P & D ENVIRONMENTAL

A Division of Paul H. King, Inc. 4020 Panama Court Oakland, CA 94611 (510) 658-6916 Attachment to letter dated 7/22/02 July 8, 2002 Report 0047.R29

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

37-24-02 - 3:36 KCYU

SUBJECT:

GROUNDWATER MONITORING AND SAMPLING REPORT

VIP Service

3889 Castro Valley Blvd.

Castro Valley, CA

Gentlemen:

P&D Environmental, a division of Paul H. King, Inc. (P&D) is pleased to present this report documenting the results of the semi-annual monitoring and sampling of groundwater monitoring wells MW1, MW2, and MW3 at the subject site. This work was performed in accordance with P&D's proposal 033099.P1 dated March 30, 1999 and requirements set forth in a letter from Mr. Scott Seery of the Alameda County Department of Environmental Health (ACDEH) dated March 18, 1994 for the subject site. Based upon a telephone conversation with Mr. Seery on July 31, 1995, the sampling of monitoring wells MW1 and MW2 was reduced to semi-annually. Based upon subsequent conversations, the sampling and monitoring of well MW3 has also been reduced to semi-annually. In addition, it was agreed that no further analysis for TPH-D will be performed for well MW3.

The monitoring and sampling was performed on April 30, 2002. The reporting period is for November, 2001 through April, 2002. A Site Location Map (Figure 1) and Site Plan (Figure 2) are attached with this report.

BACKGROUND

It is P&D's understanding that the site was purchased by VIP Service in December, 1984. Prior to purchase of the property by VIP Service, the site was operated as a retail gasoline station for an undetermined period of time. The site was operated as a retail gasoline station from the time of purchase by VIP Service until the tanks were removed by Accutite on April 26, 1993. The underground tank system consisted of three 10,000 gallon capacity gasoline tanks, two dispenser islands, and one 550 gallon waste oil tank. It is P&D's understanding that the fuel tanks contained leaded and unleaded gasoline while in use by VIP Service. In addition, VIP Service reported that diesel fuel was not stored at the site at any time.

It is P&D's understanding that at the time of tank removal, eight soil samples were collected from the sidewalls of the fuel tank pit, and one soil sample was collected from the waste oil tank pit. Groundwater was reported to have been encountered in the fuel tank pit at a depth of approximately 11 feet. One water sample was collected from the water in the fuel tank pit. On April 28, 1993 Accutite returned to the site and collected seven soil samples from beneath the dispenser islands.

All of the samples were analyzed at Sequoia Analytical in Redwood City, California for Total Petroleum Hydrocarbons as Gasoline (TPH-G); Benzene, Toluene, Ethylbenzene and Xylenes (BTEX); and for Total Lead. In addition, the samples from the waste oil tank were analyzed for Total Petroleum Hydrocarbons as Diesel (TPH-D); Total Oil and Grease (TOG); Halogenated Volatile Organic Compounds using EPA Method 8010; Semi-Volatile Organic Compounds using EPA Method 8270; and for the metals Cadmium, Chromium, Lead, Nickel and Zinc.

The results of the soil samples collected from the fuel tank pit showed TPH-G concentrations ranging from 120 to 6,200 parts per million (ppm), and total lead results ranging from not detected to 13 ppm. The results of the water sample from the fuel tank pit showed 140 ppm TPH-G, and 0.095 ppm total lead.

The results of the soil samples collected from beneath the fuel dispensers showed TPH-G values ranging from not detected to 4.7 ppm, and total lead values ranging from not detected to 7.6 ppm.

The results of the sample collected from the waste oil tank pit showed 670 ppm TPH-G; 410 ppm TPH-D; 1,300 ppm TOG; 0.023 ppm 1,2-Dichloroethane and 0.0094 ppm Tetrachloroethylene in the EPA Method 8010 analysis; 2.7 ppm 2-Methylnapthalene and 3.8 ppm Naphthalene in the EPA Method 8270 analysis; and various metals concentrations, none of which exceeded ten times their respective STLC values. The laboratory identified the TPH-D results as being a "non-diesel mix," and indicated that the compounds reported as diesel were diesel-range gasoline and diesel-range oil compounds.

Between August 27 and November 1, 1993 P&D personnel collected stockpiled soil samples for stockpiled soil disposal characterization and oversaw the excavation of approximately 680 cubic yards of soil from the vicinity of the fuel tank pit in an effort to remove petroleum hydrocarbon-impacted soil. In addition, during this time the soil which was stockpiled by Accutite during the tank removal activities and during the subsequent soil excavation activities was disposed of at an appropriate disposal facility, and the tank pit backfilled and compacted. A total of eight confirmation soil samples were collected from the sidewalls of the tank pit on November 19, 1993 at a depth of 10 feet after over-excavation and prior to backfilling. The analytical results of the samples ranged from 33 to 3,200 ppm TPH-G. Documentation of excavation, stockpiled soil characterization and disposal, and backfilling of the pit are provided in P&D's report 0047.R1 dated January 24, 1994. The samples results associated with the removal of the tanks by Accutite are also summarized in P&D's report 0047.R1.

On November 10, 1993 P&D personnel oversaw the installation of three groundwater monitoring wells, designated as MW1 through MW3, and one exploratory soil boring, designated as B1, at the subject site. The wells were developed on November 12 and sampled on November 16, 1993. The results of the water samples showed that TPH-G was not detected in wells MW1 and MW2, and that BTEX was not detected in MW2. In well MW1, 0.0022 ppm of benzene was detected. In well MW3, TPH-G was detected at 12 ppm; BTEX was detected with benzene detected at 3.3 ppm; TRPH was not detected; EPA Method 8010 compounds were not detected

except for 0.027 ppm 1,2-Dichloroethane; and EPA Method 8270 compounds were not detected except for 0.009 ppm Phenol, 0.006 ppm Benzyl Alcohol, 0.006 2-Methylphenol, 0.007 ppm 2,4-Dimethylphenol, 0.088 ppm Benzoic Acid, 0.042 ppm Naphthalene, and 0.015 2-Methylnapthalene.

