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9:02 am, Jul 27, 2011

Alameda County
Environmental Health

July 21, 2011

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

SUBJECT: SUBSURFACE INVESTIGATION REPORT CERTIFICATION
County Case # RO 3074
Britannia Business Center II
4280 Hacienda Drive
Pleasanton, CA

Dear Mr. Wickham:

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

- Subsurface Investigation Report dated July 21, 2011 (document 0523.R1).

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 Dean Rubinson at (415) 391-9800.

Sincerely,

BEP Pleasanton Investors I LLC,
A Delaware limited liability company

by: BEP Investors I LLC,
a Delaware limited liability company
Its Sole Member

by: EPL Baupost I LLC,
a California limited liability company
Its Manager

by: EPL Baupost I LLC,
a California limited liability company
Its Manager

by: _____
Melinda Ellis Evers
Managing Member

Enclosure

0523.L3

111 SUTTER STREET, SUITE 800 • SAN FRANCISCO, CA 94104
TEL: 415-391-9800 FAX: 415-391-4711
www.ellispartners.com

P&D ENVIRONMENTAL, INC.

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

July 21, 2011
Report 0523.R1

Mr. Dean Rubinson
Ellis Partners LLC
111 Sutter Street, Suite 800,
San Francisco, CA 94104

SUBJECT: SUBSURFACE INVESTIGATION REPORT
Britannia Business Center II
4280 Hacienda Drive
Pleasanton, CA

Dear Mr. Wickham:

P&D Environmental, Inc. (P&D) is pleased to present this report documenting the subsurface investigation of hydraulic fluid related to a failed elevator hydraulic jack, and the removal of oil-impacted soil from beneath the elevator pit at the subject site. The objective of the investigation was to define the horizontal extent of hydraulic oil in soil and groundwater in the area surrounding the elevator pit by drilling four soil borings, designated as B2 through B5. The removal of oil-impacted soil was performed by drilling a large (approximately 36-inch diameter) borehole at the location of the failed hydraulic jack.

All work was performed in accordance with P&D's Subsurface Investigation Work Plan dated March 8, 2011. The work plan was approved in a letter from the Alameda County Department of Environmental Health (ACDEH) dated March 23, 2011. Site Location Maps are attached as Figures 1 and 2, a Foundation Plan is attached as Figure 3, and a Site Plan Detail showing the drilling locations is attached as Figure 4. All work was performed under the direct supervision of a California Professional Geologist.

BACKGROUND

The subject site is an office building that was constructed in approximately 1993. P&D's understanding of recent events related to the failure of a hydraulic jack for one of the three elevators at the subject site is as follows.

- Maintenance of the elevators at the site was performed by ThyssenKrupp Elevator (TKE) until January 2009, and then again beginning in May 2010.
- Between January 2009 and May 2010 the building was vacant and there was no known use of the elevator during that period. In addition, no known company performed maintenance for the elevators at the site during that time.
- In May 2010 when TKE returned to the site the subject elevator was determined to not be operating, the hydraulic fluid reservoir was empty, and subsequent

testing revealed that the hydraulic system could not be pressurized. These dates indicate that the release has happened within the past one to two years.

- BEP Pleasanton Investors LLC acquired the property in October 2010. The building is presently vacant.
- On January 18, 2011 the failed hydraulic jack (consisting of a piston and an associated 6-inch outside diameter steel hydraulic jack casing measuring approximately 15 feet in length) was removed from the elevator pit. The elevator pit floor is four feet below the building first floor level. A hole was identified in the hydraulic jack casing at the bottom of the hydraulic jack casing. The hydraulic jack had been suspended in a 14.5-inch inside diameter (15 ¼-inch outside diameter) PVC casing, with fine-grained sand present in the annular space between the hydraulic jack casing and the PVC casing.
- On January 19, 2011 the fine-grained sand and associated fluids (water and hydraulic oil) were removed from inside the PVC casing to a depth of 16 feet 2 inches below the top of the PVC casing. The top of the PVC casing was located approximately 4 inches below the top of the elevator pit floor. Sand and oily fluid were present in the bottom of the PVC casing. Details of the materials encountered inside the PVC casing are provided below.
- On January 20, 2011 prior to the beginning of work the fluid level inside the PVC casing was measured at approximately 11 feet below the top of the PVC casing. The fluid and remaining sand were subsequently vacuumed from the PVC casing interior to a depth of 16 ft 5 inches below the top of the PVC casing, and the bottom of the PVC casing was visually inspected from the elevator pit. A flat PVC cap was observed at the bottom of the PVC casing, and a round hole that appeared to have been drilled in the side of the casing was observed approximately one to two inches above the bottom of the PVC casing on the south-southwest side of the PVC casing.
- On February 13, 2011 P&D personnel oversaw the drilling of one exploratory soil boring (designated as B1) in the elevator pit using 6.5-inch outside diameter hollow stem augers at a location immediately adjacent to the south-southwest side of the PVC casing. The borehole was continuously cored by K.M. McRae, Inc. of Hayward, California (McRae) to a total depth of 19.5 feet below the elevator pit floor using a split spoon sampler. Petroleum sheen was observed in the continuous core beginning at a depth of 13.0 feet below the top of the elevator pit floor (approximately 2.5 feet below the depth the groundwater was first encountered during drilling), and soil saturated with hydraulic fluid was encountered between the depths of 13.5 and 19.0 feet below the top of the elevator pit floor. The hole observed near the bottom of the PVC casing is at a depth of approximately 16.7 feet below the elevator pit floor. The oil observed in the soil core was compared in the field with the oil and oily materials that had been removed from the interior of the PVC casing and stored in drums at the site. Both the color and odor of the oil in the soil core were reported to match the hydraulic oil in the drums. The subsurface materials encountered in the soil core consisted of clay that was predominantly medium stiff to a depth of 13.0 feet and beginning again at a depth of 19.5 feet, and which was soft between the depths of 13.0 and 19.5 feet below the top of the elevator pit floor. Soil samples

were retained for laboratory analysis at depths of 1.0, 9.5 and 19.0 feet below the top of the elevator pit floor. When the augers were pulled out of the borehole, the borehole collapsed to a depth of approximately 15 feet. Prior to removal of the augers from the borehole, the depth to water inside the PVC casing was measured to be 7.3 feet below the top of the PVC casing (approximately 7.6 feet below the top of the elevator pit floor, and approximately 11.6 feet below the first floor grade for the building). This approximately static water level is 5.4 feet above the 13.0 foot depth where sheen was first observed in the continuous core from the borehole.

- Based on a letter from the elevator maintenance vendor (TKE) dated March 3, 2011 the estimated volume of hydraulic fluid lost from the hydraulic jack system is approximately 50 to 60 gallons. A copy of the March 3, 2011 letter is attached with P&D's March 8, 2011 work plan. At the time of discovery of the failed hydraulic jack, TKE reported that the hydraulic fluid level was too low to operate the elevator. As part of the procedure to test the failed hydraulic jack system approximately 10 gallons of oil was added to the system. Subsequent testing confirmed that the system would not hold pressure, and the reservoir was immediately valved off to prevent any further loss of fluid.
- During removal of the materials from inside the PVC casing on January 19, 2010 the sand was observed to be saturated with oil beginning at a depth of approximately five to six feet below the top of the PVC casing. Additionally, the materials removed from the lowermost approximately five feet of the PVC casing appeared to contain a lower viscosity fluid than oil which appeared to be composed of oily water. Assuming a porosity of 35 percent for the sand in the annular space and a 10-foot long section of the annular space saturated with hydraulic oil, approximately 25 gallons of hydraulic fluid was removed from the interior of the PVC casing when the materials were removed from the PVC casing interior.

One drum of concrete waste and 2.5 drums of oily sand waste were generated during the sand removal activities on January 19, 2011. Another 2.5 drums of oily and sandy water waste were generated during cleaning of the oily water and removal of the remaining sand in the bottom of the PVC casing on January 20, 2011 for a total of six drums, including the drum with concrete. In addition, one drum of soil was generated on February 3, 2011 during drilling of borehole B1. Documentation of waste disposal is provided under separate cover.

FIELD ACTIVITIES

Prior to performing field work, Zone 7 permit number 2011011 was obtained for borehole drilling, notification was provided to Zone 7 of the scheduled drilling dates, the drilling locations were marked with white paint, Underground Safety Alert was notified for buried utility location, and a health and safety plan was prepared. Because all boreholes were inside an unoccupied building, the permitting agency allowed the boreholes to stay open for the duration of the investigation prior to grouting.

Exploratory Boring Oversight and Temporary Well Installation

On March 29 and 31, 2011 P&D personnel oversaw the drilling of boreholes B2 through B5 inside the building surrounding the elevator pit. Vironex, Inc. (Vironex) of Concord, California (C57 license # 705927) performed the borehole drilling. The borehole locations are shown on Figure 4.

Boreholes B2 through B5 were drilled to a total depth of 24.0, 27.0, 30.0, and 27.0 feet below the ground surface (bgs), respectively. Each borehole was drilled using GeoProbe direct push technology to drive a 2.0-inch outside diameter Geoprobe macrocore barrel sampler lined with transparent PVC sleeves. The soil from the borings was logged in the field in accordance with standard geologic field techniques and the Unified Soil Classification System. All soil from the boreholes was evaluated with a Photoionization Detector (PID) equipped with a 10.6 eV bulb and calibrated using a 100 ppm isobutylene standard. The soil was also evaluated for evidence of staining or discoloration, and one soil sample was retained for laboratory analysis at a depth of 20.0 feet bgs from each borehole. The depth of 20.0 feet bgs approximately corresponds with the 16-foot 9-inch depth for the bottom of the PVC casing in the elevator pit. The soil samples were retained for laboratory analysis from designated intervals as identified above by cutting six-inch long sections from the transparent PVC sleeve. The sleeve section ends were sequentially covered with aluminum foil and plastic endcaps. The sleeve section was then labeled and stored in a cooler with ice pending delivery to the laboratory. Chain of custody procedures was observed for all sample handling. Soil boring logs for boreholes B2 through B5 are attached with this report as Appendix A.

