GRASS VALLEY ESTATES, LLC 1795 Solano Avenue Berkeley, CA 94707-2209 mforbes@feforbes.com 510 526-7933 510 526-7976 (fax)

August 16, 2013

Ms. Donna Drogos Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

SUBJECT: SUBSURFACE INVESTIGATION REPORT CERTIFICATION Former Gasoline Station 4600 Grass Valley Road Oakland, CA 94605

Dear Ms. Drogos:

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

Subsurface Investigation Report dated August 16, 2013 (document 0627.R1).

Please review the attached report and let me know if you agree with the report conclusions and recommendations.

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

Should you have any questions, please do not hesitate to contact m at (510) 526-7933.

Sincerely,

GRASS VALLEY ESTATES, LLC

Mark E. Forbes Manager

0627.L1

P&D ENVIRONMENTAL, INC.

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

August 16, 2013 Report 0627.R1

Mr. Mark Forbes Grass Valley Estates, LLC 1795 Solano Avenue Berkeley, CA 94707-2209

SUBJECT: SUBSURFACE INVESTIGATION REPORT Former Gasoline Station 4600 Grass Valley Road Oakland, CA

Dear Mr. Forbes:

P&D Environmental, Inc. (P&D) has prepared this report documenting a geophysical survey, exploratory excavation and trenching, and soil and groundwater sample collection at the subject site. These activities were performed to evaluate potential environmental impacts from historical gasoline service station identified in a Phase I Environmental Site Assessment Report dated January 24, 2012 prepared by Basics Environmental, Inc. (Basics) of Oakland, California. Field activities for investigation of a suspected well were performed on March 18, 2013, the geophysical survey was performed on March 28, 2013 and exploratory excavation and trenching activities were performed on April 8 and 10, 2013.

A Site Location Map is attached as Figure 1, a Site Vicinity Aerial Photograph is attached as Figure 2, and a Site Aerial Photograph showing historical features identified in the Basics January 24, 2012 report is attached as Figure 3. Locations of geophysical anomalies, exploratory excavation, and sample collection are shown in Figure 4. All work was performed under the supervision of a California professional geologist.

BACKGROUND

Review of the January 24, 2012 Basics report shows that in an aerial photograph of 1959, the subject site appeared developed with a small structure along the south perimeter of the subject site. The remainder of the subject site appeared unpaved. Prior to this time, the subject site appeared undeveloped. A survey plan dated during this time frame indicated the subject site was vacant. This building may have been a construction trailer in preparation for the development of the subject site, however the specific use of this structure could not be determined within this scope of work.

According to local building department records, permits to construct an approximately 24-foot by 44-foot cinderblock one-story service building and two associated canopies and sign were issued to Standard Oil of California on May 11, 1960. Based on historical records reviewed, the gasoline service station was owned by the Standard Oil Company of California and operated as Covington's Standard Service in the late 1960s and Ahmad Aghels Chevron in the 1970s. In 1976, the gasoline service station was demolished. No specific

information (i.e., former underground storage tank(s) size, type and locations, pump island locations, auto maintenance areas and use of hazardous materials etc.) was available within the local regulatory agency files reviewed. The former canopy locations identified on Figure 3 are interpreted to be the locations of the former fuel dispensers.

The report identified along the northwest perimeter of the subject site an approximately 6-inch diameter hole with a survey stick extending out. Markings on the sidewalk pointed to the hole and indicated "MON." The hole appeared to have a metal casing, however no cover was present and the hole was filled with dirt and debris. Based on the metal casing and word "MON" the hole was identified as possibly a former location of an abandoned ground water monitoring well, however, no specific information regarding a former boring/ground water well was available within the local regulatory agency files reviewed.

The report recommended that further historical research (i.e., inquiries with the past owner(s), etc. (not within the scope of the report) could be performed to further evaluate the former location of the underground storage tank(s) and associated piping. In addition, a utility search could be performed to confirm the existence or non-existence of former underground storage tanks onsite. Possible techniques could include magnetometer, ground penetrating radar, etc.

FIELD ACTIVITIES

Field activities included excavation on March 18, 2013 to evaluate a feature identified in the Basics January 2012 Phase I report as "MON" located near the northwest corner of the property, a geophysical survey on March 28, 2013 and exploratory excavation on April 8 and 10, 2013. During the April 10 exploratory excavation soil and groundwater samples were collected. Field activities during each of the site visits are described below.

March 2013 Exploratory Excavation of "MON" Feature

The location of the feature identified as "MON" in the Basics January 2012 Phase I report was investigated by hand digging to remove soil and debris from the location where a portion of the sidewalk had been removed adjacent to where the letters "MON" had been spray painted on the sidewalk. The location that was investigated is shown on Figure 4, and is located slightly northwest of the location shown in the Basics report.

No metal ring was observed at the perimeter of the location where the sidewalk had been removed, and the sidewalk appeared to be unevenly broken around the edges of the space where the sidewalk had been removed. At a depth of approximately 9 inches below the top of the sidewalk a vertical 2-inch diameter steel pipe that was filled with concrete and with a nail in the top of the concrete was located. Excavation around the sides of the pipe to a depth of approximately 18 inches below the top of the sidewalk and additional probing into the soil with a screwdriver did not reveal any evidence of a well box or cement sanitary seal surrounding the pipe. Based on the observations during the exploratory digging it was concluded that the steel pipe is a monument for surveying purposes.

March 2013 Geophysical Survey

On March 28, 2013 a geophysical survey was performed by Pierre Armand of Subtronic Corporation (Subtronic) of Martinez, California using a magnetometer and ground penetrating radar (GPR). A report was not prepared by Subtronic for the geophysical survey, however the field data are presented in Appendix A and include the following:

- An aerial photograph of the site showing the geophysical survey grid and magnetometer data superimposed on the grid,
- GPR scans for depths ranging from the ground surface to a depth of 4.7 feet in 0.2 or 0.3 foot increments for the portion of the survey grid defined by the 0 to 45 foot portion of the x-axis and the 0 to 70 foot portion of the y-axis,
- GPR scans for depths ranging from the ground surface to a depth of 4.7 feet in 0.2 or 0.3 foot increments for the portion of the survey grid defined by the 5 to 100 foot portion of the x-axis and the 0 to 100 foot portion of the y-axis,
- Radar slices to a depth of 4.7 feet for y-axis transects for x-axis values of 10, 15, 20, 25, 30, 35, 40 and 45 feet,
- Radar slices to a depth of 4.7 feet for y-axis transects for x-axis values of 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, and 110 feet.

At the time of the geophysical survey, a metal chain link fence was located along the southern property boundary enclosing construction materials that were located immediately to the south of the subject site. In addition, non-metallic piping was located on the subject site along the south side of the property adjacent to the chain link fence, obstructing access to this area for the geophysical survey.

Based on the survey results, Mr. Armand concluded the following:

- Three large metallic anomalies were identified,
- Three locations where buried pipes were suspected of being present were identified,
- One area of suspected buried reinforced concrete was identified,
- The radar penetration was not deep enough to interpret the presence of any tanks.

April 2013 Exploratory Excavations and Trenching

Exploratory excavation was performed with a backhoe on April 8 and 10, 2013 by IMX, Inc. of Oakland, California with P&D personnel on site for observation and sample collection.

On April 8, 2013 the two large magnetic anomalies identified in the Subtronic magnetometer survey in the central portion of the property were excavated to a depth of approximately 6 feet below the ground surface (bgs) at the locations shown on Figure 4. The large magnetic anomaly located at the southwest corner of the property was excavated to a depth of approximately 3 feet bgs. In the excavation an electrical conduit was exposed that extended to the northeast towards the buried electrical transformer

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that is located on the northeast side of the property. The conduit also extended towards the southwest corner of the property where a conduit of similar size and material penetrates the ground on the utility pole that is located at the southwest corner of the property.

Excavation at the location identified in the geophysical survey as possible reinforced concrete encountered large pieces of concrete measuring approximately 3 to 4 feet in diameter and at least 6 inches thick along with sections of 2-inch diameter fiberglass pipe. In addition, buried steel pipes measuring one- and two-inches in diameter were encountered at locations identified in the geophysical survey as consisting of unknown buried pipes. The various features identified during the exploratory excavation are shown on Figure 4.

On April 10, 2013 P&D personnel returned to the site to perform additional exploratory excavation oversight at the former dispenser islands and in the area where buried concrete slabs were encountered. Groundwater was encountered in this exploratory trench at a depth of approximately 5 feet bgs. It was not possible to excavate below a depth of approximately 7 feet bgs because concrete debris sloughed into the excavation from the exploratory trench perimeter, and for this reason the depth to bedrock at this location is unknown. An exploratory trench was extended westward from this area and only large pieces of broken concrete mixed with soil were encountered in the exploratory trench.