Documentation of the monitoring well and soil boring installation and associated sample results are presented in P&D's report 0047.R2 dated January 24, 1994. The locations of the monitoring wells are shown in Figure 2.

In response to a letter dated March 18, 1994 from Mr. Scott Seery ACDEH which commented upon the results of the initial groundwater sampling associated with the installation of the monitoring wells at the subject site, a quarterly groundwater monitoring and sampling program was initiated.

FIELD ACTIVITIES

On April 30, 2002, all three of the monitoring wells at the site were monitored and sampled by P&D personnel. The wells were monitored for depth to water and the presence of free product or sheen. Depth to water was measured to the nearest 0.01 foot using an electric water level indicator. The presence of free product or sheen was evaluated using a transparent bailer. No free product or sheen were observed in any of the wells. However, strong "diesel-like" petroleum hydrocarbon odors were noted in the sample water from well MW3. Depth to water level measurements are presented in Table 1.

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

The water samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials and 1-liter amber glass bottles, as appropriate, which were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to assure that no air bubbles were present.

The VOA vials and bottles were labeled and then transferred to a cooler with ice, until they were transported to McCampbell Analytical, Inc. in Pacheco, California. McCampbell Analytical, Inc. is a State-Certified hazardous waste testing laboratory. Chain of custody documentation accompanied the samples to the laboratory. Records of the field parameters measured during well purging are attached with this report. Water purged from the wells during purging operations was stored in a DOT-approved 55-gallon drum at the site pending appropriate disposal.

HYDROGEOLOGY

Water levels were measured in the monitoring wells once during the report period. The measured depth to water at the site on April 30, 2002 ranged from 8.56 to 9.03 feet.

Groundwater levels have increased in wells MW1, MW2, and MW3 by 0.30, 1.00 and 1.58 feet, respectively, since the previous monitoring on October 16, 2001. The calculated groundwater flow direction at the site on April 30, 2002 was to the west with a gradient of 0.012. The groundwater flow direction has remained relatively unchanged, and the gradient has decreased since the previous semi-annual monitoring on October 16, 2001.

Groundwater level data collected during the monitering period are presented in Table 1. The groundwater flow direction at the site on April 30, 2002 is shown on Figure 2.

LABORATORY RESULTS

The groundwater samples from monitoring wells MW1, MW2, and MW3 were analyzed for TPH-G using EPA Method 5030 in conjunction with Modified EPA Method 8015 (GCFID), BTEX and MTBE using EPA Method 8020. In addition, the groundwater sample from MW3 (near the former waste oil tank) was analyzed for Halogenated Volatile Organic Compounds using EPA Method 8010 and for Semi-Volatile Organic Compounds using EPA Method 8270.

The laboratory analytical results of the groundwater samples collected from wells MW1 and MW2 show that TPH-G, MTBE, and BTEX were not detected. The laboratory analytical results of the groundwater sample collected from monitoring well MW3 show that TPH-G was detected at a concentration of 11 ppm; benzene was detected at a concentration of 2.2 ppm; toluene was detected at a concentration of 0.12 ppm; ethylbenzene was detected at a concentration of 0.37 ppm; total xylenes were detected at a concentration of 0.59 ppm; MTBE was not detected; EPA Method 8010 and EPA Method 8270 compounds were not detected with the exception of 0.053 ppm Napthalene by EPA Method 8270.

DISCUSSION AND RECOMMENDATIONS

Based on the sample results, P&D recommends that the semi-annual monitoring and sampling be continued. Continuation of the monitoring and sampling program should be reevaluated upon regulatory agency review of soil gas survey results associated with investigation of off-site subsurface conditions in the vicinity of the subject site.

DISTRIBUTION

Copies of this report should be distributed to Mr. Scott Seery at the Alameda County Department of Environmental Health, and to Mr. Kevin Graves at the San Francisco Bay Regional Water Quality Control Board. Copies of the report should be accompanied by a transmittal letter signed by the principal executive officer of VIP Service.

LIMITATIONS

This report was prepared solely for the use of VIP Service. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with site owner, regulatory agencies and other pertinent individuals; review of available public documents;

subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between 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

Paul H. King

President

California Registered Geologist

1 and H. King

Registration No.: 5901

Expires: 12/31/03

Attachments: Tables 1 & 2

Site Location Map (Figure 1)

Site Plan (Figure 2)

Groundwater Monitoring/Well Purging Data Sheets

Laboratory Analytical Reports Chain of Custody Documentation

PHK/hcm 0047.R29

TABLE 1
WELL MONITORING DATA

Well	Date	Top of Casing	Depth to	Water Table
No.	Monitored	Elev. (ft.)	Water (ft.)	Elev. (ft.)
MWI	04/30/02	180.83	9.03	171.80
	10/16/01		9.33	171.50
	11/08/00		9.04	171.79
	05/24/00		7.97	172.86
	09/10/99		8.79	172.04
	02/10/99		7.72	173.11
	02/24/98		6.61	174.22
	11/18/97		9.71	171.12
	08/12/97		9.39	171.44
	04/25/97		8.37	172.46
	01/31/97		7.62	173.21
	07/19/96		8.81	172.02
	04/23/96		8.17	172.66
	01/17/96		9.66	171,17
	10/26/95		10.00	170.83
	08/15/95		9.23	171.60
	05/02/95		8.56	172.27
	01/30/95		9.50	171.33
	10/31/94		11.55	169,28
	07/29/94		10.86	169.97
	04/25/94		10.70	170.13
	11/16/93		11.63	169.20
	11/12/93*		11.53	169.30

NOTES:

Elevations are in feet Mean Sea Level.

ft. = Feet.

^{* =} Depth to water measurements prior to groundwater monitoring well development.