Groundwater was first encountered during drilling in borehole B2 at a depth of 21.5 feet bgs, in borehole B3 at a depth of 22.5 feet bgs, in borehole B4 at a depth of 26.5 feet bgs, and was not encountered in borehole B5 during drilling activities. Temporary wells were constructed in each of the boreholes using 1.0-inch diameter slotted PVC pipe with pre-packed filters placed in each borehole. The pre-packed filters extended from the bottom of each borehole to approximately 4 to 7 feet bgs. The depth to groundwater was measured using an electric water level indicator to the nearest 0.01 foot in temporary wells B2 and B5 at depths of 8.20 and 9.50 feet bgs, respectively, on the same day of drilling. Temporary wells B3 and B4 were dry on the same day of drilling. Depth to water level measurements were subsequently measured between April 1 and April 11, 2011 and are summarized in Table 1.

All Geoprobe drilling and sampling equipment were cleaned with an Alconox solution followed by a clean water rinse or by steam cleaning prior to use in the borehole. All soil and water generated during drilling was stored in drums at the site pending characterization and disposal.

Temporary Well Development

On April 7, 2011 temporary wells B2 through B5 were developed by over-pumping with a peristaltic pump to remove sediments from the temporary PVC casing and the pre-pack

filters. Prior to development, the temporary wells were monitored for depth to water to the nearest 0.01 feet using an electric water level indicator. The measured depth to groundwater prior to development on April 7, 2011 in temporary wells B2, B3, B4, and B5 was 8.57, 12.72, 14.26, and 8.47 feet, respectively.

During development of the temporary wells P&D personnel did not encounter any petroleum odors or sheen. Comparatively high recharge rates were observed in temporary wells B2 and B5, and comparatively slow recharge rates were observed in temporary wells B3 and B4. A total of approximately 9.3 gallons was purged from temporary well B2, 0.1 gallons from B3, 1.3 gallons from B4, and 5.3 gallons from B5. Water removed from the wells during development was stored in a drum onsite, pending characterization and appropriate disposal.

Temporary Well Monitoring and Sampling

On April 11, 2011 P&D personnel monitored temporary wells B2, B3, B4, and B5 for depth to water to the nearest 0.01 foot using an electric water level indicator. The measured depth to groundwater prior to purging and sampling on April 11, 2011 in temporary wells B2, B3, B4, and B5 was 9.21, 14.49, 15.39, and 9.42 feet, respectively. The depth to water level measurements are summarized in Table 1.

Once the temporary well water level elevations had been measured on April 11, 2011 P&D personnel purged and sampled the wells using USEPA low-flow purge and sample collection techniques. Prior to sampling, the wells were purged for a minimum of 15 minutes at a flow rate of approximately 130 milliliters per minute using a peristaltic pump and dedicated polyethylene tubing. During purging operations, the field parameters of temperature; pH; electrical conductivity; and turbidity were monitored and recorded on a groundwater monitoring/well purging data sheet until the parameters were determined to be stable or the temporary well dewatered. The indicator parameters collected during purging were considered to be stabilized as follows: plus/minus 0.1 Standard Units (S.U.) for pH; plus/minus three percent for specific conductance; and plus/minus 10 percent for turbidity. No petroleum hydrocarbon odor or sheen was detected on the purge water from any of the temporary wells. Once the field parameters were observed to stabilize for three consecutive readings or the temporary well dewatered, water samples were collected.

The water samples were pumped into 1-liter amber glass bottles that were sealed with Teflon-lined screw caps. The bottles were then transferred to a cooler with ice, pending transport to the laboratory. Chain of custody documentation accompanied the samples to the laboratory. Records of the field parameters measured during well purging are attached with this report as Appendix B.

Water removed from the wells during purging prior to sampling was stored in a labeled drum onsite, pending analysis and appropriate disposal.

Temporary Well Destruction

On June 22, 2011 Vironex personnel removed the PVC casing and filter packs from each borehole and filled each of the boreholes with neat cement grout using a tremie pipe. Mr. Jeff Jones of Zone 7 was onsite to observe and document the pouring of the grout.

Elevator Pit Large Diameter Borehole Drilling Oversight

On June 20, 2011 a 14-inch diameter auger was used to drill through the bottom cap of the 15-inch PVC casing by McRae at a depth of 19.0 feet below the elevator pit floor. The PVC casing was removed from the borehole on June 21, 2011 and the borehole was then drilled with a 22-inch diameter auger to a depth of 6.0 feet below the elevator pit floor. The borehole was then enlarged to 37-inches in diameter using a 37-inch diameter rim blade attached to a 20-inch diameter pilot auger, to a depth of 4.0 feet below the elevator pit floor. On June 22, 2011 the 37-inch diameter borehole was advanced to 12.0 feet below the elevator pit floor. On June 23, 2011 a 12.0-foot long section of 36-inch inside diameter steel casing was lowered into the 37-inch diameter borehole. On June 24, 2011 the borehole was drilled from the depth of 12.0 feet to 22.0 feet below the elevator pit floor using a 36-inch diameter rim blade and the 12.0 foot section of steel casing was pushed to a depth of 17.5 feet below the elevator pit floor. The borehole was grouted to the ground surface with the steel casing in place using a tremie pipe and approximately 6 cubic yards of sand cement slurry on June 27, 2011. A 15-inch diameter PVC casing was placed in the borehole to a depth of approximately 18.5 feet below the elevator pit floor to house a future elevator hydraulic jack.

All soil and water generated during drilling was stored in drums at the site pending characterization and disposal.

GEOLOGY AND HYDROGEOLOGY

Figure 1 shows the location of the subject site building superimposed on a 1980 US Geological Survey (USGS) 7.5 minute quadrangle topographic map. Figure 2 shows a 2009 satellite image obtained from the USGS superimposed on the topographic map for verification of the building location on the topographic map. Figure 3 is a Foundation Plan for the subject site building dated December 9, 1992. The oldest available historical aerial photograph available at Google Earth for the subject site is dated June 15, 1993 and shows that construction of the subject site building and associated parking areas had been completed.

Review of Figure 1 shows that the USGS topographic map ground surface elevation for the subject site building is between 330 and 320 feet Mean Sea Level (MSL), with an interpolated elevation of approximately 326 feet MSL. The ground surface elevation after grading for site development is presently not known. The datum used for elevation determination on the USGS topographic map is the North American Geodetic Vertical Datum of 1929 (NGVD 29). Based on discussions with surveyors who have performed surveying at the subject site, the North American Vertical Datum of 1988 (NAVD 88)

results in elevations that are approximately 2.7 feet higher in the vicinity of the site than elevations obtained with NGVD 29 data. Based on the contours on Figure 1, the interpolated NAVD 88 elevation for the site is approximately 329 feet MSL.

Figures 5 and 6 show groundwater surface elevations in the vicinity of the subject site for the Spring and Fall of 2007, respectively, obtained from the Zone 7 Water Agency (Zone 7). The groundwater surface elevation is approximately 313 or 314 feet MSL (NAVD 88). Review of groundwater surface elevation maps for 2009 from Zone 7 shows that very similar elevations and contours were reported in 2009, indicating that groundwater levels and the groundwater flow direction are seasonally consistent in the vicinity of the site. Comparison of the estimated ground surface elevation with the groundwater surface elevations suggests that the depth to groundwater from the ground surface is approximately 15 to 16 feet, which corresponds approximately with the measured depth to water inside the PVC casing in the elevator pit on February 13, 2011 of approximately 11.6 feet below the building first floor level. Review of the groundwater 310 and 320 foot elevation groundwater surface contours on Figures 5 and 6 shows that the groundwater flow direction at the site remains seasonally towards the south.

The subsurface materials encountered in boreholes B1 through B5 consisted of clay to the total depth explored of 30 feet bgs. Review of the water levels measured in the temporary wells in boreholes B2 through B5 and review of the volumes removed from the temporary wells during development shows that recharge rates to the boreholes and the associated groundwater flow rates in the vicinity of the boreholes are not uniform.

In borehole B1 medium stiff clay was encountered above the depth of 13.5 feet and below the depth of 19.0 feet bgs. Between the depths of 13.5 feet and 19.0 feet bgs the clay materials encountered in the borehole were soft. These soft conditions were not encountered in boreholes B2 through B5.

LABORATORY ANALYSIS

All of the soil and groundwater samples were analyzed at McCampbell for Total Petroleum Hydrocarbons as Bunker Oil (TPH-BO) and for Total Petroleum Hydrocarbons as Hydraulic Oil (TPH-HO) with silica gel cleanup by EPA Methods 3550B/8015B for the soil samples and EPA Methods 3510C/8015B for the groundwater samples. The groundwater samples were also prepared by the laboratory using the protocol for gravity separation attached with the laboratory report for the water samples.

Copies of the laboratory analytical results for soil and groundwater are summarized in Tables 2 and 3, respectively. Copies of the laboratory analytical reports are attached with this report as Appendix C.

The TPH-HO analysis is for the carbon range of C18-C36. However, the method detection limit is 250 micrograms per Liter (µg/L), which exceeds the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) May 2008 Table A Environmental Screening Level (ESL) for groundwater of 100 µg/L. The TPH-BO analysis is for the carbon range

C10-C36 with a method detection limit of 100 µg/L, which allows comparison of the sample result with the Table A groundwater ESL.

Review of the soil analytical results show that TPH-BO and TPH-HO were not detected in the soil samples collected from B3, B4, and B5, and were detected in the soil sample collected from borehole B2 at concentrations of 2.3 and 5.6 milligrams per kilogram (mg/kg), respectively, both below the Table C deep soil screening ESL of 5,000 mg/kg. Additional review of the soil analytical report shows that the laboratory described the TPH-BO and TPH-HO results for the soil sample collected from B2 as consisting of oil range compounds.

Review of the groundwater analytical results show that TPH-BO and TPH-HO were not detected in any of the groundwater samples collected from boreholes B2 through B5.

DISCUSSION AND RECOMMENDATIONS

The opening located in the center of the elevator pit floor for installation of the hydraulic jack and associated PVC casing (the block out), was initially measured to be three feet long and three feet wide. The PVC casing was located in the center of the block out. Hydraulic oil was encountered in borehole B1 in soft materials between the depths of 13.5 and 19.0 feet below the top of the elevator pit floor. Hydraulic oil was not observed in the medium stiff materials above or below the soft materials. Based on the medium stiff conditions identified in borehole B1 at a depth of 19.5 feet, in conjunction with the low oil concentration in the borehole B1 soil sample collected at a depth of 19.0 feet, the vertical extent of oil appears to have been limited in soil to a depth of approximately 20.0 feet below the elevator pit floor.