An additional exploratory trench that extended to approximately 3 to 4 feet bgs was excavated northward from the area identified in the geophysical survey as possible reinforced concrete until bedrock was encountered. Large quantities of buried asphaltic concrete debris were encountered in this exploratory trench for the majority of the length of the trench. An additional exploratory trench that extended to approximately 3 to 4 feet bgs was excavated westward near the north end of this trench until bedrock was encountered. Large quantities of buried asphaltic concrete debris were similarly encountered in this exploratory trench. The total depth of the asphaltic concrete debris is unknown.

An exploratory trench was excavated to a depth of approximately 3 feet bgs at the northern former canopy location near Grass Valley Road, with bedrock encountered at this location at a depth of approximately 3 feet bgs. Exploratory excavation was performed to a depth of approximately 6 feet bgs at the western former canopy location near Golf Links Road, with bedrock encountered at a depth of approximately 4 feet bgs. Groundwater was encountered in the western former canopy excavation at a depth of approximately 5 feet bgs.

All excavated soil and bedrock was evaluated with a photoionization detector (PID) that was equipped with a 10.6 electron volt bulb and that was calibrated with a 100 part per million isobutylene standard. No detectable concentrations of organic vapors, petroleum hydrocarbon odors, staining, or soil discoloration were encountered in any of the materials encountered in any of the exploratory excavations. No sheen was observed on any of the water encountered in either of the two exploratory excavations where groundwater was encountered.

On April 10, 2013 one soil sample was collected at a depth of 2 feet bgs at each of the former canopy locations (see sample locations D1-2.0 and D2-2.0 on Figure 4). The soil samples were collected from undisturbed native soil by pushing a stainless steel tube measuring 6-inches long and 2-inches in diameter into the soil exposed in the sidewall of the exploratory trench. Each tube was filled entirely to ensure that no head space was present in the tube. The ends of the tube were then sequentially covered with aluminum foil and plastic end caps, and the tube was then labeled and stored in a cooler with ice pending delivery to the laboratory. Chain of custody procedures were observed for all sample handling.

On April 10, 2013 one groundwater samples designated as T1-Water was collected from the exploratory trench where the concrete debris was encountered, and one groundwater sample designated as D1-Water was collected from the exploratory excavation at the westernmost former canopy location. The water samples were collected using a peristaltic pump and new polyethylene tubing with new silicone tubing used in the pump rollers at each location. The water sample was pumped from the discharge tubing directly into VOAs provided by the laboratory that are preserved with hydrochloric acid at the laboratory. The bottles were labeled and stored in a cooler with ice pending delivery to the laboratory. Chain of custody procedures was observed for all sample handling.

Following completion of sample collection all of the excavated areas were backfilled with the excavated materials. No compaction or compaction testing was performed during any of the backfilling.

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 undifferentiated bedrock.

Based on review of the Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California (U.S. Geological Survey Miscellaneous Field Studies MF-2342, Version 1.0) by R.W Graymer, 2000, the site is predominantly underlain by Late Cretaceous, Cenomanian Joaquin Miller Formation (Kjm) that is described as consisting of thinly bedded shale with minor sandstone. The shale grades into thinly bedded, fine-grained sandstone near the top of the formation. The fine-grained sandstone near the top of the formation is called the Oakland Sandstone. The bedrock materials encountered at the site are consistent with the description of the Oakland Sandstone.

The subsurface native materials encountered in the exploratory excavations consisted of silty and sandy soil to a depth of approximately 3 feet bgs in the central portion of the property and to a depth of approximately 4 feet bgs in the western portion of the property. The soil was underlain by silty sandstone to the total depth explored at locations where bedrock was encountered.

The area where buried concrete and asphalt debris fill were encountered during exploratory trenching is interpreted to be the former gasoline service station UST pit. The total depth of the UST pit is unknown.

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Groundwater encountered in the former UST pit during exploratory excavation is interpreted to have accumulated in the permeable fill material in the UST pit, and to not be representative of the depth to regional groundwater at the subject site. The basis for this conclusion is the absence of groundwater in the exploratory excavations at the geophysical magnetic anomalies in the central portion of the property where excavation occurred to a depth of approximately 6 feet bgs. The groundwater that was encountered in the exploratory excavation of the westernmost former dispenser island canopy is interpreted to have entered the excavation from the adjacent former UST pit.

The depth to regional groundwater is unknown. Similarly, the groundwater flow direction at the site is unknown. Review of Figure 1 shows that the site is located near the base of a westward-facing slope of a tributary to Arroyo Viejo. Arroyo Viejo is located approximately 3,500 feet to the northwest of the subject site. Drainage from the subject site to Arroyo Viejo is northwestward through a narrow northwestward-trending drainage channel. Based on the site vicinity topography, the groundwater flow direction in the vicinity of the subject site is assumed to be northwesterly towards Arroyo Viejo through the northwestward-trending drainage channel and parallel to Golf Links Road.

LABORATORY ANALYSIS

All of the soil and groundwater samples were analyzed at McCampbell Analytical, Inc. (McCampbell) of Pittsburg, California for Total Petroleum Hydrocarbons as Gasoline (TPH-G), for methyl tertiary-butyl ether (MTBE), benzene, toluene, and total xylenes (BTEX) using EPA Method 5030B in conjunction with EPA Method 8021B and modified EPA Method 8015B, and for Total Petroleum Hydrocarbons as Diesel (TPH-D), Total Petroleum Hydrocarbons as Bunker Oil (TPH-BO), and Total Petroleum Hydrocarbons as Motor Oil (TPH-MO) using EPA Method 3550B and EPA Method 3630C in conjunction with EPA Method 8015B, using silica gel cleanup. All of the groundwater samples were analyzed for TPH-G, MTBE, and BTEX using EPA Method 5030B in conjunction with EPA Method 8015B, and for TPH-D, TPH-BO, and TPH-MO using EPA Method 3510C in conjunction with EPA Method 8015B.

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

DISCUSSION AND RECOMMENDATIONS

The area where buried concrete and asphalt debris were encountered during exploratory trenching is interpreted to be the former gasoline service station UST pit. Based on the results of the geophysical survey and exploratory trenching, the USTs were removed from the site. Based on the presence of concrete and asphaltic concrete debris encountered in the former UST pit, it appears that the concrete and asphalt surfaces at the former gasoline station were demolished and placed in the former UST pit at the time that the former gasoline station was demolished. The total depth of the former UST pit is unknown.

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Groundwater encountered in the former UST pit during exploratory excavation is interpreted to have accumulated in the permeable fill material in the UST pit, and to not be representative of the depth to regional groundwater at the subject site. The basis for this conclusion is the absence of groundwater in the exploratory excavations at the geophysical magnetic anomalies in the central portion of the property where excavation occurred to a depth of approximately 6 feet bgs. The groundwater that was encountered in the exploratory excavation of the westernmost former dispenser island canopy is interpreted to have entered the excavation from the adjacent former UST pit. The depth to regional groundwater is unknown.

Based on the absence of detectable concentrations of organic vapors, petroleum hydrocarbon odors, staining, or soil discoloration in any of the materials encountered in any of the exploratory excavations, and the absence of sheen on any of the water encountered in either of the two exploratory excavations where groundwater was encountered, no evidence was discovered of historical petroleum hydrocarbon releases at the site during exploratory excavation.

Review of Table 1 shows that TPH-G, MTBE and BTEX were not detected in either of the soil samples (D1-2.0 and D2-2.0). TPH-D was detected in soil samples D1-2.0 and D2-2.0 at concentrations of 3.0 and 2.3 milligrams per kilogram (mg/kg), respectively, TPH-BO was detected at concentrations of 18 and 20 mg/kg, respectively, and TPH-MO was detected at concentrations of 18 and 20 mg/kg, respectively. Further review of the laboratory analytical report shows that the laboratory described the TPH-D, TPH-BO, and TPH-MO results for both samples as consisting of both oil-range and diesel-range compounds, with no recognizable pattern.

Similarly TPH-G, MTBE, BTEX, and TPH-MO were not detected in either of the groundwater samples (D1-Water and T1-Water), and TPH-D and TPH-BO were not detected in groundwater sample T1-Water. TPH-D and TPH-BO were detected in groundwater sample D1-Water at concentrations of 65 and 190 micrograms per Liter (ug/L), respectively. Further review of the laboratory analytical report shows that the laboratory described the TPH-D and TPH-BO results for groundwater sample D1-Water as consisting of diesel-range compounds, with no recognizable pattern.

Comparison of the soil and groundwater sample results with the San Francisco Bay Regional Water Quality Control Board May 2013 Environmental Screening Levels (ESLs) for soil and groundwater shows that none of the detected soil petroleum concentrations exceed their respective Table A-1 shallow soil screening levels for residential land use, and that the only detected groundwater petroleum concentration exceeding the Table F-1a groundwater screening level where groundwater is a current or potential drinking water resource was 190 ug/L TPH-BO in sample D1-Water. The TPH-BO is identified as consisting primarily of diesel-range compounds with no recognizable pattern.