TABLE 1
WELL MONITORING DATA
(Continued)

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW2	04/30/02	179.70	8.76	170.94
	10/16/01		9.76	169.94
	11/08/00		8.63	171.07
	05/24/00		7.65	172.05
	09/10/99		8.48	171.22
	02/10/99		7.05	172.65
	02/24/98		6.20	173.50
	11/18/97		9.26	170.44
	08/12/97		9.06	170.64
	04/25/97		8.10	171,60
	01/31/97		7.22	172.48
	07/19/96		8.57	171.13
	04/23/96		7.85	171.85
	01/17/96		8.94	170.76
	10/26/95		9.68	170.02
	08/15/95		8.91	170.79
	05/02/95		8,17	171,53
	01/30/95		8.68	171.02
	10/31/94		10.99	168.71
	07/29/94		10.34	169.36
	04/25/94		10.04	169.66
	11/16/93		11.10	168,60
	11/12/93*		10.95	168.75

NOTES:

Elevations are in feet Mean Sea Level.

ft = Feet

^{* =} Depth to water measurements prior to groundwater monitoring well development.

TABLE 1
WELL MONITORING DATA
(Continued)

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW3	04/30/02	178.98	8.56	170.42
	10/16/01		10.14	168.84
	11/08/00		8.45	170.53
	05/24/00		7.62	171.36
	09/10/99		8.34	170.64
	02/10/99		7.12	171.86
	02/24/98		6,55	172.43
	11/18/97		8.97	170.01
	08/12/97		8.85	170.13
	04/25/97		7.99	170.99
	01/31/97		7.30	171.68
	07/19/96		8.42	170.56
	04/23/96		7.76	171.22
	01/17/96		8.61	170.37
	10/26/95		9.39	169.59
	08/15/95		8.62	170.36
	05/02/95		8.04	170.94
	01/30/95		8.46	170.52
	10/31/94		10.58	168.40
	07/29/94		10.03	168.95
	04/25/94		9.64	169.34
	11/16/93		10.63	168.35
	11/12/93*		10.66	168.32

NOTES:

Elevations are in feet Mean Sea Level.

ft. = Feet.

^{* =} Depth to water measurements prior to groundwater monitoring well development.

TABLE 2 GROUNDWATER LABORATORY ANALYTICAL RESULTS

Sample Location	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
			uples Collected on April 30, 2002			
MW1	ND	ND	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3 ^a	11	ND<200	2.2	0.12	0.37	0.59
			ples Collected on ctober 16, 2001			
MW1	ND	ND	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3**	2.1	ND	0.52	0.030	0.077	0.130

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

NA = Not Analyzed.

a = In MW3, EPA Method 8010 compounds were not detected; and EPA Method 8270 compounds were not detected except for 0.053 ppm naphthalene.

^{** =} In MW3 EPA Method 8010 compounds were not detected except for 0.0013 ppm 1,2-dichloroethane; and EPA Method 8270 compounds were not detected.

TABLE 2 GROUNDWATER LABORATORY ANALYTICAL RESULTS (Continued)

Sample Location	ТРН-G	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
			ples Collected on vember 8, 2000			
MW1	ND	ND	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3**	0.54		0.15 ples Collected on May 24, 2000	0.0069 0.018	0.029	
MW1	ND	ND	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3***	2.1	0.032	0.47	0.027	0.062	0.13
			ples Collected on tember 10, 1999			
MW1	ND	0.049	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3****	0.39	ND	0.098	0.0073 0.012	0.028	

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

NA = Not Analyzed.

- ** = In MW3 EPA Method 8010 compounds were not detected except for 0.0013 ppm 1,2-dichloroethane; and EPA Method 8270 compounds were not detected.
- *** = In MW3 EPA Method 8010 compounds were not detected except for 0.0017 ppm 1,2-Dichloroethane; and EPA Method 8270 compounds were not detected.
- **** = In MW3 EPA Method 8010 compounds were not detected except for 0.002 ppm 1,2-Dichloroethane; and EPA Method 8270 compounds were not detected.

TABLE 2
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Location	TPH-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			ples Collected on bruary 10, 1999			
MW1	NA	ND	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3****	NA	4.1	1.7	0.96	0.27	0.42
			ples Collected on bruary 24, 1998			
MWI	ND	ND	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3+	NA	19	4.6	0.33	0.65	1.8
			ples Collected on vember 18, 1997			
MW1	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	NA	NA
MW3++	NA	2.1	0.48	0.052	0.071	0.19

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

ND = Not Detected.

NA = Not Analyzed.

- ***** = In MW3, MTBE was not detected; EPA Method 8010 compounds were not detected except for 0.0028 ppm 1,2-Dichloroethane; and EPA Method 8270 compounds were not detected except for 0.021 ppm Naphthalene.
- + = In MW3, MTBE was not detected; EPA Method 8010 compounds were not detected except for 0.011 ppm 1,2-Dichloroethane; and EPA Method 8270 compounds were not detected except for Naphthalene, 2-Methylnaphthalene and Phenol which were detected at concentrations of 0.083, 0.019, and 0.023 ppm, respectively.
- ++ = In MW3, MTBE was not detected; EPA Method 8010 compounds were not detected except for 0.0021 ppm 1,2 Dichloroethane; and EPA Method 8270 compounds were not detected except for Naphthalene and 2-Methylnaphthalene which were detected at concentrations of 0.058 and 0.026 ppm, respectively.

TABLE 2
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Location	TPH-D	ТРН-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			ples Collected on ugust 12, 1997			
MW1	ND	ND	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3+++	NA	16	4.2	0.45	0.54	1.9
			ples Collected on April 25, 1997			
MW1	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	NA	NA
MW3++++	NA	30	5.3	0.52	0.95	3.0
			ples Collected on nuary 31, 1997			
MW1	NA	ND	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3+++++	NA	5.5	1.6	0.10	0.19	0.41

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

ND = Not Detected.

NA = Not Analyzed.