The 15 ¼-inch outside diameter PVC casing that formerly housed the hydraulic jack was likely to have been installed in a borehole measuring 20 or 24 inches in diameter. Oil released from the PVC casing was likely to have accumulated in permeable fill material placed in the annular space between the borehole wall and the existing PVC casing. Assuming a porosity of 40 percent for the clayey materials in the annular space between the existing 15 ¼-inch outside diameter PVC casing and the 36-inch outside diameter steel casing, the calculated volume for porosity in the annular space between the depths of 13.0 and 19.0 feet is approximately 100 gallons. This calculated volume of the porosity exceeded the estimated volume of oil suspected of being present outside of the PVC casing by a factor of approximately three to four.

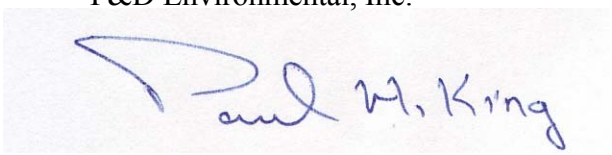
No petroleum hydrocarbons were detected in any of the water samples collected from four temporary wells surrounding the elevator pit. Petroleum hydrocarbons were only detected in soil in one of the four boreholes (TPH-BO and TPH-HO in B2 at concentrations of 2.3 and 5.6 mg/kg, respectively). Based on observations and sample analysis from borehole B1 located in the elevator pit, the vertical extent of petroleum hydrocarbons appears to be approximately 19.5 feet below the elevator pit floor. A 36-inch diameter borehole was drilled to a depth of 22 feet below the elevator pit floor, removing source area petroleum-impacted soil to the maximum extent practicable. Based on the groundwater sample

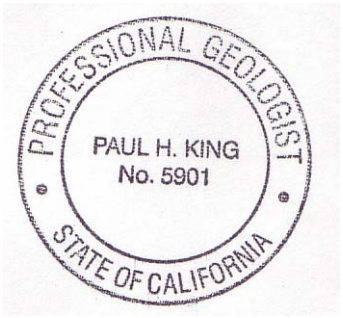
results from the temporary wells surrounding the elevator pit and the removal of source are petroleum-impacted soil to the maximum extent practicable, P&D recommends that no further investigation or remedial action be performed and that the case be closed.

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 - Summary of Depth to Water Measurements
Table 2 - Summary of Soil Sample Analytical Results
Table 3 - Summary of Groundwater Sample Analytical Results

Figure 1 - Site Location Map
Figure 2 - Site Location Map with Satellite Imagery
Figure 3 - Foundation Plan
Figure 4 - Site Plan Detail
Figure 5 - Zone 7 Groundwater Gradient Map Upper Aquifer Spring 2007 Livermore Valley Groundwater Basin
Figure 6 - Zone 7 Groundwater Gradient Map Upper Aquifer Fall 2007 Livermore Valley Groundwater Basin

Appendix A - Boring Logs
Appendix B - Groundwater Monitoring/Well Purging Data Sheets
Appendix C - Laboratory Analytical Reports and Chain of Custody Documentation

PHK/sjc/mld
0523.R1

TABLES

TABLE 1

Summary of Depth to Water Measurements

Date Monitored	Temporary Well ID	Depth to Water (Ft)
4/11/2011	B2	9.21
4/7/2011		8.57
4/4/2011		8.65
4/1/2011		8.01
3/29/2011		8.2
4/11/2011	B3	14.49
4/7/2011		12.72
4/4/2011		16.86
4/1/2011		23.99
3/31/2011		No Water Encountered.
4/11/2011	B4	15.39
4/7/2011		14.26
4/4/2011		18.18
4/1/2011		28.18
3/31/2011		No Water Encountered.
4/11/2011	B5	9.42
4/7/2011		8.47
4/4/2011		8.44
4/1/2011		7.88
3/31/2011		9.5

TABLE 2

Summary of Soil Sample Analytical Results

Date Sampled	Sample ID	TPH-BO	TPH-HO
3/29/2011	B2-20	2.3, a	5.6, a
3/31/2011	B3-20	ND<2.0	ND<5.0
3/31/2011	B4-20	ND<2.0	ND<5.0
3/29/2011	B5-20	ND<2.0	ND<5.0
ESL		*5,000*	*5,000*

NOTES

TPH-BO = Total Petroleum Hydrocarbons as Bunker Oil.
TPH-HO = Total Petroleum Hydrocarbons as Hydraulic Oil.
ND = Not Detected.
a = Laboratory Note: contains oil range compounds.
ESL = Environmental Screening Level, developed by San Francisco Bay-Regional Water Quality Control Board (SF-RWQCB) updated May 2008, from Table C-Deep Soils, Commercial/Industrial Land Use.
Results in BOLD indicate a detected concentration that exceeds the respective ESL value.
Results are in milligrams per kilogram (mg/kg) unless otherwise noted.

TABLE 3

Summary of Groundwater Sample Analytical Results

Date Sampled	Sample ID	TPH-BO	TPH-HO
4/11/2011	B2	ND<100	ND<250
4/11/2011	B3	ND<100	ND<250
4/11/2011	B4	ND<100	ND<250
4/11/2011	B5	ND<100	ND<250
ESL		*100*	*100*

NOTES

TPH-BO = Total Petroleum Hydrocarbons as Bunker Oil.
TPH-HO = Total Petroleum Hydrocarbons as Hydraulic Oil.
ND = Not Detected.
a = Laboratory Note: contains oil range compounds.
ESL = Environmental Screening Level, developed by San Francisco Bay-Regional Water Quality Control Board (SF-RWQCB) updated May 2008, from Table C-Deep Soils, Commercial/Industrial Land Use.
Results in BOLD indicate a detected concentration that exceeds the respective ESL value.
Results are in micrograms per Liter (ug/L) unless otherwise noted.

FIGURES

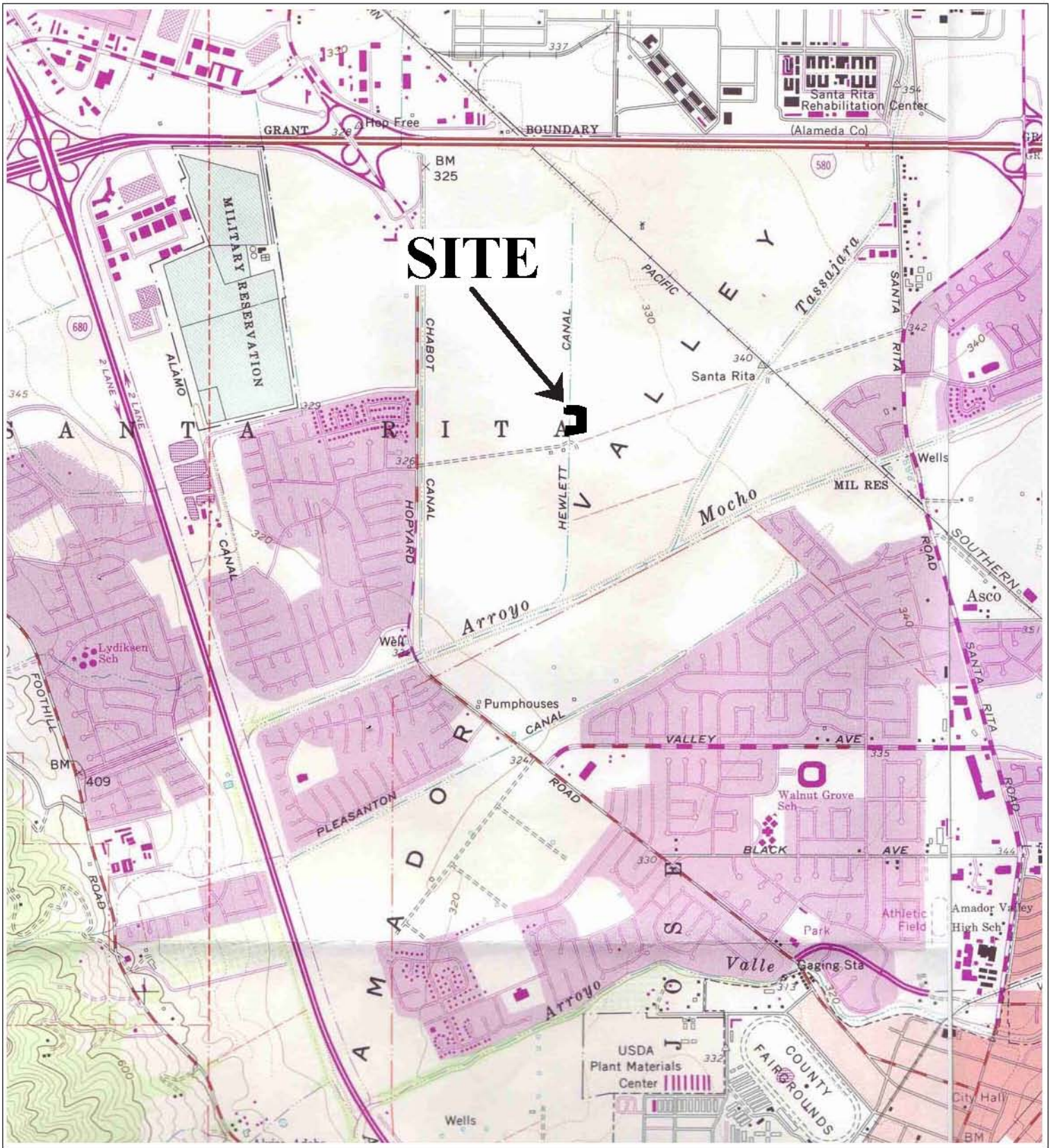


Figure 1
Site Location Map
4280 Hacienda Drive
Pleasanton, California

Base Map From:
U.S.Geological Survey 7.5 Minute Quadrangles
Dublin, California, and Livermore, California
Topomap Photorevised 1980,