Groundwater sample D1-Water was collected immediately adjacent to the area where asphaltic concrete debris was encountered in the former UST pit. Based on the absence of any detected concentrations of TPH-G, MTBE or BTEX in any of the soil or groundwater samples at the subject site and the absence of any detectable concentrations of petroleum hydrocarbons in groundwater sample T1-Water, the detected petroleum in groundwater sample D1-Water is interpreted to be limited in extent and to be related to the

Page 7 of 9

asphaltic concrete debris encountered in the northern portion of the former UST pit. The low concentrations of petroleum hydrocarbons detected in the soil samples are interpreted to consist of naturally occurring organic matter in the soil at the site.

Based on the sample results P&D concludes that no historical petroleum hydrocarbon releases were detected at the site and recommends that no further investigation be performed at the subject site. P&D recommends that a copy of this report be provided to the Alameda County Environmental Health Services Agency for review and concurrence with this conclusion.

P&D also recommends that future development of the property should ensure that any exploratory excavation areas and the area identified as the former UST pit are properly compacted prior to construction at the site.

LIMITATIONS

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

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

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

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

Sincerely,

P&D Environmental, Inc.

27, King

Paul H. King California Professional Geologist #5901 Expires: 12/31/13



Attachments:

TABLES

 Table 1 – Summary of Soil Sample Laboratory Analytical Results

Table 2 - Summary of Groundwater Sample Laboratory Analytical Results

FIGURES

Figure 1 – Site Location Map Figure 2 – Site Vicinity Aerial Photograph Figure 3 – Site Aerial Photograph Showing Historical Gasoline Station Features Figure 4 – Site Aerial Photograph Showing Excavation and Sample Collection Locations

APPENDICES

Appendix A – Geophysical Survey Appendix B – Laboratory Reports and Chain of Custody Documentation

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TABLES

SUMMARY OF SOIL SAMPLE LABORATORY ANALYTICAL RESULTS

Sample ID	Sample Depth (Ft bgs)	Sample Date	TPH-G	TPH-D	TPH-BO	TPH-MO	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes
D1-2.0	2.0	4/10/2013	ND<1.0	3.0, a,b	18, a,b	18, a,b	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
D2-2.0	2.0	4/10/2013	ND<1.0	2.3, a,b	20, a,b	20, a,b	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
ESL ¹			100	100	500	500	0.023	0.044	2.9	3.3	2.3
<u>NOTES</u> Et bas – Fas	et below ground s	urfaça									
	otal Petroleum Hy		s Gasoline.								
	otal Petroleum Hy										
TPH-BO = '	Total Petroleum H	Hydrocarbons	as Bunker C)il.							
TPH-MO =	Total Petroleum	Hydrocarbon	s as Motor O	il.							
MTBE = Me	ethyl-tert-Butyl E	ther									
ND = Not D											
	ory analytical not										
	ory analytical not										
	conmental Screen						Board, update	ed May 2013 1	from Table A	-1 – Shallow	Soil Screening
	undwater is a cur										
	old indicate a co		-	0	<u> </u>						
All results a	nd ESLs reported	l ın milligram	s per kilogra	m (mg/kg) u	nless otherwi	se noted.					

TABLE 2

Borehole	Sample	TPH-G	TPH-D	TPH-BO	TPH-MO	MTBE	Benzene	Toluene	Ethyl-	Total Xylenes
ID	Date								benzene	
D1-Water	4/10/2013	ND<50	65, a	190, a	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
T1-Water	4/10/2013	ND<50	ND<50	ND<100	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
ESL		100	100	100	100	5.0	1.0	40	30	20
NOTES:										
TPH-G = Tota										
TPH-D = Tota										
TPH-BO = To										
TPH-MO = Tc			ns as Motor C	Dil.						
MTBE = Meth	5 5	Ether								
ND = Not Dete										
NA = Not Ana	5									
a = Laboratory	analytical no	ote: diesel-ran	ge compound	s are significa	nt; no recogniz	able pattern				
ESL = Enviror	nmental Scree	ening Level, b	y San Francis	sco Bay – Reg	ional Water Qu	ality Contro	ol Board, u	pdated May	2013, from	Table F-1a –
					drinking water					
Results in bol	d indicate a o	concentration	1 equal or ex	ceeding the re	espective ESL v	value.				
All results and	ESLs reporte	ed in microgra	ums per Liter	(ug/L) unless	otherwise noted	1.				

SUMMARY OF GROUNDWATER SAMPLE LABORATORY ANALYTICAL RESULTS

FIGURES

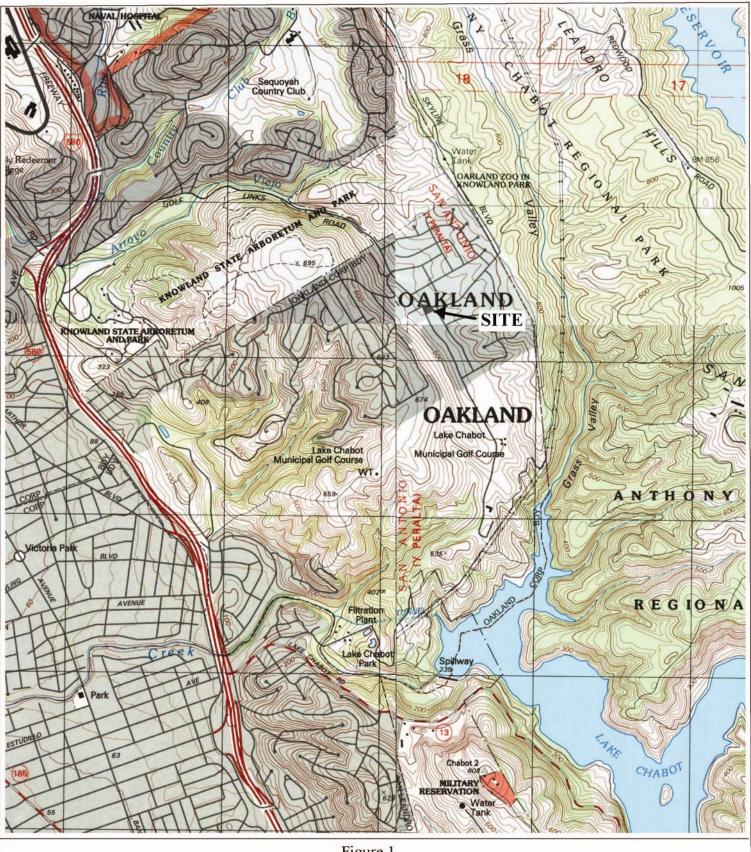


Figure 1 Site Location Map 4600 Grass Valley Road Oakland, California

Base Map From:

U.S. Geological Survey Oakland East, Las Trampas Ridge, San Leandro, and Hayward, California 7.5-Minute Quadrangles, Maps dated 1997, 1995, 1993, and 1993, respectively P&D Environmental, Inc. 55 Santa Clara Ave., Suite 240 Oakland, CA 94610 0 1,000 2,000 Approximate Scale in Feet

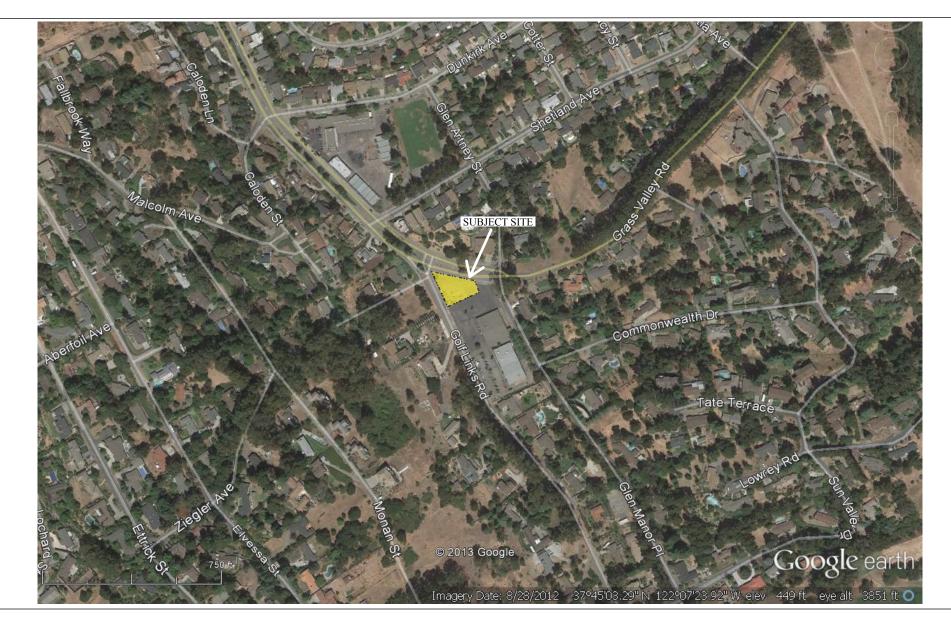


Figure 2 Site Vicinity Aerial Photograph 4600 Grass Valley Road Oakland, California