- +++ = In MW3, MTBE was not detected; EPA Method 8010 compounds were not detected except for 0.0091 ppm 1,2-Dichloroethane; and EPA Method 8270 compounds were not detected except for Bis(2-ethylhexyl) Phthalate, Naphthalene, and 2-Methylnaphthalene which were detected at concentrations of 0.021, 0.087, and 0.024 ppm, respectively.
- ++++ = In MW3, MTBE was not detected; EPA Method 8010 compounds were not detected except for 0.012 ppm 1,2 Dichloroethane; and EPA Method 8270 compounds were not detected except for Phenol, 4-Methylphenol, 2,4-Dimethylphenol, Naphthalene, and 2-Methylnaphthalene which were detected at concentrations of 0.0028, 0.0024, 0.0028, 0.066 ppm, and 0.015 ppm, respectively.
- +++++ = In MW3, MTBE was detected at a concentration of 0.063 ppm; EPA Method 8010 compounds were not detected except for 0.014 ppm 1,2 Dichloroethane; and EPA Method 8270 compounds were not detected except for Phenol, 2,4-Dimethylphenol, Naphthalene, and 2-Methylnaphthalene which were detected at concentrations of 0.0094, 0.0028, 0.031, and 0.0048 ppm, respectively.

TABLE 2 GROUNDWATER LABORATORY ANALYTICAL RESULTS (Continued)

Sample Location	TPH-D	ТРН-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			oles Collected on July 19, 1996			
MWI	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	NA	NA
MW3@	NA		4.8 ples Collected on pril 23, 1996	0.61	0.76	2.8
MWI	NA	ND	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3@@	NA	9.7	2.9	0.17	0.38	0.68
			oles Collected on nuary 17, 1996			
MWI	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	NA	NA
MW3@@@	NA	21	4.1	0.37	0.52	1.5

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

ND = Not Detected.

NA = Not Analyzed.

- @ = In MW3, EPA Method 8010 compounds were not detected; EPA Method 8270 compounds were not detected except for 0.0022 ppm 2,4-Dimethylphenol, 0.1 ppm Naphthalene, and 0.022 ppm 2-Methylnaphthalene. The EPA Method 8020 showed that MTBE was detected in MW3 at a concentration of 0.21 ppm.
- @@ = In MW3, EPA 8010 compounds were not detected except for 0.0051 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for Naphthalene and Phenol which were detected at concentrations of 0.056 and 0.025 ppm, respectively. The EPA Method 8020 results showed that MTBE was not detected in MW1 or MW2, and was detected in MW3 at a concentration of 0.15 ppm.
- @@@ = In MW3, EPA 8010 compounds were not detected except for 0.011 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for 0.0022 ppm Phenol, 0.0051 ppm 4-Methylphenol, 0.0029 ppm 2,4-Dimethylphenol, 0.032 ppm Naphthalene, and 0.010 ppm 2-Methylphenol.

TABLE 2
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Location	TPH-D	ТРН-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			ples Collected on tober 26, 1995			
MW1	NA	ND	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3@@@@	NA	19	4.0	0.48	0.64	1.8
			ples Collected on ugust 15, 1995			
MW1	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	NA	NA
MW3@@@@@	ĝ NA	7.0	2.4	0.23	0.26	0.73
			ples Collected on May 2, 1995			
MW1	NA	ND	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3#	0.84	18	5.4	0.39	0,65	1.7

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

ND = Not Detected.

NA = Not Analyzed.

- @@@@ = In MW3, EPA 8010 compounds were not detected except for 0.011 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for 0.043 ppm Naphthalene. The EPA Method 8020 results showed that MTBE was not detected in MW1 or MW2, and was detected in MW3 at a concentration of 0.24 ppm.
- @@@@@ = EPA 8010 compounds were not detected except for 0.0091 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for 0.003 ppm 4-Methylphenol, 0.005 ppm 2,4-Dimethyl Phenol, 0.019 ppm Naphthalene, and 0.003 ppm 2-Methylnaphthalene.
- #= Review of the laboratory report and discussions with the laboratory indicate that the results reported as TPH-D are gasoline-range compounds. EPA 8010 compounds not detected except for 0.014 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for 0.010 ppm 2-Methyl naphthalene and 0.062 ppm Naphthalene.

TABLE 2
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Location	TPH-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			ples Collected on nuary 30, 1995			
MW1	NA	ND	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3##	0.70	24	7.6	0.35	0.90	2.2
			ples Collected on ctober 31, 1994			
MW1	NA	ND	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3###	0.60	8.7	2.6	0.26	0.32	0.92
			ples Collected on July 29, 1994			
MW1	NA	ND	0.0012	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3####	0.67	6.3	2.0	0.13	0.22	0.52

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

ND = Not Detected.

NA = Not Analyzed.

= Review of the laboratory report and discussions with the laboratory indicate that the results reported as TPH-D are gasoline-range compounds. EPA 8010 compounds not detected except for 0.018 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for 0.014 ppm 2-Methyl naphthalene and 0.11 ppm Naphthalene.

= Review of the laboratory report and discussions with the laboratory indicate that the results reported as TPH-D are gasoline-range compounds. EPA 8010 compounds not detected except for 0.019 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for 0.008 ppm 2-Methyl naphthalene, 0.047 ppm Naphthalene, and 0.002 ppm Bis(2-Ethylhexyl) Phthalate.

= Review of the laboratory report and discussions with the laboratory indicate that the results reported as TPH-D are gasoline-range compounds. EPA 8010 compounds not detected except for 0.0077 ppm 1,2-Dichloroethane; EPA 8270 compounds not detected except for 0.008 ppm 2-Methylnaphthalene and 0.044 ppm Naphthalene.

TABLE 2
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(Continued)

Sample Location	TPH-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			ples Collected on April 25, 1994			
MW1	ND	ND	ND	ND	ND	ND
MW2	ND	ND	ND	ND	ND	ND
MW3####	2.1	17	4.8	0.47	0.29	1.6
			ples Collected on vember 16, 1993			
MW1	NA	ND	0.0022 ND	ND	ND	
MW2	NA	ND	ND	ND	ND	ND
MW3^	NA	12	3.3	0.66	0.24	1.6

NOTES:

TPH-D = Total Petroleum Hydrocarbons as Diesel.