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

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SCALE IN FEET

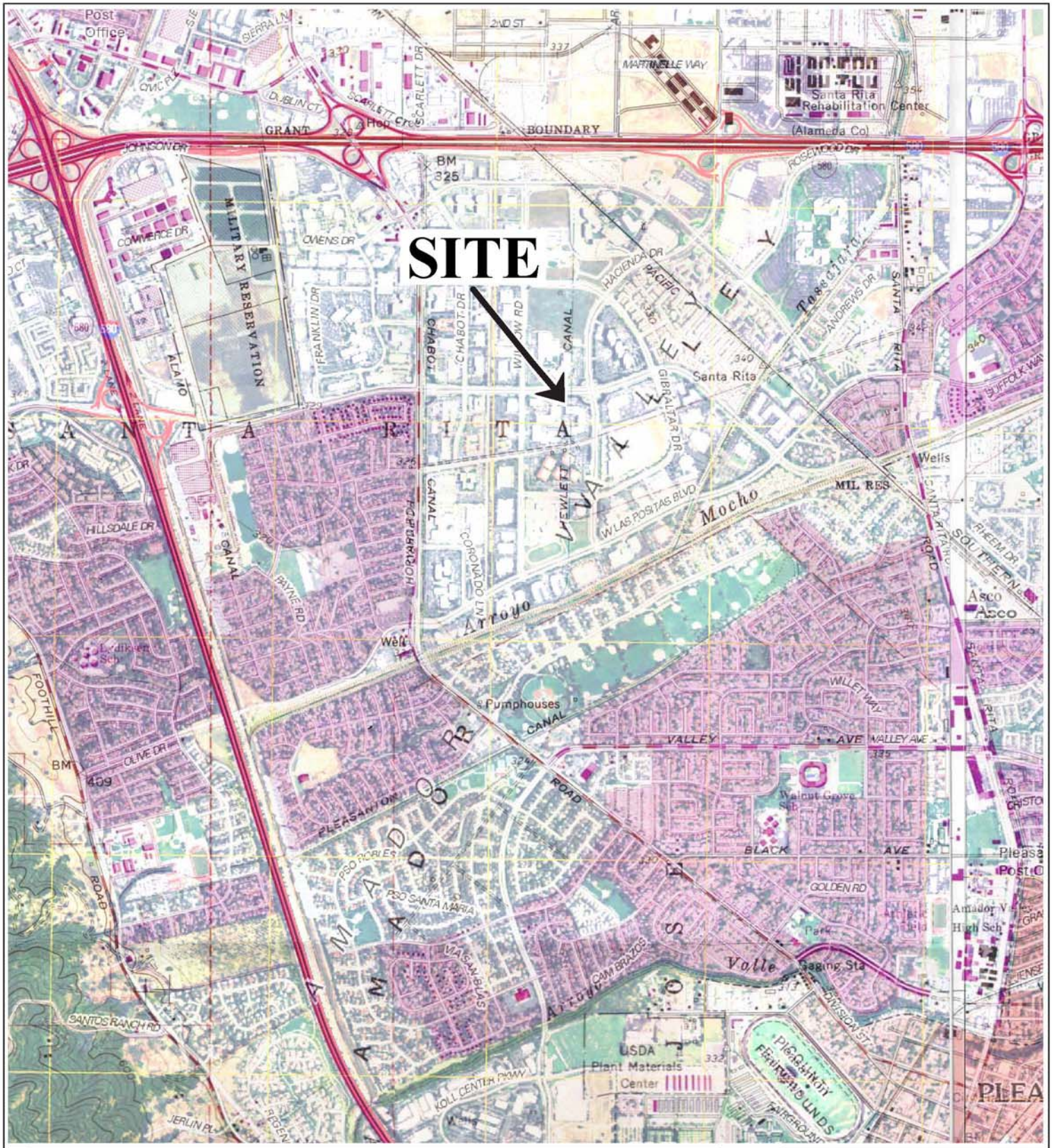

Figure 2
Site Location Map with Satellite Imagery
4280 Hacienda Drive
Pleasanton, California

N

Base Map From:
U.S.Geological Survey 7.5 Minute Quadrangles
Dublin, California, and Livermore, California
Topomap Photorevised 1980,
Satelite Imagery Quadrangles dated 2009

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

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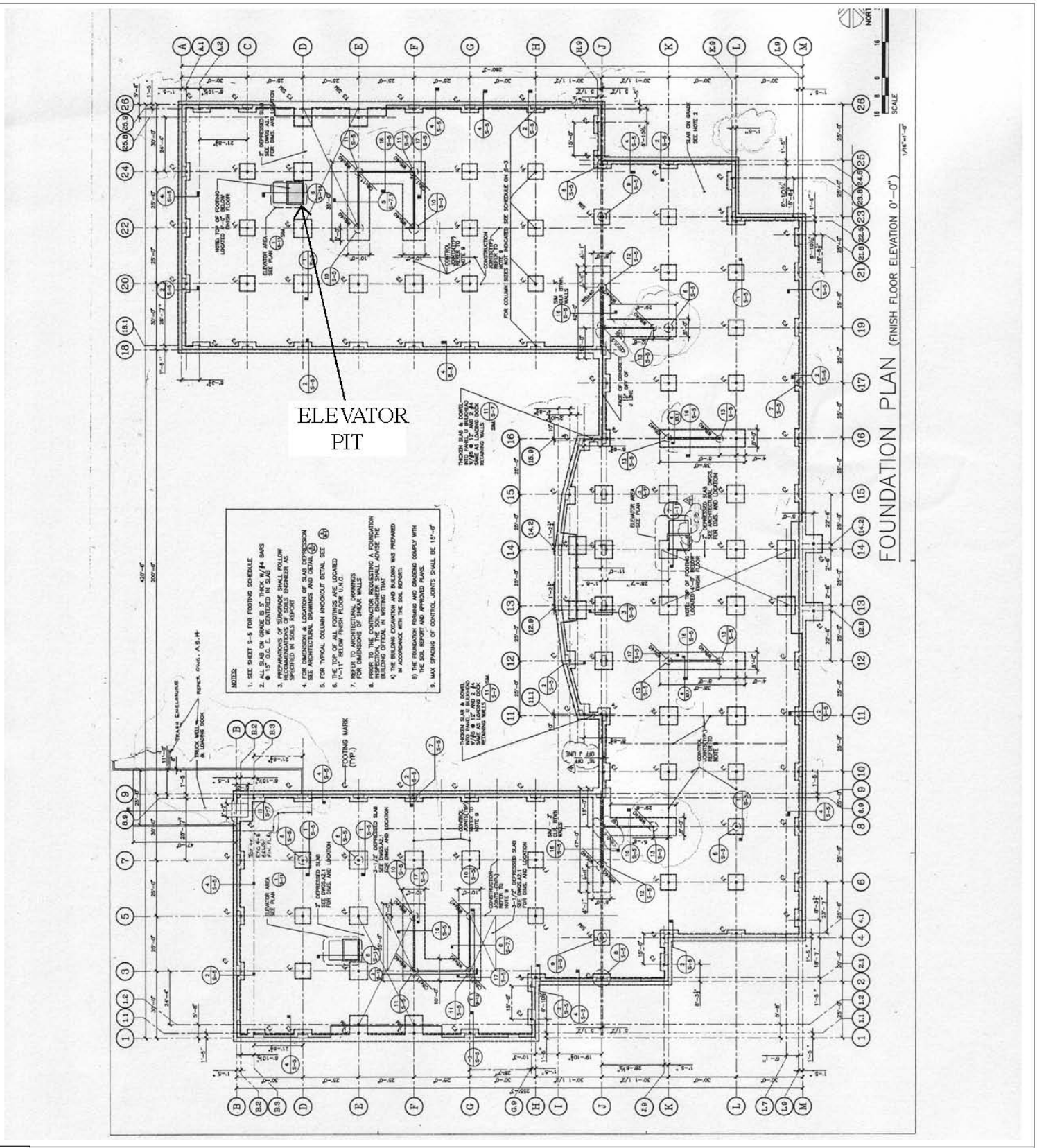

Figure 3
Foundation Plan
4280 Hacienda Drive
Pleasanton, California

N

Base Map From:
Hallenbeck, Chamorro & Associates,
Brittania Business Center, Hacienda
Business Park Foundation Plan
Dated 12/9/92

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

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APPROXIMATE SCALE IN FEET

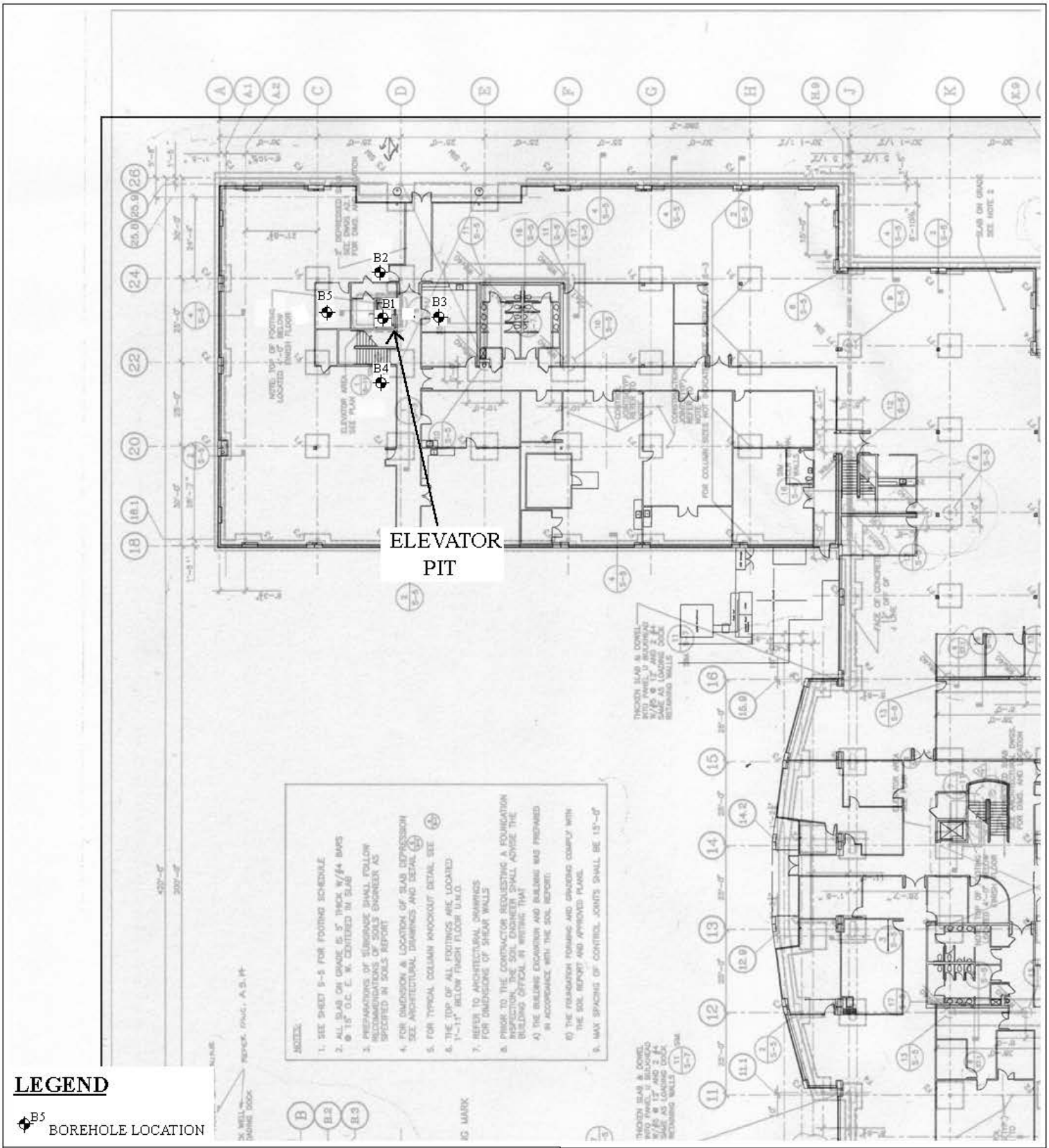


Figure 4
Site Plan Detail
4280 Hacienda Drive
Pleasanton, California

Base Map From:
Hallenbeck, Chamorro & Associates,
Brittania Business Center, Hacienda
Business Park Foundation Plan
Dated 12/9/92