Base Map from: Google Earth, August 2012

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

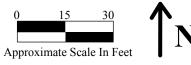


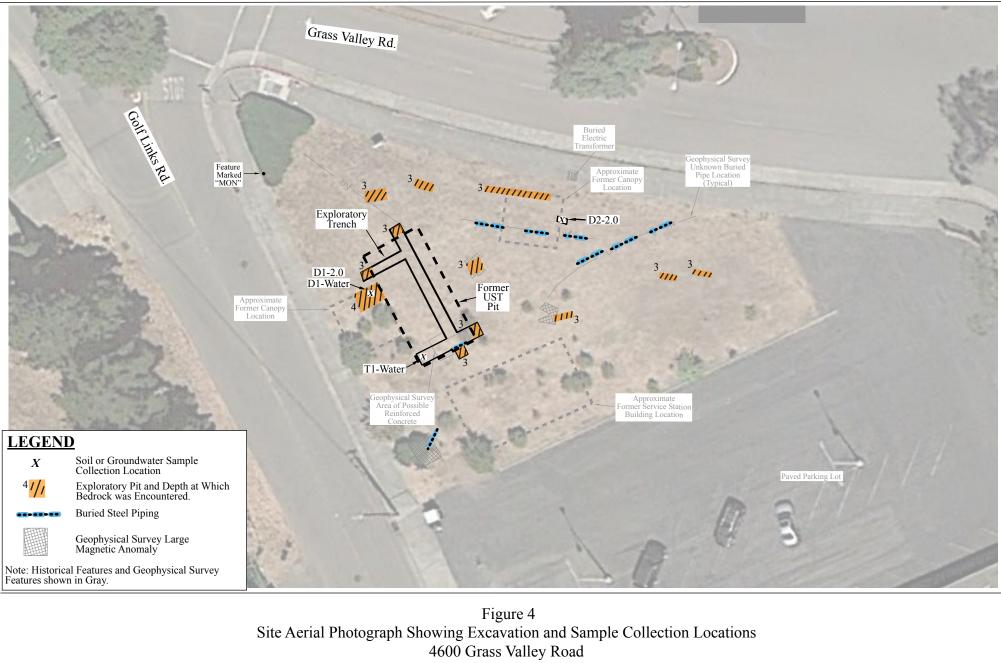


Figure 3 Site Aerial Photograph Showing Historical Gasoline Station Features 4600 Grass Valley Road Oakland, California

Base Map from: Basics, Environmental, Inc., "Phase I Environmental Assessment Report", January 2012, and Google Earth, August 2012

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

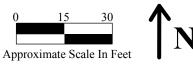




Oakland, California

Base Map from: Basics, Environmental, Inc., "Phase I Environmental Assessment Report", January 2012, Subtronic Corporation, April 2013, and Google Earth, August 2012

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

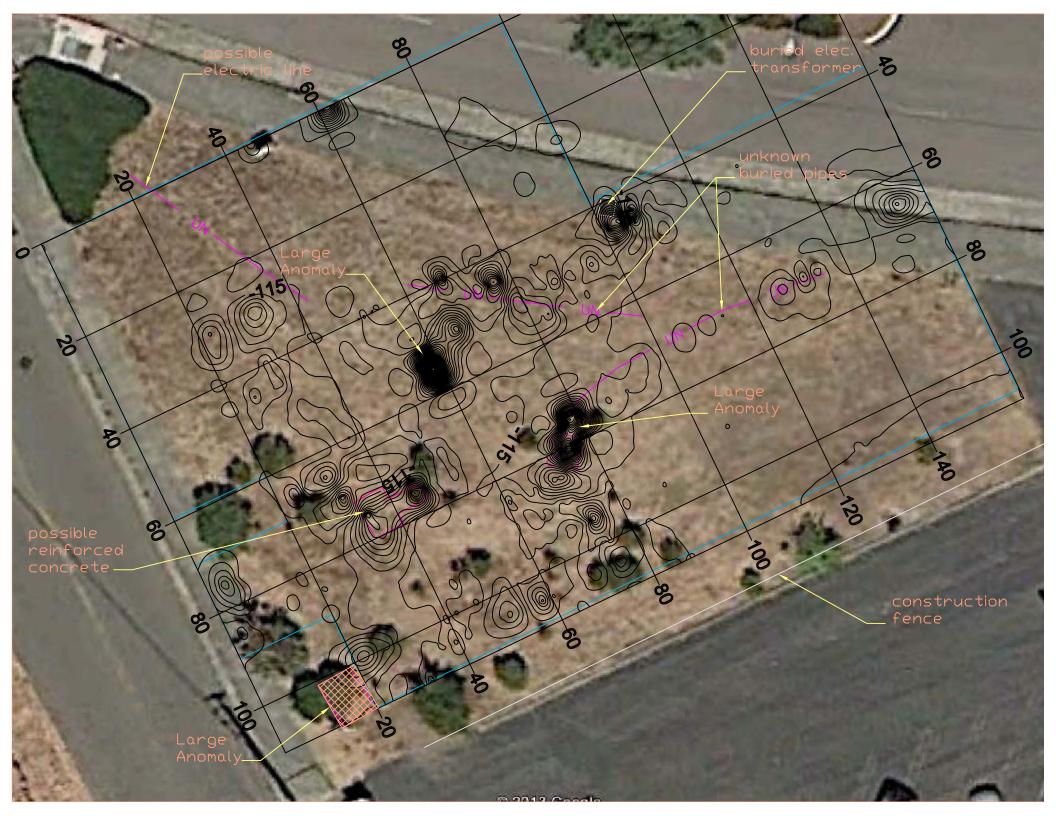


APPENDIX A

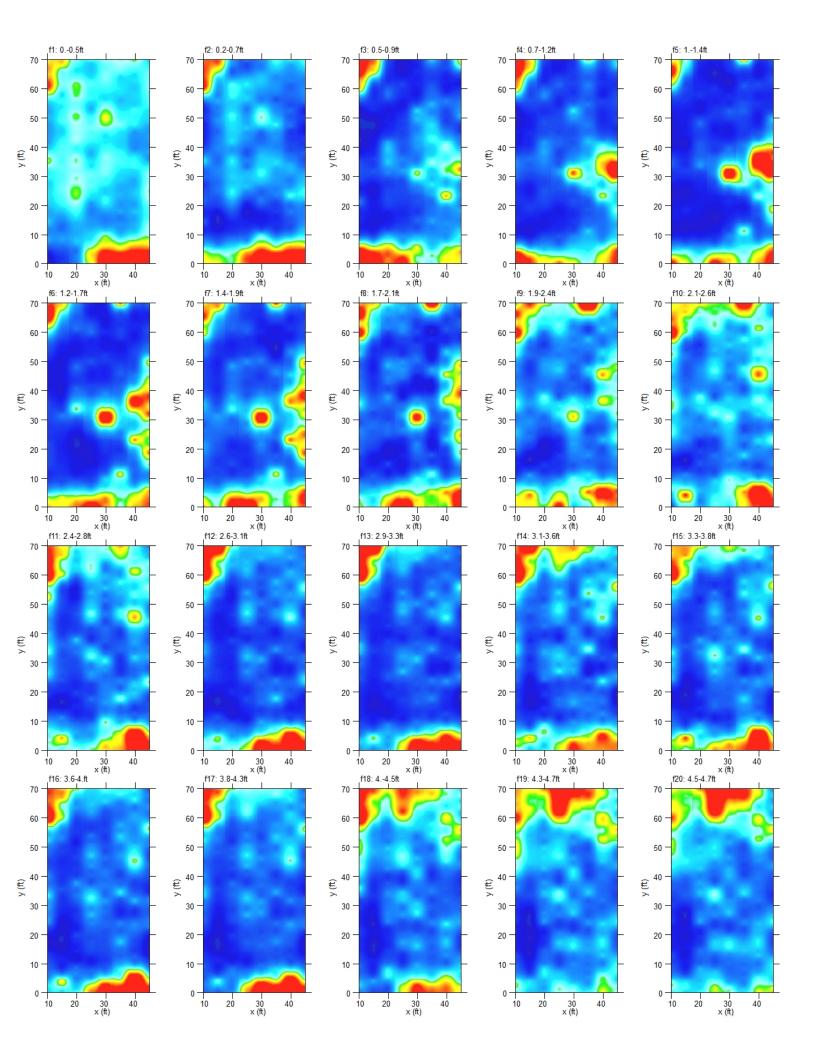
Geophysical Survey

- Magnetometer Data and Geophysical Survey Grid
- Ground Penetrating Radar for Geophysical Survey Grid X-axis 0 to 45 Feet Y-axis 0 to 70 Feet Surface to 4.7 Foot Depth
- Ground Penetrating Radar for Geophysical Survey Grid X-axis 50 to 110 Feet Y-axis 0 to 100 Feet Surface to 4.7 Foot Depth
- Radar Slices to 4.7 Foot Depth for X-axis Locations of X= 10, 15, 20, 25, 30, 35, 40 and 45 Feet
- Radar Slices to 4.7 Foot Depth for X-axis Locations of X= 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105 and 110 Feet