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

ND = Not Detected.

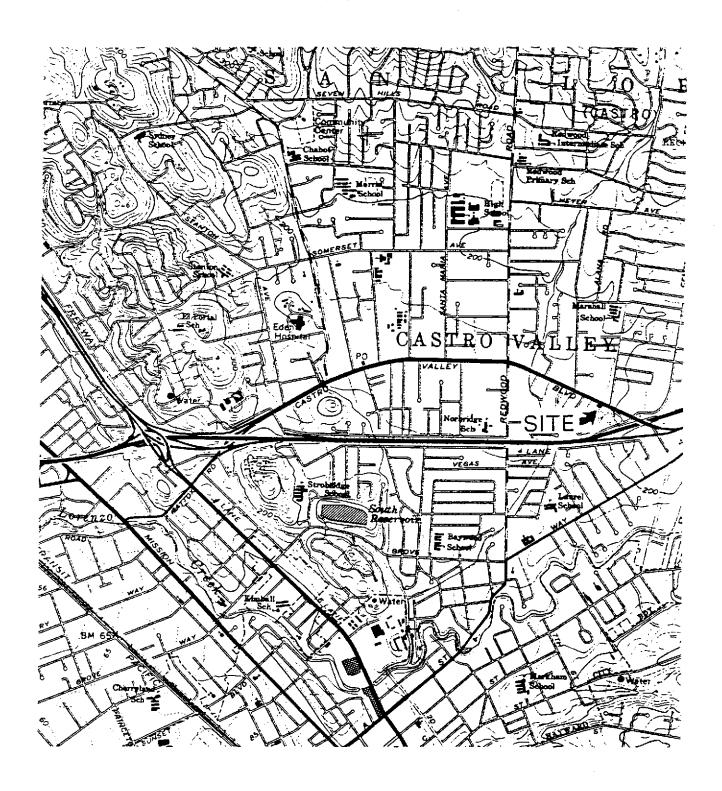
NA = Not Analyzed.

= Review of the laboratory report and discussions with the laboratory indicate that the results reported as TPH-D are gasoline-range compounds. EPA 8010 compounds not detected except for 0.28 ppm 1,2-Dichloroethane; EPA 8270 compounds not detected except for 0.013 ppm 2-Methylnapthalene and 0.084 ppm Naphthalene.

^ = TRPH not detected; EPA 8010 compounds not detected except for 0.027 ppm 1,2-Dichloroethane; EPA 8270 compounds not detected except for 0.009 ppm Phenol, 0.006 ppm Benzyl Alcohol, 0.006 2-Methylphenol, 0.007 ppm 2,4-Dimethylphenol, 0.088 ppm Benzoic Acid, 0.042 ppm Naphthalene, and 0.015 ppm 2-Methylphenol.

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

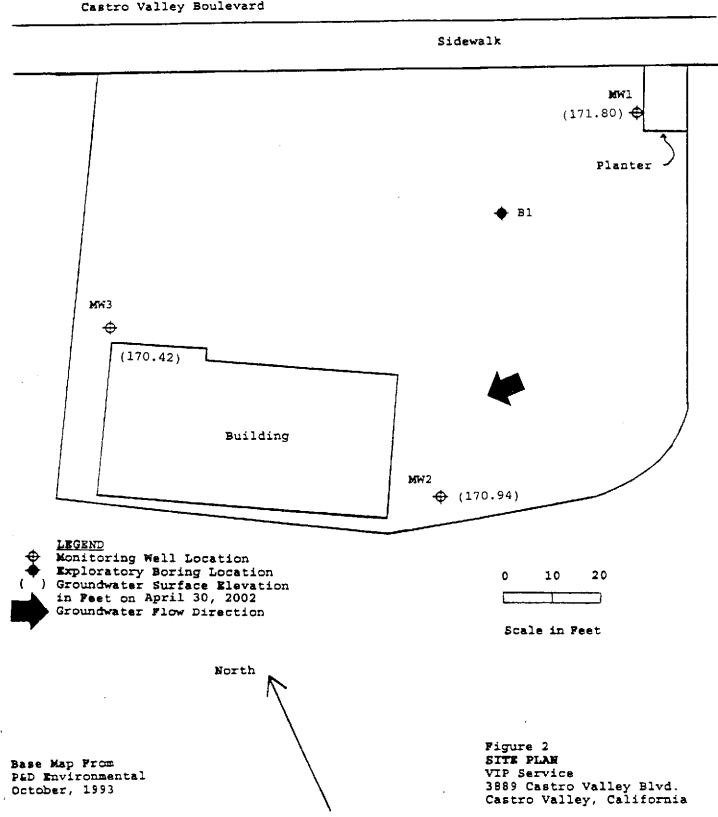


Scale in Feet 0 1000 2000 3000 Figure 1 SITE LOCATION MAP VIP Service 3889 Castro Valley Blvd. Castro Valley, California

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Castro Valley Boulevard



P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name _	VEP- Cost	≥ Valley	Well No.	MW)
	0047	_	Date	4/30/02
TOC to Wate	r (ft.) <u>9,03</u>	_ 10:30		None
Well Depth	(ft.) 70.0	<u>></u>	Free Pro	duct Thickness
Well Diamet	er Z_'		Sample Co	ollection Method
Gal./Casing	Vol. 1.8	_	Tes	flon Bailer
TIME	S=5.4 GAL. PURGED	Hq	TEMPERATURE ()	ELECTRICAL CONDUCTIVITY (
11:35	0.1	9.40	60.3	12,242,00
11:36		9.01	63.6	12.81
11-37		8.82	64.7	13.23
_11:38		8.74	65.3	13.26
:1:39	<u> </u>	8.68	65.6	13.44
11:40		8.65	65.6	13.41
1):41	6	S59	65.6	13.44
17:45	iollest 5	ample		 _
·-				
	· · · · · · · · · · · · · · · · · · ·			
	-	*		
				48
				