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

0 20 40
APPROXIMATE SCALE IN FEET

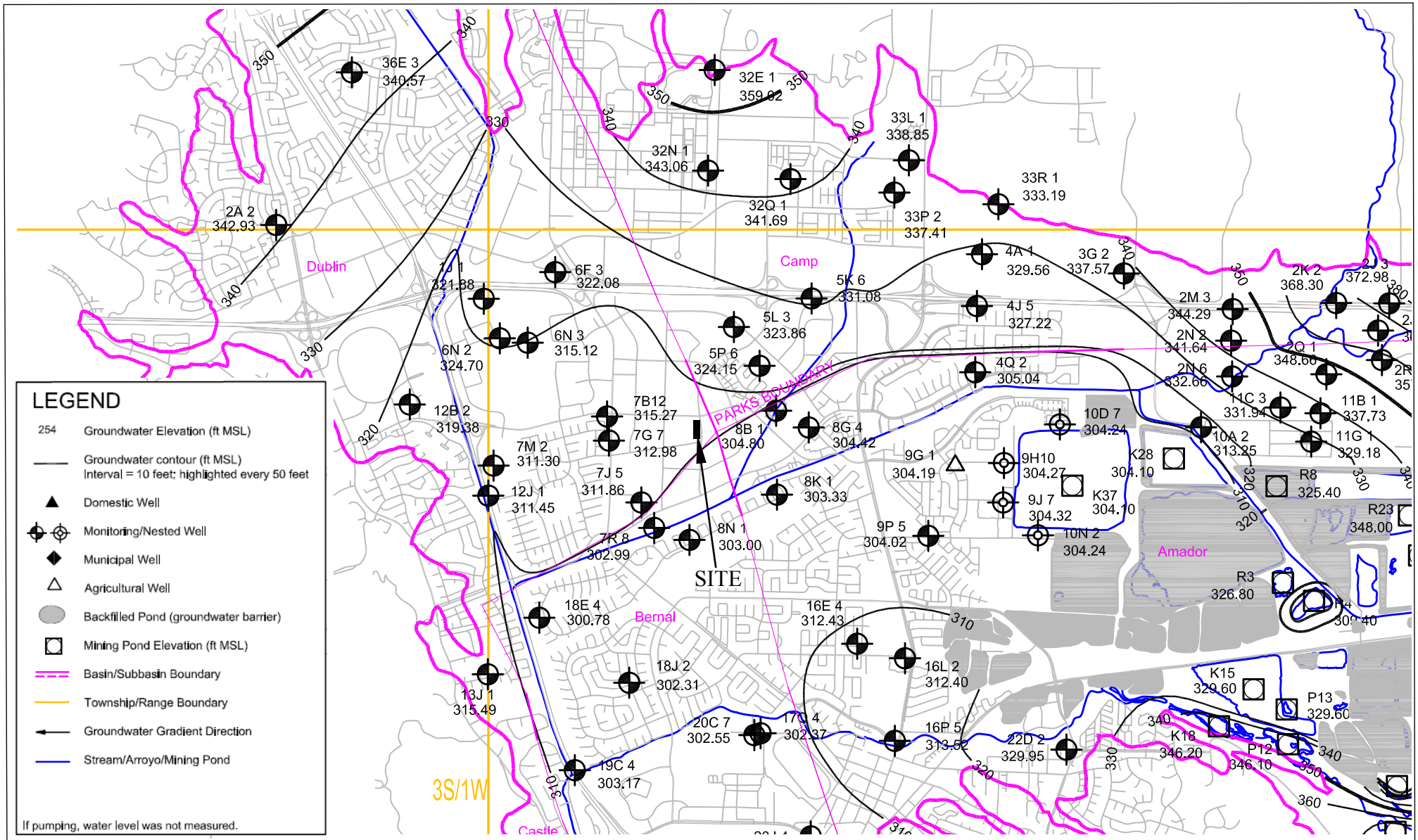
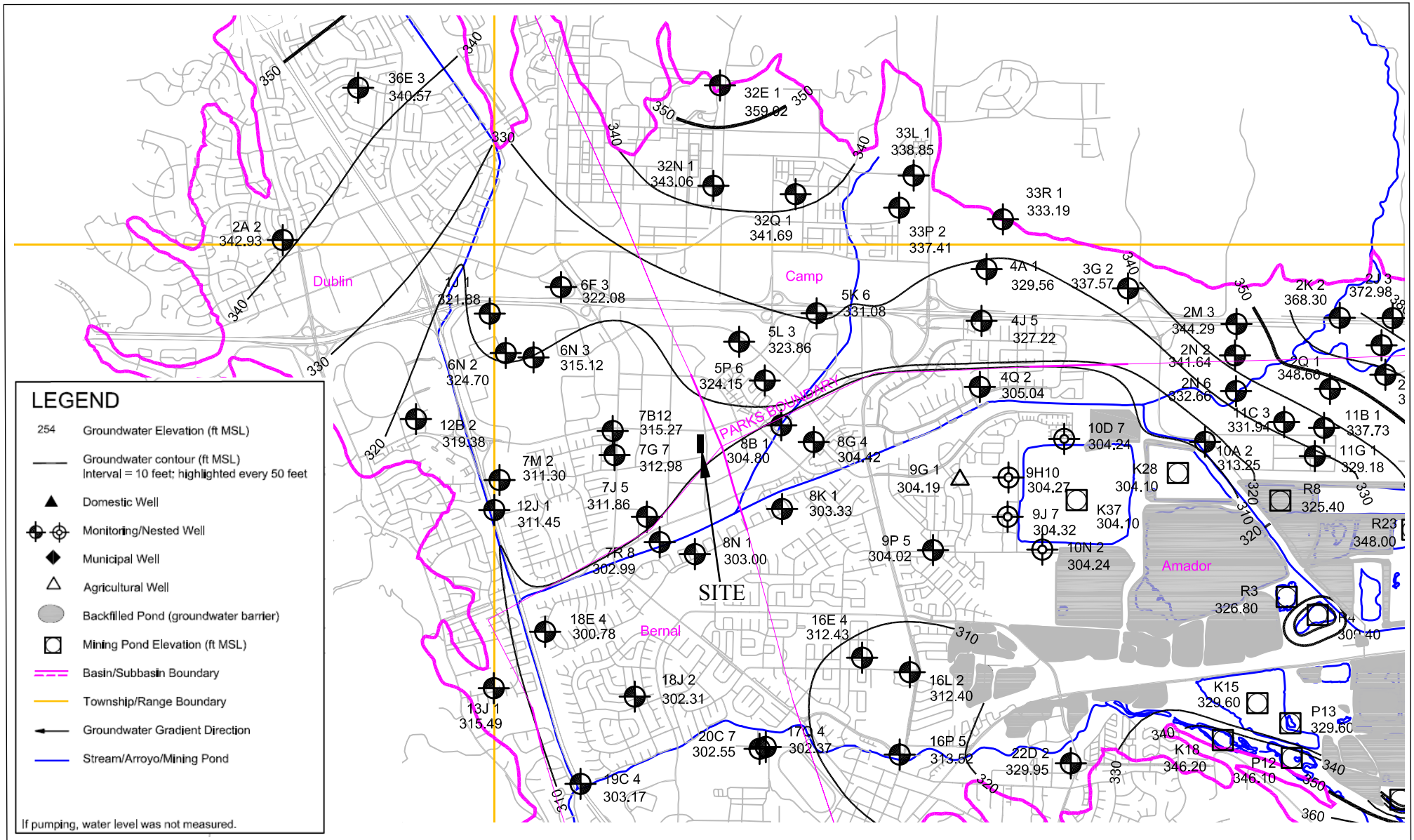


Figure 5
Zone 7 Groundwater Gradient Map Upper Aquifer Spring 2007
Livermore Valley Groundwater Basin
4280 Hacienda Drive
Pleasanton, California


LEGEND
254 Groundwater Elevation (ft MSL)
Groundwater contour (ft MSL) Interval = 10 feet; highlighted every 50 feet
Domestic Well
Monitoring/Nested Well
Municipal Well
Agricultural Well
Backfilled Pond (groundwater barrier)
Mining Pond Elevation (ft MSL)
Basin/Subbasin Boundary
Township/Range Boundary
Groundwater Gradient Direction
Stream/Arroyo/Mining Pond
If pumping, water level was not measured.
Dublin
Camp
Bernal
Amador
SITE
PARKS BOUNDARY
36E 3 340.57
32E 1 359.02
33L 1 338.85
32N 1 343.06
32Q 1 341.69
33R 1 333.19
33P 2 337.41
2A 2 342.93
1J 1 321.88
6F 3 322.08
5K 6 331.08
4A 1 329.56
3G 2 337.57
2K 2 368.30
2J 3 372.98
2M 3 344.29
4J 5 327.22
2N 2 341.64
2Q 1 348.66
2N 6 332.66
5L 3 323.86
6N 3 315.12
6N 2 324.70
5P 6 324.15
4Q 2 305.04
11C 3 331.94
11B 1 337.73
11G 1 329.18
10A 2 313.25
10D 7 304.24
12B 2 319.38
7B12 315.27
7G 7 312.98
8B 1 304.80
8G 4 304.42
7M 2 311.30
12J 1 311.45
7J 5 311.86
8K 1 303.33
9G 1 304.19
9H10 304.27
K28 304.10
R8 325.40
9J 7 304.32
K37 304.10
R23 348.00
7R 8 302.99
8N 1 303.00
9P 5 304.02
10N 2 304.24
R3 326.80
18E 4 300.78
16E 4 312.43
18J 2 302.31
16L 2 312.40
13J 1 315.49
K15 329.60
P13 329.60
20C 7 302.55
17C 4 302.37
16P 5 313.52
22D 2 329.95
K18 346.20
P12 346.10
19C 4 303.17
Figure 6
Zone 7 Groundwater Gradient Map Upper Aquifer Fall 2007
Livermore Valley Groundwater Basin
4280 Hacienda Drive
Pleasanton, California
N
Base Map From:
Zone 7
Groundwater Gradient Map/ Upper Aquifer; Fall 2007 (September)/
Livermore Groundwater Basin. June 2008
P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610
0 2,000 4,000
Approximate Scale In Feet

APPENDIX A

BORING LOGS

P&D ENVIRONMENTAL, INC.