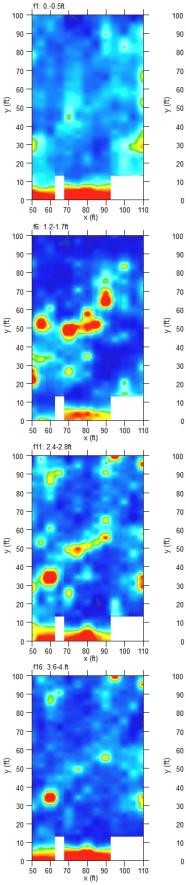
Magnetometer Data and Geophysical Survey Grid

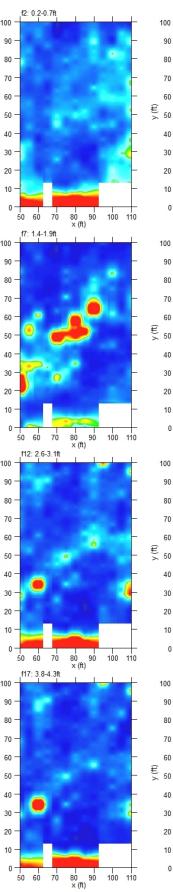


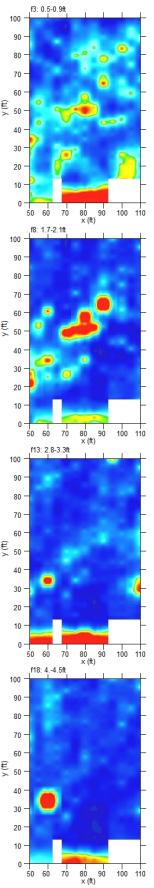
Ground Penetrating Radar for Geophysical Survey Grid X-axis 0 to 45 Feet Y-axis 0 to 70 Feet Surface to 4.7 Foot Depth

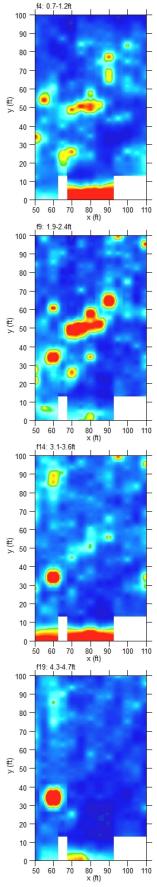


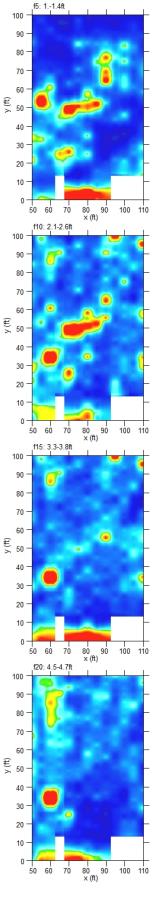
Ground Penetrating Radar for Geophysical Survey Grid X-axis 50 to 110 Feet Y-axis 0 to 100 Feet Surface to 4.7 Foot Depth



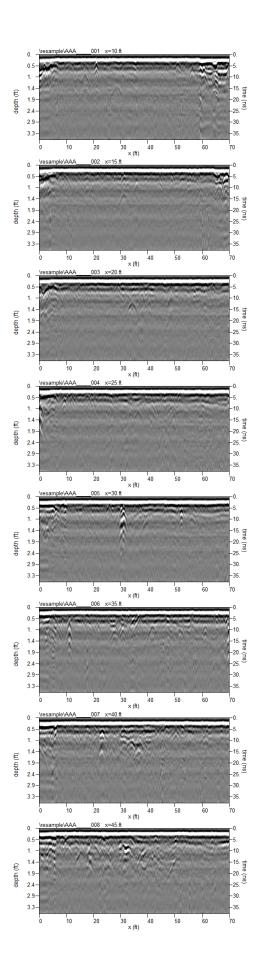




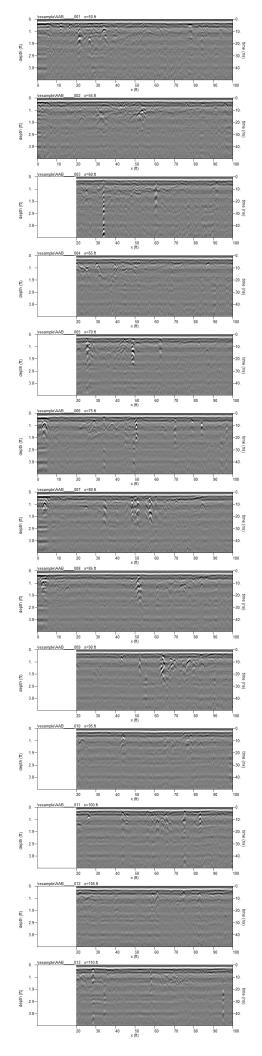




Radar Slices to 4.7 Foot Depth for X-axis Locations of X= 10, 15, 20, 25, 30, 35, 40 and 45 Feet



Radar Slices to 4.7 Foot Depth for X-axis Locations of X= 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105 and 110 Feet



APPENDIX B

Laboratory Analytical Reports and Chain of Custody Documentation

- McCampbell Workorder #1304355: Former Dispenser Soil Sample Results
- McCampbell Workorder #1304362: Former Dispenser Groundwater Sample Results
- McCampbell Workorder #1304361: Exploratory Trench Groundwater Sample Results



McCampbell Analytical, Inc. "When Quality Counts"

Analytical Report

P & D Environmental	Client Project ID: #0627; 4600 Grass Valley Rd.	Date Sampled: 04/10/13
55 Santa Clara, Ste.240		Date Received: 04/11/13
55 Sulta Claid, 510-210	Client Contact: Paul King	Date Reported: 04/17/13
Oakland, CA 94610	Client P.O.:	Date Completed: 04/16/13

WorkOrder: 1304355

April 17, 2013

Dear Paul:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: #0627; 4600 Grass Valley Rd.,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

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.

The analytical results relate only to the items tested.

	C	HAI	N O	FC	USTOE	DY F	REG	CO	RI)	13	54	33	55			PAG	GE _/	– OF	
P&D E	ENVIR 55 Santa Oak (5	ON Clara A land, C 10) 65	MEN Vve., Su CA 9461 8-6916	TAL iite 240	, INC.				/	6	7	/	/	//	//	//	/			
PROJECT NUMBER:				NAME: D GRA KLAN	ss Valley 1 D, CA	ed.	CONTAINERS	ANALYSIC	Elen -	AND AND				/	//	E				
SAMPLED BY: (PRINT Michael Deschenie SAMPLE NUMBER				Dec	<u>chenn</u> IPLE LOCATI	ON	NUMBER OF CONTAINERS	HAN	LI RT ANGELGN			/	/	/	PRESFID.	ALLEANS-	RE	MARK	s	
D1-2.0 Da-2.0		1500 1510	Soil II		USER PIT		1	XXX	××						1Œ 4	Non	RMAL	TA		
																				_
										ICE/P GOOD HEAD DECH				B	CON	OPRIAT AINER:	s			
										PRES	ERVAT	ION.	VOAS) MET	ALS O	THER			
RELINQUISHED BY: (SIGNATUR RELINQUISHED BY: TSIGNATUR RELINQUISHED BY: TSIGNATUR	leves	'e 4	I JS IDATE	TIME TIME ISIS	RECEIVED B		~	_	-	Total (This LAB	No. of C Shipme ORAT	ontaine nt) ORY (CONT	Z ACT:	LABOF	RATOR UPBEL RATOR 7)2	LAN Y PHON	IE NUN	IBER:	NC-
RELINQUISHED BY: (SIGNATU	RE)	/	DATE	TIME	RECEIVED FO	OR LABO	ORAT	der	BY:	SAN		ANAI	YSIS		EST SI			,		
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com					REMARKS:															

Page 2 of 8

McCampbell Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Lab ID Client ID	Matrix	Collection Date	Hold 1	2 3	Requested 4 5	Tests (See legend678		0 11	12
Oakland, CA 94610 (510) 658-6916 FAX: 510-834-0152	ProjectNo: #0627; 4600	0 Grass Valley Rd.		Oakland, CA	,	Dat	te Printed:	04/12/20	13
Paul King P & D Environmental 55 Santa Clara, Ste.240	Email: lab@pdenvi cc: PO:	iro.com		Accounts Pa P & D Enviro 55 Santa Cla	nmental	Dat	te Received:	04/11/20	13
Report to:				Sill to:			juested TAT:	5 da	
Pittsburg, CA 94565-1701 (925) 252-9262	□WaterTrax □Write	On 🗆 EDF	Work(Order: 1304355	Clie	entCode: PDEO	⊡ThirdParty	□J-flag	

1304355-001	D1-2.0	Soil	4/10/2013 15:00	А	А				
1304355-002	D2-2.0	Soil	4/10/2013 15:10	А	А				

Test Legend:

1	G-MBTEX_S
6	
11	

2	TPH(DMO)WSG_S
7	
12	

3	
8	

4	
9	

5	
10	

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.