		<u></u>		
				
NOTES:				
			<u> </u>	

PURGE10.92

9:07

P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

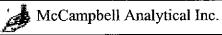
Site Name VEP - Costro Vall	ey Well No	MWZ
Job No. 0047	,	4/30/02
TOC to Water (ft.) 8.76 16/32	Sheen	None
Well Depth (ft.) 20.0	Free Produ	ct Thickness d
Well Diameter Z "	Sample Col	lection Method
Gal./Casing Vol	700	flon Bailer,
Z=5.4 TIME GAL. PURGED DH	TEMPERATURE	ELECTRICAL CONDUCTIVITY
12:10 0.1 7.3		13.42 ×100
12:11 1 7,2		13.63
	35 65.9	13.59
12:13 3 7.	····	13.20
12:14 4 7.3		13.23
12:15 5 7.		13.45
12:16 7.	35 65.9	13.57
12:20 Colleit Sam	ple	
		·
		·
		· · · · · · · · · · · · · · · · · · ·

NOTES:		•

P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

	Site Name _	VIP- Cast	o Valley	Well No	MW3	
	Job No	0047	_	Date	4/30/02	
a/l	TOC to Water	(ft.) 8,56	18:35/14	Sheen	None	
	Well Depth	(ft.)	<u>)</u>	Free Produ	uct Thickness 👌	
	Well Diamete	er <u>Z."</u>		Sample Col	llection Method	
	Gal./Casing	Vol. 1.9	<u></u>		TeFlon Bailer	
	TTMP	£ = 5		(o=	ELECTRICAL /	/
	TIME 12:36	GAL. PURGED O . I	४.५ ९	TEMPERATURE	CONDUCTIVITY (MS/C	"
				63.0	12,73 x 100	
	12:37		8.51	64.1	12.56	
	12:38		8.58	64.5	12.80	
	12:39	<u> </u>	8,58	64.7	13.03	
	12:40	4	8.55	64.9	5.20	
	12:41	5	8.49	65.1	13.14	
	12:42	6	8,45	65.3	13.22	
	12:45	Collect	Sample			

	-					
			<u>-</u>			
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			<u></u>			
				<u> </u>		
	NOTES:	trong metro	leum (die	sel-like) ac	D_	
		7				



110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

P & D Environmental	Client Project ID: #0047; VIP -Castro	Date Sampled: 04/30/02
4020 Panama Court	Valley	Date Received: 05/01/02
Oakland, CA 94611-4931	Client Contact: Paul King	Date Extracted: 05/02/02-05/03/02
Oakiand, CA 94011-4931	Client P.O.:	Date Analyzed: 05/02/02-05/03/02

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

Extraction me	thod: SW5030B			Analytical n	nethods: SW802	1B/8015Cm		,	Work Orde	rk Order: 020501	
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	
001A	MW 1	w	ND	ND	ND	ND	ND	ND	1	105	
002A	MW 2	w	ND	ND	ND	ND	ND	ND	1	101	
003A	MW 3	w	11000,a	ND<200	2200	120	370	590	20	#	
					1						
											
	WANTE OF THE PERSON OF THE PER										
	Limit for DF =1; not detected at or	W	50	5	0.5	0.5	0.5	0.5		g/L	
	reporting limit	S	1	0.05	0.005	0.005	0.005	0.005	mg	y/Kg	

^{*}water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, wipe samples in ug/wipe, and TCLP extracts in ug/L.

DF = dilution factor.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) no recognizable pattern.



McCampbell Analytical Inc.

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P & D Environmental	Client Project ID: #0047; VIP -Castro	Date Sampled: 04/30/02
4020 Panama Court	Valley	Date Received: 05/01/02
Oakland, CA 94611-4931	Client Contact: Paul King	Date Extracted: 05/03/02
Oakianu, CA 94011-4931	Client P.O.:	Date Analyzed: 05/03/02

		Chent P.O		Date Analyzed. 03/	03/02	
	Halogena	ted Volatile Organics by	,	0 Basic Target List)		
Extraction Method: SW5030B	······························		hod: SW8021B		Work Orde	r: 0205011
	Lab ID	0205011-003B			Reporting	Limit for
	Client ID	MW 3			DF	
	Matrix	W]	_
	DF	10			S	W
Compound			Concentration		ug/kg	μg/L
Bromodichloromethane		ND<5.0			NA	0.5
Bremeform		ND<5.0			NA	0.5
Bromomethane		ND<5.0			NA	0.5
Carbon Tetrachloride		ND<5.0			NA	0.5
Chlorobenzene		ND<5.0	1		NA	0.5
Chloroethane		ND<5.0	<u> </u>		NA	0.5
2-Chloroethyl vinyl ether		ND<5.0	-		NA	0.5
Chloroform		ND<5.0			NA	0.5
Chloromethane		ND<5.0			NA	0.5
Dibromochloromethane		ND<5.0			NA.	0.5
1.2-Dichlorobenzene		ND<5.0			NA	0.5
1,3-Dichlorobenzene		ND<5.0			NA	0.5
1,4-Dichlorobenzene		ND<5.0			NA	0.5
Dichlorodifluoromethane		ND<5.0			NA	0.5
1,1-Dichloroethane		ND<5.0			NA	0.5
1,2-Dichloroethane		ND<5.0			NA	0.5
1,1-Dichloroethene		ND<5.0	i		NA	0.5
cis-1,2-Dichloroethene		ND<5.0		- 	NA	0.5
trans-1,2-Dichloroethene		ND<5.0	:		NA	0.5
1,2-Dichloropropane		ND<5.0			NA	0.5
cis-1,3-Dichloropropene		ND<5.0	j		NA	0.5
trans-1,3-Dichloropropene		ND<5.0			NA	0.5
Methylene chloride		ND<16			NA	0.5
1,1,2,2-Tetrachloroethane		ND<5.0			NA	0.5
Tetrachloroethene		ND<6.0			NA	0.5
1,1,1-Trichloroethane		ND<5.0			NA	0.5
1,1,2-Trichloroethane		ND<5.0			NA	0.5
Trichloroethene		ND<5.0			NA	0.5
Trichlorofluoromethane		ND<5.0	i		NA	0.5
Vinyl Chloride		ND<5.0			NA	0.5
Company Company		Surrogate Re	ecoveries (%)			·
%SS		88.0		İ		

^{*} water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe

Reporting limit for DF = 1; water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe

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

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains greater than ~2 vol. % sediment; (j) sample diluted due to high organic content.