BORING NO.: B1	PROJECT NO.: 0523	PROJECT NAME: 4280 Hacienda Drive, Pleasanton	
BORING LOCATION: In Elevator Pit at Southwest corner of PVC Hydraulic jack casing			ELEVATION AND DATUM: None
DRILLING AGENCY: K.M. McRae, Inc.	DRILLER: Matt	DATE & TIME STARTED: 2/3/11 1030	DATE & TIME FINISHED: 6/21/11 through 6/27/11
DRILLING EQUIPMENT: Rail-Mounted Hollow Stem Auger Rig			
COMPLETION DEPTH: 19.5 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 11.0 Feet	NO. OF SAMPLES: 3 Soil		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 0.5 ft. Brown fine silty sand (FILL); with some angular gravel to 0.5-inch diameter.	FILL		No Well Constructed B1-1.0	0	Borehole drilled in elevator pit. Elevator pit is 4.0 ft. below first floor grade. Depth of 0.0 ft. is top of elevator pit floor. Borehole drilled from 0.0 to 18.0 ft. using a rail-mounted 6.5-inch O.D. Hollow Stem Auger Rig.
5	0.5 to 8.5 ft. Dark Brown clay (OH); soft to medium stiff, moist, with reddish-brown mottling and rootlets. No Petroleum Hydrocarbon (PHC) odor.	OH			0	Soil continuously cored using a 2.0-inch O.D. California modified split spoon sampler pushed by a 1,200 lb. rail-mounted drill rig
				▼	0	
10	8.5 to 13.0 ft. Grayish-brown clay (CL); medium stiff, moist. No PHC odor. Wet at 10.5 ft. Saturated at 11.0 ft.			B1-9.5 ▽	0	First encountered water during drilling at 10.5 ft. Water level measured in borehole at 8.1 ft. at 1348.
15	13.0 to 19.5 ft. Gray clay (CL); soft, saturated, with some angular gravel to 0.25-inch diameter between 14.0 to 17.5 ft. Hydraulic oil visible at 13.0 ft. Saturated with hydraulic oil 13.5 to 19.0 ft.	CL			0	Water level measured from top of adjacent PVC casing at 7.3 ft. at 1420. Top of PVC is 0.3 ft. below top of elevator pit floor. After sample collection to 19.5 ft. depth, hollow stem auger removed from borehole 2/3/11 and borehole collapsed to 15.0 ft. depth.
	Medium stiff at 19.5 ft.			B1-19.0	0	
20						Borehole subsequently destroyed during drilling of 36-inch diameter borehole in elevator pit that extended to 22 ft. depth from 6/21/11 through 6/27/11.
25						
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: B2	PROJECT NO.: 0523	PROJECT NAME: 4280 Hacienda Drive, Pleasanton	
BORING LOCATION: North of Elevator Pit, approximately 15 feet from B1			ELEVATION AND DATUM: None
DRILLING AGENCY: Vironex	DRILLER: Mike	DATE & TIME STARTED: 3/29/11 0815	DATE & TIME FINISHED: 6/22/11 0835
DRILLING EQUIPMENT: GeoProbe Badger			
COMPLETION DEPTH: 24.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 21.5 Feet	NO. OF SAMPLES: 1 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 1.5 ft. Concrete slab (6-inches) and sandy gravel base (FILL).	FILL		No Well Constructed	0	Borehole hand augered from 0.0 to 3.0 ft using 3.0-inch O.D. hand auger.
5	1.5 to 8.0 ft. Dark gray clay (OH); medium stiff, moist, with rootlets and black mottling. No Petroleum Hydrocarbon (PHC) odor.	OH			0	Borehole continuously cored using a 3.0-foot long 2.0-inch O.D. Geoprobe single wall drill rods containing a Geoprobe Macrocore barrel sampler. The sampler was lined with 2.8-foot long 1.75-inch O.D. transparent PVC tubes.
				▼	0	3-6 ft 2.8 ft recovery 6-9 ft 2.8 ft recovery 9-12 ft 2.8 ft recovery 12-15 ft 2.8 ft recovery 15-18 ft 2.6 ft recovery 18-21 ft 2.8 ft recovery 21-24 ft 2.8 ft recovery
10	8.0 to 13.0 ft. Dark grayish-brown clay (CL); medium stiff, moist, with black mottling. No PHC odor.	CL			0	Temporary 1.0-inch diameter slotted PVC casing with pre-packed filter placed in borehole.
15	13.0 to 16.5 ft. Color change to brown with black mottling.				0	Water level measured at 16.3 ft at 1046 and at 11.3 ft at 1056. Depth to water was subsequently measured at 8.2 ft at 1224.
	16.5 to 24.0 ft. Color change to grayish-brown.					Because the borehole was inside an unoccupied building, the permitting agency allowed the borehole to be left open for the duration of the project, prior to grouting.
	17.0 to 21.0 ft. Some coarse sand and coarse gravel to 0.5-inch diameter.				0	
20		X		B2-20.0		
	Wet at 21.0 ft. Saturated at 21.5 ft.			▽	0	Borehole grouted on 6/22/11 using a tremie pipe and neat cement grout.
25						Mr. Jeff Jones with Zone 7 Water Agency on site to observe and document grouting of the borehole.
30						

P&D ENVIRONMENTAL, INC.

BORING NO.: B3	PROJECT NO.: 0523	PROJECT NAME: 4280 Hacienda Drive, Pleasanton	
BORING LOCATION: East of Elevator Pit, approximately 17 feet from B1			ELEVATION AND DATUM: None
DRILLING AGENCY: Vironex	DRILLER: Mike	DATE & TIME STARTED: 3/31/11 0820	DATE & TIME FINISHED: 6/22/11 0925
DRILLING EQUIPMENT: GeoProbe Badger			
COMPLETION DEPTH: 27.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 22.5 Feet	NO. OF SAMPLES: 1 Soil		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 1.5 ft. Concrete (6-inches) slab and sandy gravel base (FILL).	FILL		No Well Constructed	0	Borehole hand augered from 0.0 to 3.0 ft using 3.0-inch O.D. hand auger.
5	1.5 to 9.0 ft. Dark gray clay (OH); medium stiff, moist, with abundant organic content and black mottling. No Petroleum Hydrocarbon (PHC) odor.	OH			0	Borehole continuously cored using a 3.0-foot long 2.0-inch O.D. Geoprobe single wall drill rods containing a Geoprobe Macrocore barrel sampler. The sampler was lined with 2.8-foot long 1.75-inch O.D. transparent PVC tubes.
10	9.0 to 14.0 ft. Dark grayish-brown clay (CL); medium stiff, moist, with black mottling. No PHC odor. 11.0 to 12.0 ft. Some coarse sand.	CL			0	3-6 ft 2.8 ft recovery 6-9 ft 2.8 ft recovery 9-12 ft 2.8 ft recovery 12-15 ft 2.6 ft recovery 15-18 ft 2.8 ft recovery 18-21 ft 2.6 ft recovery 21-24 ft 2.6 ft recovery 24-27 ft 2.6 ft recovery Temporary 1.0-inch diameter slotted PVC casing with pre-packed filter placed in borehole.
15	14.0 to 15.0 ft. Color change to dark brown with black mottling. Expansive clay. 15.0 to 27.0 ft. Color change to dark grayish-brown with black mottling. Expansive clay.				0	Expanding clays from 14.0 to 24.0 ft. Difficulty inserting temporary well past 14.0 ft. Borehole extended to 27.0 ft to confirm depth of saturated zone. Well was dry at 1050.
20		X		B3-20.0	0	Because the borehole was inside an unoccupied building, the permitting agency allowed the borehole to be left open for the duration of the project, prior to grouting.
25	Wet at 22.0 ft. Saturated at 22.5 ft. 24.0 to 27.0 ft. stiff clay			▽	0	Borehole grouted on 6/22/11 using a tremie pipe and neat cement grout.
30						Mr. Jeff Jones with Zone 7 Water Agency on site to observe and document grouting of the borehole.

P&D ENVIRONMENTAL, INC.