Sample Receipt Checklist

Client Name:	P & D Environmen	tal				Date and	d Time Received:	4/11/2013 4	4:09:14 PM
Project Name:	#0627; 4600 Grass	Valley Rd.				LogIn Re	eviewed by:		Zoraida Cortez
WorkOrder N°:	1304355	Matrix: <u>Soil</u>				Carrier:	<u>Rob Pringle (M</u>	Al Courier)	
		<u>Cha</u>	in of Cu	<u>ustody (C</u>	COC) In	formatic	on		
Chain of custody	present?		Yes	✓	Ν	o 🗌			
Chain of custody	signed when relinqu	ished and received?	Yes	✓	Ν	o 🗌			
Chain of custody	agrees with sample	labels?	Yes	✓	N	o 🗌			
Sample IDs note	d by Client on COC?		Yes	✓	Ν	о 🗌			
Date and Time o	f collection noted by	Client on COC?	Yes	✓	N	о 🗌			
Sampler's name	noted on COC?		Yes	✓	N	о 🗌			
			Sample	Receipt	t Inform	nation			
Custody seals in	tact on shipping cont	ainer/cooler?	Yes		N	о 🗌		NA 🖌	
Shipping contain	er/cooler in good con	dition?	Yes	✓	N	o 🗌			
Samples in prope	er containers/bottles?		Yes	✓	Ν	o 🗌			
Sample containe	ers intact?		Yes	✓	N	o 🗌			
Sufficient sample	e volume for indicated	test?	Yes	✓	Ν	o 🗌			
		Sample Pres	servatio	n and Ho	old Tim	<u>e (HT) In</u>	formation		
All samples rece	ived within holding tir	ne?	Yes	✓	N	o 🗌			
Container/Temp	Blank temperature		Coole	er Temp:	4.4°C			NA	
Water - VOA vial	ls have zero headspa	ice / no bubbles?	Yes		Ν	ο 🗌 Ν	lo VOA vials submi	tted 🗹	
Sample labels ch	necked for correct pre	eservation?	Yes	✓	Ν	o 🗌			
Metal - pH accep	otable upon receipt (p	H<2)?	Yes		Ν	o 🗌		NA 🗹	
Samples Receive	ed on Ice?		Yes	✓	Ν	o 🗌			
		(Ісе Тур	be: WE	TICE))				
* NOTE: If the "N	lo" box is checked, s	ee comments below.							

Comments:

McCampbell Analytical, Inc. "When Quality Counts"						1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com						
P & D Environmental Client Project ID:					#0627; 460	0 Grass	Date Sampled: 04/10/13					
55 Santa Clara, Ste.240				Valley	Valley Rd.			Date Received: 04/11/13				
55 Santa Clara, Ste.240				Client Contact: Paul King				Date Extracted: 04/11/13				
Oakland, CA 94610 Client P.O.:					P.O.:	Date Analyzed: 04/12/13						
Extractio	Gas n method: SW5030B	soline Ra	nge (C	C6-C12)			5 as Gasoli 5W8021B/8015	ne with BTEX	X and MT		rk Order:	1304355
Lab ID	Client ID	Matrix	TF	PH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	D1-2.0	S]	ND	ND	ND	ND	ND	ND	1	104	
002A	D2-2.0	S	1	ND	ND	ND	ND	ND	ND	1	100	

Reporting Limit for DF =1; ND means not detected at or	W	50	5.0	0.5	0.5	0.5	0.5	ug/L
above the reporting limit	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:



	McCampbell ''When Qu	Analy ality Cou	ytical, Inc. nts''	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com						
P & D E	Invironmental			#0627; 4600 Grass	Date Sampled: 04/10/13					
55 Santa Clara, Ste.240					Date Received: 04/11/13					
ee suitu			Client Contact: Par	ul King	Date Extracted: 04/11/13					
Oakland	, CA 94610	-	Client P.O.:	D.: Date Analyzed: 04/15/13-04/16/13						
Extraction n	nethod: SW3550B/3630C	Total Ex		ractable Petroleum Hydrocarbons with Silica Gel Clean-Up* Analytical methods: SW8015B Work Order: 1304						
Lab ID	Lab ID Client ID Matrix		TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	TPH-Bunker Oil (C10-C36)	DF	% SS	Comments		
001A	D1-2.0	S	3.0	18	18	1	119	e7,e2		
002A	D2-2.0	S	2.3	20	20	1	113	e7,e2		

Reporting Limit for $DF = 1$; ND means not detected at or	W	NA	NA	NA	ug/L
above the reporting limit	S	1.0	5.0	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: e2) diesel range compounds are significant; no recognizable pattern e7) oil range compounds are significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Soil QC Matrix: Soil BatchID: 76331 WorkOrder: 130					rder: 1304355						
EPA Method: SW8015B	Extraction: SW	/3550B/363	30C					Spiked Sam	1304348-024A		
Analyte		Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
		mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)		ND	40	112	114	1.65	107	70 - 130	30	70 - 130	
%SS:		96	25	110	109	0.701	95	70 - 130	30	70 - 130	
All target compounds in the Method Blank of t NONE	his extraction bate	h were ND	less than th	e method	RL with tl	he following	g exception	ns:			

BATCH 76331 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1304355-001A	04/10/13 3:00 PM	I 04/11/13	04/16/13 2:29 AM	1304355-002A	04/10/13 3:10 PM	04/11/13	04/15/13 8:59 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

K__QA/QC Officer



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Soil	QC Matrix:	Soil			BatchID	BatchID: 76332 WorkOrder: 1304			
EPA Method: SW8021B/8015Bm Extraction: S	W5030B						Spiked Sam	1304348-018A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acc	eptance	Criteria (%)
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex) [£]	ND	0.60	87.3	89.1	2.04	109	70 - 130	20	70 - 130
MTBE	ND	0.10	102	101	0.961	96.7	70 - 130	20	70 - 130
Benzene	ND	0.10	91.6	89.7	2.14	89.7	70 - 130	20	70 - 130
Toluene	ND	0.10	90.2	88.7	1.71	88.5	70 - 130	20	70 - 130
Ethylbenzene	ND	0.10	95.3	93.7	1.68	92.8	70 - 130	20	70 - 130
Xylenes	ND	0.30	100	97.3	3.17	96.3	70 - 130	20	70 - 130
%SS:	102	0.10	98	94	3.51	102	70 - 130	20	70 - 130
All target compounds in the Method Blank of this extraction ba NONE	tch were ND	less than th	e method	RL with tl	he following	g exceptio	ns:		

			<u>BATCH 76332 SI</u>	JMMARY			
Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1304355-001A	04/10/13 3:00 PM	04/11/13	04/12/13 7:46 AM	1304355-002A	04/10/13 3:10 PM	04/11/13	04/12/13 11:50 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.

 \pounds 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.

K___QA/QC Officer



McCampbell Analytical, Inc. "When Quality Counts"

Analytical Report

P & D Environmental	Client Project ID: #0627; 4600 Grass Valley Rd.	Date Sampled: 04/10/13
55 Santa Clara, Ste.240		Date Received: 04/11/13
55 Sulla Child, 510.2 10	Client Contact: Paul King	Date Reported: 04/17/13
Oakland, CA 94610	Client P.O.:	Date Completed: 04/17/13

WorkOrder: 1304362

April 17, 2013

Dear Paul:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #0627; 4600 Grass Valley Rd.,
- 2) QC data for the above sample, and
- 3) A copy of the chain of custody.

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.

The analytical results relate only to the items tested.