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P & D Environmental	Client Project ID: #0047; VIP -Castro	Date Sampled: 04/30/02
4020 Panama Court	Valley	Date Received: 05/01/02
Oakland, CA 94611-4931	Client Contact: Paul King	Date Extracted: 05/01/02
Oakiand, CA 94011-4931	Client P.O.:	Date Analyzed: 05/02/02

	Semi-Volatile	Orga	nics by	GC/MS (Basic Target List)						
Extraction Method: SW3510C		Ana	lytical Me	thod: SW8270D	Work	Order: 0	205011			
Lab ID				0205011-003C						
Client ID				MW 3						
Matrix		Water								
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit			
Acenaphthene	ND<50	5.0	10	Acenaphthylene	ND<50	5.0	10			
Anthracene	ND<50	5.0	10	Benzidine	ND<50	5.0	10			
Benzoic Acid	ND<250	5.0	50	Benz(a)anthracene	ND<50	5.0	10_			
Benzo(b)fluoranthene	ND<50	5.0	10	Benzo(k)fluoranthene	ND<50	5.0	10			
Benzo(g,h,i)perylene	ND<50	5.0	10	Benzo(a)pyrene	ND<50	5.0	10			
Benzyl Alcohol	ND<100	5.0	20	Bis (2-chloroethoxy) Methane	ND<50	5.0	10			
Bis (2-chloroethyl) Ether	ND<50	5.0	10	Bis (2-chloroisopropyl) Ether	ND<50	5.0	10			
Bis (2-ethylhexyl) Phthalate	ND<50	5.0	10	4-Bromophenyl Phenyl Ether	ND<50	5.0	10			
Butylbenzyl Phthalate	ND<50	5.0	10	4-Chloroaniline	ND<50	5.0	10			
4-Chloro-3-methylphenol	ND<50	5.0	10	2-Chloronaphthalene	ND<50	5.0	10			
2-Chlorophenol	ND<50	5.0	10	4-Chlorophenyl Phenyl Ether	ND<50	5.0	10			
Chrysene	ND<50	5.0	10	Dibenzo(a,h)anthracene	ND<50	5.0	10			
Dibenzofuran	ND<50	5.0	10	Di-n-butyl Phthalate	ND<50	5.0	10			
1.2-Dichlorobenzene	ND<50	5.0	10	1,3-Dichlorobenzene	ND<50	5.0	10			
1,4-Dichlorobenzene	ND<50	5.0	10	3,3-Dichlorobenzidine	ND<100	5.0	20			
2.4-Dichlorophenol	ND<50	5.0	10	Diethyl Phthalate	ND<50	5.0	10			
2,4-Dimethylphenol	ND<50	5.0	10	Dimethyl Phthalate	ND<50	5.0	10			
4,6-Dinitro-2-methylphenol	ND<250	5.0	50	2,4-Dinitrophenol	ND<250	5.0	50			
2.4-Dinitrotoluene	ND<50	5.0	10	2,6-Dinitrotoluene	ND<50	5.0	10			
Di-n-octyl Phthalate	ND<50	5.0	10	1,2-Diphenylhydrazine	ND<50	5.0	10			
Fluoranthene	ND<50	5.0	10	Fluorene	ND<50	5.0	10			
Hexachlorobenzene	ND<50	5.0	10	Hexachlorobutadiene	ND<50	5.0	10			
Hexachlorocyclopentadiene	ND<50	5.0	10	Hexachloroethane	ND<50	5.0	10			
Indeno (1,2,3-cd) pyrene	ND<50	5.0	10	Isophorone	ND<50	5.0	10			
2-Methylnaphthalene	ND<50	5.0	10	2-Methylphenol (o-Cresol)	ND<50	5.0	10			
3 &/or 4-Methylphenol (m,p-Cresol)	ND<50	5.0	10	Naphthalene	53	5.0	10			
2-Nitroaniline	ND<50	5.0	10	3-Nitroaniline	ND<250	5.0	50			
4-Nitroaniline	ND<50	5.0	10	2-Nitrophenol	ND<50	5.0	10			
4-Nitrophenol	ND<50	5.0	10	Nitrobenzene	ND<250	5.0	50			
N-Nitrosodiphenylamine	ND<50	5.0	10	N-Nitrosodi-n-propylamine	ND<50	5.0	10			
Pentachlorophenol	ND<50	5.0	10	Phenanthrene	ND<250	5.0	50			
Phenoi	ND<50	5.0	-10	Pyrene	ND<50	5.0	10			
1,2,4-Trichlorobenzene	ND<50	5.0	10	2,4,5-Trichlorophenol	ND<50	5.0	10			
2,4,6-Trichlorophenol	ND<50	5.0	10	• • • • • • • • • • • • • • • • • • • •		L	-			
			· · · - · -	ecoveries (%)		-				
%SS1:	#	ļ		%SS2:	;	#				
%SS3:	43.9	9		%SS4:	54.	0				
%SS5:	#	ŧ		%SS6:	58.	0				

%SS5:

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high

^{*} water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in mg/kg, wipe samples in ug/wipe, oil/nonaqueous liquid samples in mg/L.