BORING NO.: B4	PROJECT NO.: 0523	PROJECT NAME: 4280 Hacienda Drive, Pleasanton	
BORING LOCATION: South of Elevator Pit, approximately 20 feet from B1			ELEVATION AND DATUM: None
DRILLING AGENCY: Vironex	DRILLER: Mike	DATE & TIME STARTED: 3/31/11 1125	DATE & TIME FINISHED: 6/22/11 0905
DRILLING EQUIPMENT: GeoProbe Badger			
COMPLETION DEPTH: 30.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: 26.5 Feet	NO. OF SAMPLES: 1 Soil		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 1.5 ft. Concrete slab (6-inches) and sandy gravel base (FILL).	FILL		No Well Constructed	0	Borehole hand augered from 0.0 to 3.0 ft using 3.0-inch O.D. hand auger.
5	1.5 to 11.0 ft. Dark gray clay (OH); medium stiff, moist, with rootlets and black mottling. No Petroleum Hydrocarbon (PHC) odor.	OH			0	Borehole continuously cored using a 3.0-foot long 2.0-inch O.D. Geoprobe single wall drill rods containing a Geoprobe Macrocore barrel sampler. The sampler was lined with 2.8-foot long 1.75-inch O.D. transparent PVC tubes.
10	9.0 to 14.0 ft. Expansive clays.				0	3-6 ft 2.4 ft recovery 6-9 ft 2.8 ft recovery 9-12 ft 2.6 ft recovery 12-15 ft 2.4 ft recovery 15-18 ft 2.8 ft recovery 18-21 ft 2.8 ft recovery 21-24 ft 2.8 ft recovery 24-27 ft 2.6 ft recovery 27-30 ft 2.8 ft recovery
15	11.0 to 26.0 ft. Dark brown clay (CL); medium stiff, moist, with black mottling. No PHC odor. 16.0 to 30.0 ft. Expansive clay.	CL			0	Temporary 1.0-inch diameter slotted PVC casing with pre-packed filter placed in borehole. Expanding clays from 9.0 to 30.0 ft. Water not encountered at 24.0 ft. Borehole extended to 27.0 ft. Water encountered during drilling at 26.5 ft. Borehole extended to 30.0 ft. Well was dry at 1548.
20		X		B4-20.0	0	Because the borehole was inside an unoccupied building, the permitting agency allowed the borehole to be left open for the duration of the project, prior to grouting.
25	Wet at 26.0 ft. Saturated at 26.5 ft. 26.0 to 30.0 ft. Color change to grayish-brown with black mottling. 27.0 to 30.0 ft. stiff clay			▽	0	Borehole grouted on 6/22/11 using a tremie pipe and neat cement grout.
30					0	Mr. Jeff Jones with Zone 7 Water Agency on site to observe and document grouting of the borehole.

P&D ENVIRONMENTAL, INC.

BORING NO.: B5	PROJECT NO.: 0523	PROJECT NAME: 4280 Hacienda Drive, Pleasanton	
BORING LOCATION: West of Elevator Pit, approximately 17 feet from B1			ELEVATION AND DATUM: None
DRILLING AGENCY: Vironex	DRILLER: Mike	DATE & TIME STARTED: 3/29/11 1110	DATE & TIME FINISHED: 6/22/11 0850
DRILLING EQUIPMENT: GeoProbe Badger			
COMPLETION DEPTH: 27.0 Feet	BEDROCK DEPTH: Not Encountered	LOGGED BY: MLD	CHECKED BY: PHK
FIRST WATER DEPTH: Not Encountered	NO. OF SAMPLES: 1 Soil, 1 Water		

DEPTH (FT.)	DESCRIPTION	GRAPHIC COLUMN	BLOW COUNT PER 6"	WELL CONSTRUCTION LOG	PID	REMARKS
	0.0 to 1.5 ft. Concrete slab (6-inches) and sandy gravel base (FILL).	FILL		No Well Constructed	0	Borehole hand augered from 0.0 to 3.0 ft using 3.0-inch O.D. hand auger.
5	1.5 to 9.0 ft. Dark gray clay (OH); medium stiff, moist, with rootlets and black mottling. No Petroleum Hydrocarbon (PHC) odor.	OH				Borehole continuously cored using a 3.0-foot long 2.0-inch O.D. Geoprobe single wall drill rods containing a Geoprobe Macrocore barrel sampler. The sampler was lined with 2.8-foot long 1.75-inch O.D. transparent PVC tubes.
	8.0 to 9.0 ft. Abundant organic content.				0	3-6 ft 2.6 ft recovery 6-9 ft 2.8 ft recovery 9-12 ft 2.8 ft recovery 12-15 ft 2.6 ft recovery 15-18 ft 2.8 ft recovery 18-21 ft 2.8 ft recovery 21-24 ft 2.6 ft recovery 24-27 ft 2.8 ft recovery
10	9.0 to 14.0 ft. Dark grayish-brown clay (CL); medium stiff, moist, with black mottling. No PHC odor.	CL		▼		Temporary 1.0-inch diameter slotted PVC casing with pre-packed filter placed in borehole.
15	14.0 to 23.0 ft. Color change to dark brown with black mottling.				0	Water not encountered during drilling to 24.0 ft on 3/29/11. Water level measured at 23.0 ft at 0705 on 3/31/11. Borehole extended to 27.0 ft on 3/31/11. Water level measured at 11.3 ft at 0811 and at 9.5 ft at 0828.
	23.0 to 27.0 ft. Color change to grayish-brown.				0	
20		X		B5-20.0		
	Wet at 24.5 ft. Saturated at 25.0 ft.				0	Because the borehole was inside an unoccupied building, the permitting agency allowed the borehole to be left open for the duration of the project, prior to grouting.
25				▽		Borehole grouted on 6/22/11 using a tremie pipe and neat cement grout.
						Mr. Jeff Jones with Zone 7 Water Agency on site to observe and document grouting of the borehole.
30						

APPENDIX B

GROUNDWATER MONITORING/WELL PURGING
DATA SHEETS

P&D Environmental
Groundwater Monitoring/Well Purging Data Sheet

Site Name 4280 Hacienda Dr., Pleasanton
Well No. Temp. B2
Job Number 0523
Date 4/11/11
TOC to Water (ft.) 9.21
Sheen None
Well Depth (ft.) 24.0
Free Product Thickness ∅
Well Diameter 1 ''
Sample Collection Method ~~Dedicated~~ 5.2 Dedicated
Flow Rate (mL/minute) 130 PE tubing + Peristaltic pump
Start Purge Time 1355

Time	Vol. Purged (mL)	pH	Depth to Water (ft.)	Temperature (C°)	Electrical Conductivity (µS/cm)	Turbidity (NTU)
1358	390	7.21	—	17.4	>3999	116
1402	910	7.14	—	17.5	>3999	202
1405	1,300	7.08	—	17.5	>3999	113
1408	1,690	7.09	—	17.5	>3999	43.81
1411	2,080	7.09	—	17.5	>3999	29.86
1415	2,600	7.11	—	17.5	>3999	46.29
1418	2,990	7.15	—	17.5	>3999	17.56
1421	3,510	7.11	—	17.5	>3999	14.42
1424	3,770	7.13	—	17.5	>3999	12.52
1427	4,160	7.13	—	17.5	>3999	13.17
1430	4,550	7.14	—	17.4	>3999	15.25
1433	5,200	7.09	—	17.5	>3999	32.48
1437	5,460	~~7.11~~ 7.15	—	17.5	>3,999	35.89
1439	5,720	7.13	—	17.5	>3999	85
1444	6,370	7.14	—	17.5	>3999	47.73
1446	6,630	7.14	—	17.5	>3999	37.66

NOTES

GW Sample B2 collected @ 1455 hrs

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%

Time	Turb	pH	temp	Cond
1447	35.77	—	—	—
1450	43.05	—	—	—
1451	4231	7.19	17.4	>3,999
1453	19.34	—	—	—
1454	15.76	—	—	—

P&D Environmental
Groundwater Monitoring/Well Purging Data Sheet

Site Name 4280 Hacienda Dr, Pleasanton

Job Number 0523

TOC to Water (ft.) 14.49

Well Depth (ft.) ~27.0

Well Diameter 1"

Flow Rate (mL/minute) 130

Start Purge Time 1257

Well No. Temp B3

Date 4/11/11

Sheen None

Free Product Thickness Ø

Sample Collection Method 3/8" ~~Never used~~ PE tubing & peristaltic pump Dedicated

Time	Vol. Purged (mL)	pH	Depth to Water (ft.)	Temperature (C°)	Electrical Conductivity (µS/cm)	Turbidity (NTU)
1300	390	7.50	—	17.5	23,999	10.52
1302	650	7.26	—	18.0	23,999	4.72
1305	1,040	7.18	—	18.0	23,999	7.56
1308	1,430	7.16	—	18.0	23,999	7.67
1311	1,820	7.12	—	18.0	23,999	18.77
1315	2,340	7.11	—	18.0	23,999	24.19
1317	well dewatered after purging additional approx 100 mL.					

NOTES

GW Sample B3 collected @ 1555 hrs

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%

P&D Environmental
Groundwater Monitoring/Well Purging Data Sheet

Site Name 4280 Hacienda Dr., Pleasanton

Job Number 0523

TOC to Water (ft.) 15.39

Well Depth (ft.) 30.0

Well Diameter 1"

Flow Rate (mL/minute) 130

Start Purge Time 1225

Temp Well No. B4

Date 4/11/11

Sheen None

Free Product Thickness Ø

Dedicated Sample Collection Method PE tubing + peristaltic pump

Time	Vol. Purged (mL)	pH	Depth to Water (ft.)	Temperature (C°)	Electrical Conductivity (µS/cm)	Turbidity (NTU)
1229	520	7.11	—	18.6	73999	24.04
1232	910	7.05	—	18.5	73999	86
1235	1300	7.02	—	18.4	73999	148
1237	1,560	6.98	—	18.2	73999	180
1241	2,080	7.00	—	18.2	73999	64
1243	well dewatered after purging additional ~100 mL					

NOTES

B4 (groundwater) collected @ 1620

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%

P&D Environmental
Groundwater Monitoring/Well Purging Data Sheet

Site Name 4280 Hacienda Dr, Pleasanton
Job Number 0523
TOC to Water (ft.) 9.42
Well Depth (ft.) 27.0
Well Diameter 1"
Flow Rate (mL/minute) 130
Start Purge Time 1327

Temp Well No. BS
Date 4/11/11
Sheen None
Free Product Thickness Ø
Sample Collection Method ~~Non-dedicated~~ Dedicated PE tubing peristaltic pump

Time	Vol. Purged (mL)	pH	Depth to Water (ft.)	Temperature (C°)	Electrical Conductivity (µS/cm)	Turbidity (NTU)
1330	390	7.35	—	~~23999~~ 17.4	>3999	22.35
1333	780	7.23	—	17.6	>3999	103
1335	1,040	7.16	—	17.6	>3999	58
1338	1,430	7.16	—	17.8	>3999	12.36
1341	1,820	7.16	—	17.9	>3999	8.66
1344	2,210	7.16	—	17.9	>3999	13.20
1347	2,600	7.17	—	17.9	>3999	36.47
1348	well dewatered					