	С	HA	IN O	FC	USTOI)Y R	E	CO	R	D			17	50	43	162	2	PAGE	<u> </u>	F
P&D	ENVIF 55 Santa Oak	Clara A								/	/	/	/	/	/ /	[]		/		
PROJECT NUMBER:				G	rass val Rd, land, cA		NUMBER OF CONTAINERS	ANALYCIC	North States	BOI HOUSE	5/			/	/	//	Æ			
SAMPLED BY: (PRIN Heens Ohous SAMPLE NUMBER			RE) Hea		hand, ca		UMBER OF	NH TO	-/ -	O DAL			/	/	/	RECEN	PERNATIVE	REM/	ARKS	
D1- water	411013				Xispenser (6	4		X		/	_		/	HCL	(mal	TAT	
								_						_						
											ICE GO	/t°	NDIT	ION_	-p-		PROPRIAT			
·											-DE	CHLO	VATIC	ED IN VO	LAB_	P	RESERVED	INLAB		
RELINQUISHED BY: (SIGNAN	URE)	4	DATE 11/13	TIME 1917	RECEIVED B	Y: (SIGN	ATU	RET	>	-	Total N	lo. of S hipmer lo. of C	amples it) iontaine it)	rs (RATORY:	ец	Anali	Had
RELINQUISHED BY: (SIGNAT	S	4	DATE DATE	TIME /5/S TIME	RECEIVED B	OR LABO	A		BY:	I	AN	zela	a P	yde	ACT:	LABO	ratory p 7)25	HONE	NUMBE	R:
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com					(SIGKATURE REMARKS:		ts					ACHE) YE		(X) NO			

McCampbell Analytical, Inc. **CHAIN-OF-CUSTODY RECORD** Page 1 of 1 1534 Willow Pass Rd Pittsburg, CA 94565-1701 WorkOrder: 1304362 **ClientCode: PDEO** (925) 252-9262 EQuIS WaterTrax WriteOn EDF Excel 🖌 Email HardCopy ThirdParty □J-flag Bill to: Requested TAT: Report to: 5 days Paul King lab@pdenviro.com Accounts Payable Email: P & D Environmental P & D Environmental CC: Date Received: 04/11/2013 PO: 55 Santa Clara, Ste.240 55 Santa Clara, Ste.240 Oakland, CA 94610 ProjectNo: #0627; 4600 Grass Valley Rd. Oakland, CA 94610 Date Printed: 04/12/2013 (510) 658-6916 FAX: 510-834-0152 Г

					Requested Tests (See legend below)										
Lab ID	Client ID	Matrix	Collection Date Hold	I 1	2	3	4	5	6	7	8	9	10	11	12
					·										
1304362-001	D1-Water	Water	4/10/2013 15:00	В	Α										

Test Legend:

1	G-MBTEX_W
6	
11	

2	TPH(DMO)_W
7	
12	

3	
8	

4	
9	

5	
10	

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.



Sample Receipt Checklist

Client Name:	P & D Environment	al			D	ate and	Time Received:	4/11/2013 4	:51:40 PM
Project Name:	#0627; 4600 Grass	Valley Rd.			Lo	ogIn Rev	viewed by:		Zoraida Cortez
WorkOrder N°:	1304362	Matrix: <u>Water</u>			С	arrier:	<u>Rob Pringle (M</u>	<u>Al Courier)</u>	
		<u>Cha</u>	in of Cu	istody (C	OC) Info	rmatior	1		
Chain of custody	present?		Yes	✓	No				
Chain of custody	signed when relinqui	shed and received?	Yes	✓	No				
Chain of custody	agrees with sample	labels?	Yes	✓	No				
Sample IDs note	d by Client on COC?		Yes	✓	No				
Date and Time o	f collection noted by	Client on COC?	Yes	✓	No				
Sampler's name	noted on COC?		Yes	✓	No				
			<u>Sample</u>	Receipt	Informa	<u>tion</u>			
Custody seals in	tact on shipping conta	ainer/cooler?	Yes		No			NA 🖌	
Shipping contain	er/cooler in good con	dition?	Yes	✓	No				
Samples in prope	er containers/bottles?		Yes	✓	No				
Sample containe	rs intact?		Yes	✓	No				
Sufficient sample	e volume for indicated	I test?	Yes	✓	No				
		Sample Pres	ervatio	n and Ho	ld Time	<u>(HT) Inf</u>	ormation		
All samples rece	ived within holding tin	ne?	Yes	✓	No				
Container/Temp	Blank temperature		Coole	r Temp:	4.4°C				
Water - VOA vial	s have zero headspa	ce / no bubbles?	Yes	✓	No	🗌 No	o VOA vials submi	tted	
Sample labels ch	necked for correct pre	eservation?	Yes	✓	No				
Metal - pH accep	otable upon receipt (p	H<2)?	Yes		No			NA 🗹	
Samples Receive	Yes	✓	No						
		(Ісе Тур	e: WE	TICE)					
* NOTE: If the "N	lo" box is checked, s	ee comments below.							

Comments:

	McCamp	DDELL / When Qua			I <u>, Inc.</u>		oll Free Telepho	Pass Road, Pittsburg ne: (877) 252-9262 pbell.com / E-mail: 1	/ Fax: (925) 252	2-9269							
P & D	Environmental					#0627; 460	0 Grass	Date Sample	npled: 04/10/13								
55 Sa	nta Clara, Ste.240			Valley	Rd.			Date Receiv	ed: 04/1	1/13							
55 54				Client	Contact: Pa	ul King		Date Extract	ed: 04/1	2/13							
Oakla	nd, CA 94610			Client	P.O.:			Date Analyz	ed: 04/12	2/13							
Extractio	Gas on method: SW5030B	soline Ra	nge (C	6-C12)		drocarbons		ne with BTEX	X and MT	Work Order: 1304362							
Lab ID	Client ID	Matrix	TP	'H(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments					
001B	D1-Water	W	١	ND	ND	ND	ND	ND	ND	1	100						

Reporting Limit for DF =1; ND means not detected at or	W	50	5.0	0.5	0.5	0.5	0.5	μg/L
above the reporting limit	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:

Angela Rydelius, Lab Manager

	McCampbell "When Qu	Anal uality Cou	<u>ytical, Inc.</u> nts''	Toll Free Telepho	Pass Road, Pittsburg, CA 945 one: (877) 252-9262 / Fax: (92: npbell.com / E-mail: main@mcd	5) 252-9269		
P & D I	Environmental			#0627; 4600 Grass	Date Sampled:	04/10/13		
55 Sant	a Clara, Ste.240		Valley Rd.		Date Received:	04/11/13		
			Client Contact: Pa	ul King	Date Extracted:	04/11/13		
Oakland	d, CA 94610		Client P.O.:	04/16/13				
Extraction	method: SW3510C		Total Extractab Analytical 1	le Petroleum Hydrocart nethods: SW8015B	oons*	Work Or	der: 1304	362
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	TPH-Bunker Oil (C10-C36)	DF	% SS	Comments
001A	D1-Water	W	65	ND	190	1	97	e2

Reporting Limit for DF =1; ND means not detected at or	W	50	250	100	μg/L
above the reporting limit	S	NA	NA	NA	mg/Kg

* water samples are reported in µg/L, filter samples samples in µg/filter, µg/wipe 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: e2) diesel range compounds are significant; no recognizable pattern

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water	QC Matrix: Water				BatchID	: 76358	WorkOrder: 1304362				
EPA Method: SW8021B/8015Bm Extraction: S	W5030B						Spiked Sam	ple ID:	1304365-001A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS		
TPH(btex) [£]	ND	60	96.9	97.8	0.839	95.5	70 - 130	20	70 - 130		
MTBE	ND	10	92.2	86.5	6.02	101	70 - 130	20	70 - 130		
Benzene	ND	10	97.9	93.5	4.57	98.2	70 - 130	20	70 - 130		
Toluene	ND	10	97.9	95.2	2.82	97.8	70 - 130	20	70 - 130		
Ethylbenzene	ND	10	99.1	94.8	4.44	97.7	70 - 130	20	70 - 130		
Xylenes	ND	30	99.6	95.8	3.85	98	70 - 130	20	70 - 130		
%SS:	98	10	100	97	3.35	99	70 - 130	20	70 - 130		
All target compounds in the Method Blank of this extraction ba NONE	tch were ND	less than th	e method	RL with t	he following	g exceptio	ns:				

			BATCH 76358 S	UMMARY			
Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1304362-001B	04/10/13 3:00 PM	1 04/12/13	04/12/13 3:50 AM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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.

₩___QA/QC Officer



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water	QC	QC Matrix: Water					: 76270		WorkOrder: 1304362			
EPA Method: SW8015B	Extraction: SW35 ²	10C					e,	Spiked Sam	nple ID: N/A			
Analyte	Sa	ample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)				
,,	ł	μg/L μg/		% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS		
TPH-Diesel (C10-C23)	1	N/A	1000	N/A	N/A	N/A	113	N/A	N/A	70 - 130		
%SS:	1	N/A	625	N/A	N/A	N/A	98	N/A	N/A	70 - 130		
All target compounds in the Method Blank NONE	c of this extraction batch w	vere ND l	ess than th	e method]	RL with th	ne following	g exception	s:				

BATCH 76270 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1304362-001A	04/10/13 3:00 PM	04/11/13	04/16/13 11:11 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

K_____QA/QC Officer



McCampbell Analytical, Inc. "When Quality Counts"

Analytical Report

P & D Environmental	Client Project ID: #0627; 4600 Grass Valley Rd.	Date Sampled: 04/10/13
55 Santa Clara, Ste.240		Date Received: 04/11/13
55 Sulla Child, 510.2 10	Client Contact: Paul King	Date Reported: 04/17/13
Oakland, CA 94610	Client P.O.:	Date Completed: 04/17/13

WorkOrder: 1304362

April 17, 2013

Dear Paul:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #0627; 4600 Grass Valley Rd.,
- 2) QC data for the above sample, and
- 3) A copy of the chain of custody.

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.

The analytical results relate only to the items tested.