QC SUMMARY REPORT FOR SW8021B/8015Cm

BatchID: 1613

Matrix: W

WorkOrder: 0205011

EPA Method: SW80	21B/8015Cm E	xtraction:	SW5030B		Ext. Date: 5/01/02		Spiked Sample ID: N/A				
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (
Compound	µg/L	μ g/ L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High	
TPH(gas)	N/A	60	N/A	N/A	N/A	111	116	4.6	80	120	
мтве	N/A	10	N/A	N/A	N/A	96.2	93.7	2.6	80	120	
Benzene	N/A	10	N/A	N/A	N/A	93.9	96.5	2.8	80	120	
Toluene	N/A	10	N/A	N/A	N/A	98.2	101	2.8	80	120	
Ethylbenzene	N/A	10	N/A	N/A	N/A	98.9	101	2.4	80	120	
Xylenes	N/A	30	N/A	N/A	N/A	98.7	99.3	0.67	80	120	
%SS	N/A	10	N/A	N/A	N/A	103	105	1.8	80	120	

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

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

N/A = not enough sample to perform matrix spike, or analyte concentration in sample exceeds spike amount.

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

* MS and / or MSD spike recoveries may not be near 100% or their RPDs near 0% if: a) the sample is inhomogeneous AND contains significant concentrations of analyze relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

QC SUMMARY REPORT FOR SW8021B

BatchID: 1622

Matrix: W

WorkOrder: 0205011

EPA Method: SW8021B	E	Extraction: SW5030B			Ext. Date:	5/01/02	Spiked Sample ID: N/A				
	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	Criteria (%	
Compound	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High	
Chlorobenzene	N/A	10	N/A	N/A	N/A	102	99.9	2.0	70	130	
1,1-Dichloroethene	N/A	10	N/A	N/A	N/A	100	98.9	1.2	70	130	
Trichloroethene	N/A	10	N/A	N/A	N/A	100	97.3	2.8	70	130	
%SS	N/A	10	N/A	N/A	N/A	104	100	3.4	70	130	

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

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

N/A = not enough sample to perform matrix spike, or analyte concentration in sample exceeds spike amount.

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

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

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

QC SUMMARY REPORT FOR SW8270D

BatchID: 1623

Matrix: W

WorkOrder: 0205011

EPA Method: SW8270D	Extraction: SW3510C			Ext. Date:	5/01/02	Spiked Sample ID: N/A				
0	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	Criteria (%)
Compound	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Acenaphthene	N/A	50	N/A	N/A	N/A	53.6	51.6	4.0	30	130
4-Chloro-3-methylphenol	N/A	50	N/A	N/A	N/A	99.1	96.8	2.4	30	130
2-Chlorophenol	N/A	50	N/A	N/A	N/A	103	101	1.9	30	130
1,4-Dichlorobenzene	N/A	50	N/A	N/A	N/A	51.2	49.6	3.2	30	130
2,4-Dinitrotoluene	N/A	50	N/A	N/A	N/A	55	53.2	3.4	30	130
4-Nitrophenol	N/A	50	N/A	N/A	N/A	77.6	79.8	2.8	30	130
N-Nitrosodi-n-propylamine	N/A	50	N/A	N/A	N/A	45.8	43.3	5.7	30	130
Pentachlorophenol	N/A	50	N/A	N/A	N/A	80.6	83.2	3.2	30	130
Phenol	N/A	50	N/A	N/A	N/A	83.9	81.5	2.9	30	130
Pyrene	N/A	50	N/A	N/A	N/A	60.8	59.5	2.1	30	130
1,2,4-Trichlorobenzene	N/A	50	N/A	N/A	N/A	51.7	50	3.3	30	130
%SS4	N/A	5000	N/A	N/A	N/A	60	58.9	2.0	30	130

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

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

N/A = not enough sample to perform matrix spike, or analyte concentration in sample exceeds spike amount.

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

^{*} MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

P & D ENVIRONMENTAL

A Division of Paul H. King, Inc. 4020 Panama Court Oakland, CA 94611 (510) 658-6916

CHAIN OF CUSTODY RECORD

0205011

PROJECT NUMBER: PROJECT NAME: VIP- Costro Valley 0047 SAMPLED BY: (PRINTED AND SIGNATURE) REMARKS Paul H. King Paul H. Krina SAMPLE LOCATION SAMPLE NUMBER DATE TIME TYPE 4/30/02 5 <u>ግ</u>ረ ኤ Normal From Aron MWI wister 5 MWZ MW3 CAND CONSTRON HEAD SPACE LABSENT RELINQUISHED BY: (SIGNATURE) TOTAL NO. OF SAMPLES DATE TIME REGEIVED BY: (SIGNATURE) LABORATORY: (THIS SHIPMENT) DH. King TOTAL NO. OF CONTAINERS (THIS SHIPMENT) Mc Camphell Analytical DATE TIME RECEIVED BY: (SIGNATURE) LABORATORY CONTACT: LABORATORY PHONE NUMBER: Bd Angela Rydeling (925) 798-1620 RELINQUISHED BY: (SIGNATURE) TIME RECEIVED FOR LABORATORY BY: SAMPLE ANALYSIS REQUEST SHEET (SIGNATURE) ATTACHED: ()YES ()NO REMARKS: WOAs preserved with HCl

McCampbell Analytical Inc.

110 Second Avenue South, #D7 Pacheco, CA 94553-5560 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

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WorkOrder: 0205011

Client:

P & D Environmental 4020 Panama Court Oakland, CA 94611-4931 TEL:

(510) 658-6916

FAX:

(510) 658-9074

ProjectNo:

#0047; VCP -Cas

PO:

01-May-02

				I		Requested Tests						
Sample ID	ClientSampID	Matrix	Collection Date	Bottle	SW8021B	8021B/8015	SW8270D					
0205011-001	MW 1	Water	4/30/02		T	A						
0205011-002	MW 2	Water	4/30/02			A						
	****		 			- 						

Comments:

Date/Time	e Date/Time	
Relinquished by:	Received by:	
Relinquished by:	Received by:	
Relinquished by:	Received by:	

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

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other