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%

GW Sample BS collected @ 1525

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTS

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: #0523; 4280 Hacienda Dr. Pleasanton	Date Sampled: 03/29/11
		Date Received: 04/01/11
55 Santa Clara, Ste.240	Client Contact: Michael Deschenes	Date Reported: 04/07/11
Oakland, CA 94610	Client P.O.:	Date Completed: 04/05/11

WorkOrder: 1104015

April 07, 2011

Dear Michael:

Enclosed within are:

1) The results of the **4** analyzed samples from your project: **#0523; 4280 Hacienda Dr. Pleasanton,**
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

1104015

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0523	4280 HACIENDA DR. PLEASANTON

SAMPLED BY: (PRINTED AND SIGNATURE) MICHAEL DESCHENES

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH (GAS HOLD) SILICA GEL CLEANUP	PRESERVATIVE	REMARKS
B2-20	3/29/11	1025	SOIL		1	X	ICE	NORMAL TURNAROUND
B3-20	3/31/11	0950	SOIL		1	X		
B4-20	3/31/11	1420	SOIL		1	X		
B5-20	3/29/11	1420	SOIL		1	X		

ICE/t° 5.4c
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)	TOTAL NO. OF SAMPLES (THIS SHIPMENT)	LABORATORY:
Michael Deschenes	4/1/11	1400		4	MC CAMPBELL ANALYTICAL
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	TOTAL NO. OF CONTAINERS (THIS SHIPMENT)	LABORATORY PHONE NUMBER:
	4/1/11	1455		4	(877) 252-9262
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	LABORATORY CONTACT: ANGELA RYDELIUS	SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( )YES (X)NO

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

REMARKS:

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1104015 **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: #0523; 4280 Hacienda Dr. Pleasanton

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

Requested TAT: 5 days

Date Received: **04/01/2011**
Date Printed: **04/01/2011**

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
1104015-001	B2-20	Soil	3/29/2011 10:25	☐	A											
1104015-002	B3-20	Soil	3/29/2011 9:50	☐	A											
1104015-003	B4-20	Soil	3/29/2011 14:20	☐	A											
1104015-004	B5-20	Soil	3/29/2011 14:20	☐	A											

Test Legend:

1	TPH-WSG_S	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

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

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

Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **4/1/2011 3:09:11 PM**

Project Name: **#0523; 4280 Hacienda Dr. Pleasanton**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **1104015** Matrix Soil

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 5.4°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
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: #0523; 4280 Hacienda Dr. Pleasanton	Date Sampled: 03/29/11
		Date Received: 04/01/11
55 Santa Clara, Ste.240	Client Contact: Michael Deschenes	Date Extracted: 04/01/11
Oakland, CA 94610	Client P.O.:	Date Analyzed: 04/03/11-04/05/11

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3550B/3630C Analytical methods: SW8015B Work Order: 1104015

Lab ID	Client ID	Matrix	TPH-Bunker Oil (C10-C36)	TPH-Hydraulic Oil (C18-C36)	DF	% SS	Comments
1104015-001A	B2-20	S	2.3	5.6	1	107	e7
1104015-002A	B3-20	S	ND	ND	1	109	
1104015-003A	B4-20	S	ND	ND	1	108	
1104015-004A	B5-20	S	ND	ND	1	103	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	2.0	5.0	mg/Kg

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

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

%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:

e7) oil range compounds are significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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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 SW8015B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 57383 WorkOrder 1104015

EPA Method SW8015B **Extraction SW3550B/3630C** **Spiked Sample ID: 1113089-015A**

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-Diesel (C10-C23)	ND	40	94.9	95.7	0.897	93.3	94.6	1.29	70 - 130	30	70 - 130	30
%SS:	106	25	102	103	0.595	95	96	0.790	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 57383 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1104015-001A	03/29/11 10:25 AM	04/01/11	04/03/11 5:29 PM	1104015-002A	03/29/11 9:50 AM	04/01/11	04/03/11 6:43 PM
1104015-003A	03/29/11 2:20 PM	04/01/11	04/05/11 3:58 AM	1104015-004A	03/29/11 2:20 PM	04/01/11	04/04/11 5:02 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.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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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: #0523; 4280 Hacienda Dr., Pleasanton	Date Sampled: 04/11/11
		Date Received: 04/12/11
55 Santa Clara, Ste.240	Client Contact: Steve Carmack	Date Reported: 04/19/11
Oakland, CA 94610	Client P.O.:	Date Completed: 04/19/11

WorkOrder: 1104323

April 19, 2011

Dear Steve:

Enclosed within are:

1) The results of the **4** analyzed samples from your project: **#0523; 4280 Hacienda Dr., Pleasanton,**
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

1104323

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER:	PROJECT NAME:
0523	4780 Hacienda Dr., Pleasanton

SAMPLED BY: (PRINTED AND SIGNATURE) Steve Carmack

	SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-GD + HO	w/ silica gel cleanup	Bawa Zone Method	PRESERVATIVE	REMARKS
+	B2	4/11/11	1455	H_2O			X				Normal Turnaround
+	B3	↓	1555	↓			X				↓
+	B4		1620				X				
+	B5	↓	1525	↓			X				↓

ICE / t° 5.4° ✓
GOOD CONDITION ✓ APPROPRIATE CONTAINERS ✓
HEAD SPACE ABSENT ___ PRESERVED IN LAB ___
DECHLORINATED IN LAB ___
PRESERVATION VOAS | O&G | METALS | OTHER ✓

RELINQUISHED BY: (SIGNATURE)	DATE 4/12/11	TIME 1341	RECEIVED BY: (SIGNATURE)	TOTAL NO. OF SAMPLES (THIS SHIPMENT) 4	LABORATORY: McCampbell Analytical
RELINQUISHED BY: (SIGNATURE)	DATE 4/12/11	TIME 1430	RECEIVED BY: (SIGNATURE)	TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 6	LABORATORY CONTACT: Angela Rydelius
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	SAMPLE ANALYSIS REQUEST SHEET ATTACHED: (X)YES ( )NO	LABORATORY PHONE NUMBER: (877) 252-9262

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

REMARKS: * See Attached *

APPENDIX D

Protocol for Gravity Separation of Groundwater Samples

ATTACHMENT A

Protocol for Gravity Separation of Groundwater Samples to Isolate the Water Phase

Groundwater samples may contain non-dissolved petroleum resulting from entrained sheen and/or entrained petroleum-affected soil particles. The objective of this procedure is to separate the oil phase and the particulate matter solid phase from the water phase prior to extraction and analysis of the sample. In this way, the analysis will better represent the true dissolved-phase of the sample. The success of this procedure depends on many factors, including adequate time for separation, and complete exclusion of the oil and particulate matter phases from the collected water phase.

For groundwater samples to be analyzed for semi-volatiles (e.g., extractable TPH, PAHs):

1. Pour the raw groundwater sample into a glass separatory funnel of adequate volume.
2. Allow the sample to separate and equilibrate for a minimum of 48 hours. Keep the sample refrigerated during the separation period.
3. After the separation period, the analyst will observe the sample to confirm that the water phase is visually clear. If the water is not visually clear, additional separation time may be required.
4. Open the bottom stopcock of the funnel and allow all of the particulate matter that collected at the bottom to run completely through; discard.
5. Collect an adequate sample volume of the water phase from the bottom of the funnel without including any of the oil phase and place into appropriate containers.
6. Add surrogates to water phase sample and extract as per requested method.

For groundwater samples to be analyzed for volatiles (e.g., purgeable TPH, BTEX, etc.):

1. Store the 40-ml VOA vials upside-down in the refrigerator for a minimum of 48 hours.
2. After the separation period, the vials must remain in the upside-down position while the septum is punctured by the hypodermic needle and the water phase is subsampled. The analyst should keep the needle tip within the water phase and must avoid both the solid and oil phases with the needle tip during subsampling.

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(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1104323 **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: #0523; 4280 Hacienda Dr., Pleasanton

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

Requested TAT: 5 days

Date Received: **04/12/2011**
Date Printed: **04/12/2011**

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
1104323-001	B2	Water	4/11/2011 14:55	☐	A											
1104323-002	B3	Water	4/11/2011 15:55	☐	A											
1104323-003	B4	Water	4/11/2011 16:20	☐	A											
1104323-004	B5	Water	4/11/2011 15:25	☐	A											

Test Legend:

1	TPH-DZ-MAIWSG_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

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

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Sample Receipt Checklist

Client Name: **P & D Environmental**
Date and Time Received: **4/12/2011 2:42:11 PM**

Project Name: **#0523; 4280 Hacienda Dr., Pleasanton**
Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **1104323** Matrix Water
Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 5.4°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
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: #0523; 4280 Hacienda Dr., Pleasanton	Date Sampled: 04/11/11
		Date Received: 04/12/11
55 Santa Clara, Ste.240	Client Contact: Steve Carmack	Date Extracted: 04/12/11
Oakland, CA 94610	Client P.O.:	Date Analyzed: 04/15/11-04/18/11

Total Extractable Petroleum Hydrocarbons with Dawn Zemo Separation & MAI Silica Gel Clean-Up*

Extraction method: SW3510C/3630C/Dawn Zemo S Analytical methods: SW8015B Work Order: 1104323

Lab ID	Client ID	Matrix	TPH-Bunker Oil (C10-C36)	TPH-Hydraulic Oil (C18-C36)	DF	% SS	Comments
1104323-001A	B2	W	ND	ND	1	96	
1104323-002A	B3	W	ND	ND	1	95	
1104323-003A	B4	W	ND	ND	1	94	
1104323-004A	B5	W	ND	ND	1	94	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	100	250	µg/L
	S	NA	NA	mg/Kg

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

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate 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:

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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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 SW8015B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 57602 WorkOrder 1104323

EPA Method SW8015B **Extraction SW3510C/3630C/Dawn Zemo Separation** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	104	121	15.2	N/A	N/A	70 - 130	30
%SS:	N/A	625	N/A	N/A	N/A	98	101	3.53	N/A	N/A	70 - 130	30

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

BATCH 57602 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1104323-001A	04/11/11 2:55 PM	04/12/11	04/15/11 2:24 PM	1104323-002A	04/11/11 3:55 PM	04/12/11	04/15/11 3:32 PM
1104323-003A	04/11/11 4:20 PM	04/12/11	04/15/11 4:54 PM	1104323-004A	04/11/11 3:25 PM	04/12/11	04/18/11 5:59 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.

DHS ELAP Certification 1644 QA/QC Officer