	С	HA	IN O	FC	USTOI)Y R	E	CC	R	D			17	50	43	162	2	PAGE	<u> </u>	F
P&D	ENVIF 55 Santa Oak	Clara A								/	/	/	/	/	/	[]		/		
PROJECT NUMBER:				G	rass val Rd, land, cA		NUMBER OF CONTAINERS	ANALYCIC	North States	BOI HOUSE	5/			/	/	//	Æ			
SAMPLED BY: (PRIN Heens Ohous SAMPLE NUMBER			RE) Hea		hand, ca		UMBER OF	NH TO	-/ -	O DAL			/	/	/	RECEN	PERNATIVE	REM/	ARKS	
D1- water	411013				Xispenser (6	4		X		/	_		/	HCL	(mal	TAT	
								_						_						
											ICE GO	/t°	NDIT	ION_	-p-		PROPRIAT			
·											-DE	CHLO	VATIC	ED IN VO	LAB_	P	RESERVED	INLAB		
RELINQUISHED BY: (SIGNAN	URE)	4	DATE 11/13	TIME 1917	RECEIVED B	Y: (SIGN	ATU	RET	>	-	Total N	lo. of S hipmer lo. of C	amples it) iontaine it)	rs (RATORY:	ец	Anali	Had
RELINQUISHED BY: (SIGNAT	S	4	DATE DATE	TIME /5/S TIME	RECEIVED B	OR LABO	A		BY:	I	AN	zela	a P	yde	ACT:	LABO	ratory p 7)25	HONE	NUMBE	R:
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com					(SIGKATURE REMARKS:		ts					ACHE) YE		(X) NO			

McCampbell Analytical, Inc. **CHAIN-OF-CUSTODY RECORD** Page 1 of 1 1534 Willow Pass Rd Pittsburg, CA 94565-1701 WorkOrder: 1304362 **ClientCode: PDEO** (925) 252-9262 EQuIS WaterTrax WriteOn EDF Excel 🖌 Email HardCopy ThirdParty □J-flag Bill to: Requested TAT: Report to: 5 days Paul King lab@pdenviro.com Accounts Payable Email: P & D Environmental P & D Environmental CC: Date Received: 04/11/2013 PO: 55 Santa Clara, Ste.240 55 Santa Clara, Ste.240 Oakland, CA 94610 ProjectNo: #0627; 4600 Grass Valley Rd. Oakland, CA 94610 Date Printed: 04/12/2013 (510) 658-6916 FAX: 510-834-0152 Г

				Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date Hold	I 1	2	3	4	5	6	7	8	9	10	11	12
					·										
1304362-001	D1-Water	Water	4/10/2013 15:00	В	Α										

Test Legend:

1	G-MBTEX_W
6	
11	

2	TPH(DMO)_W
7	
12	

3	
8	

4	
9	

5	
10	

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.



Sample Receipt Checklist

Client Name:	P & D Environment	al			D	ate and	Time Received:	4/11/2013 4	:51:40 PM
Project Name:	#0627; 4600 Grass	Valley Rd.			Lo	LogIn Reviewed by:			Zoraida Cortez
WorkOrder N°:	1304362	Matrix: <u>Water</u>			С	arrier:	<u>Rob Pringle (M</u>	<u>Al Courier)</u>	
		<u>Cha</u>	in of Cu	istody (C	OC) Info	rmatior	1		
Chain of custody	present?		Yes	✓	No				
Chain of custody	signed when relinqui	shed and received?	Yes	✓	No				
Chain of custody	agrees with sample	labels?	Yes	✓	No				
Sample IDs note	d by Client on COC?		Yes	✓	No				
Date and Time o	f collection noted by	Client on COC?	Yes	✓	No				
Sampler's name	noted on COC?		Yes	✓	No				
			<u>Sample</u>	Receipt	Informa	<u>tion</u>			
Custody seals in	tact on shipping conta	ainer/cooler?	Yes		No			NA 🖌	
Shipping contain	er/cooler in good con	dition?	Yes	✓	No				
Samples in prope	er containers/bottles?		Yes	✓	No				
Sample containe	rs intact?		Yes	✓	No				
Sufficient sample	e volume for indicated	I test?	Yes	✓	No				
		Sample Pres	ervatio	n and Ho	ld Time	<u>(HT) Inf</u>	ormation		
All samples rece	ived within holding tin	ne?	Yes	✓	No				
Container/Temp	Blank temperature		Coole	r Temp:	4.4°C				
Water - VOA vial	s have zero headspa	ce / no bubbles?	Yes	✓	No	🗌 No	o VOA vials submi	tted	
Sample labels ch	necked for correct pre	eservation?	Yes	✓	No				
Metal - pH accep	otable upon receipt (p	H<2)?	Yes		No			NA 🗹	
Samples Receive	ed on Ice?		Yes	✓	No				
		(Ісе Тур	e: WE	TICE)					
* NOTE: If the "N	lo" box is checked, s	ee comments below.							

Comments:

	McCamp	DDELL / When Qua			I <u>, Inc.</u>	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com							
						#0627; 460	0 Grass	Date Sampled: 04/10/13					
55 Sa	nta Clara, Ste.240		Valley	Rd.			Date Receiv	ed: 04/1	1/13				
55 54	ina Ciara, 510.2+0			Client	Contact: Pa	ul King		Date Extract	ed: 04/1	2/13			
Oakla	nd, CA 94610			Client	P.O.:			Date Analyz	ed: 04/12	2/13			
Extractio	Gas on method: SW5030B	soline Ra	nge (C	6-C12)		drocarbons		ne with BTEX	X and MT		rk Order:	1304362	
Lab ID	Client ID	Matrix	TP	'H(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments	
001B	D1-Water	W	١	ND	ND	ND	ND	ND	ND	1	100		

Reporting Limit for DF =1; ND means not detected at or	W	50	5.0	0.5	0.5	0.5	0.5	μg/L
above the reporting limit	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:

	McCampbell "When Qu	Anal uality Cou	<u>ytical, Inc.</u> nts''	Toll Free Telepho	1534 Willow Pass Road, Pittsburg, CA 94565-1701 Il Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 //www.mccampbell.com / E-mail: main@mccampbell.com				
P & D Environmental				#0627; 4600 Grass	Date Sampled:	04/10/13			
55 Sant	a Clara, Ste.240		Valley Rd.		Date Received:	04/11/13			
			Client Contact: Pa	ul King	Date Extracted:	04/11/13			
Oakland	d, CA 94610		Client P.O.:		Date Analyzed:	04/16/13			
Extraction	method: SW3510C		Total Extractab Analytical 1	le Petroleum Hydrocart nethods: SW8015B	oons*	Work Or	der: 1304	362	
Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	TPH-Bunker Oil (C10-C36)	DF	% SS	Comments	
001A	D1-Water	W	65	ND	190	1	97	e2	

Reporting Limit for DF =1; ND means not detected at or	W	50	250	100	μg/L
above the reporting limit	S	NA	NA	NA	mg/Kg

* water samples are reported in µg/L, filter samples samples in µg/filter, µg/wipe 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: e2) diesel range compounds are significant; no recognizable pattern

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water	QC Matrix: Water				BatchID	WorkOrder: 1304362			
EPA Method: SW8021B/8015Bm Extraction: S	W5030B				5		Spiked Sam	ple ID:	1304365-001A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acc	eptance	Criteria (%)
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex) [£]	ND	60	96.9	97.8	0.839	95.5	70 - 130	20	70 - 130
MTBE	ND	10	92.2	86.5	6.02	101	70 - 130	20	70 - 130
Benzene	ND	10	97.9	93.5	4.57	98.2	70 - 130	20	70 - 130
Toluene	ND	10	97.9	95.2	2.82	97.8	70 - 130	20	70 - 130
Ethylbenzene	ND	10	99.1	94.8	4.44	97.7	70 - 130	20	70 - 130
Xylenes	ND	30	99.6	95.8	3.85	98	70 - 130	20	70 - 130
%SS:	98	10	100	97	3.35	99	70 - 130	20	70 - 130
All target compounds in the Method Blank of this extraction ba NONE	tch were ND	less than th	e method	RL with t	he following	g exceptio	ns:		

			BATCH 76358 S	UMMARY			
Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1304362-001B	04/10/13 3:00 PM	1 04/12/13	04/12/13 3:50 AM				

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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.

₩___QA/QC Officer



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water		QC Matrix: Water				BatchID: 76270			WorkOrder: 1304362		
EPA Method: SW8015B		Spiked Sample ID: N/A									
Analyte	Sa	Sample Spiked MS			MSD	MS-MSD LCS		Acceptance Criteria (%)			
		ug/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH-Diesel (C10-C23)	1	N/A	1000	N/A	N/A	N/A	113	N/A	N/A	70 - 130	
%SS:	1	N/A	625	N/A	N/A	N/A	98	N/A	N/A	70 - 130	
All target compounds in the Method Blank NONE	of this extraction batch w	vere ND l	ess than th	e method]	RL with th	ne following	g exception	s:			

BATCH 76270 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1304362-001A	04/10/13 3:00 PM	I 04/11/13	04/16/13 11:11 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

K_____QA/QC Officer