Certified Mail #Z 745 731 309

VIP Service Station 385 Century Cir. Danville, Ca 94526 May 25, 1997

Alameda County Env. Health Dept. Env. Protection Div 1131 Harbor Bay Pkwy # 250 Alameda, CA 94502, 6577

Attn.: Scott Seery

Site: VIP Service Station

3889 Castro Valley Blvd. Castro Valley, CA 94546

Subject: Quarterly Ground water Monitoring And sampling Report

P & D Environmental Report # 0047 R16, Dated February 26, 1997

and report # 0047.17, May 6, 1997.

Gentlemen:

We are submitting subject item reports documenting quarterly ground water monitoring report for your information as required for continued monitoring at above site.

Should you have any questions regarding above subject, please contact us.

Sincerely,

RB Patel

Attachments: Above Reports

PROTECTION PROTECTION 9: 46

P & D Environmental

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

Report 0047.R16

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

SUBJECT: Quarterly 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 quarterly 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 080696.P1 dated August 6, 1996 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. In addition, no further analysis for TPH-D will be performed for well MW3. All three wells were monitored and sampled during this quarter.

The monitoring and sampling was performed on January 31, 1997. The reporting period is for November, 1996 through January, 1997. The wells were not monitored or sampled during the previous quarter. 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.

February 26, 1997 Report 0047.R16

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 Tetrachloroethene 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. The sample collection locations are shown on the attached Site Plan, Figure 3. 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 January 31, 1997 all three of the monitoring wells at the site were monitored and sampled by 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 was observed in any of the wells. However, petroleum hydrocarbon odors were detected in 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 pending appropriate disposal.

HYDROGEOLOGY

Water levels were measured in the monitoring wells once during the quarter. The measured depth to water at the site on January 31, 1997 ranged from 7.22 to 7.62 feet. Groundwater levels have increased in wells MW1, MW2, and MW3 by 1.19, 1.35, and 1.12 feet, respectively, since the previous monitoring on July 19, 1996. The calculated groundwater flow direction at the site on January 31, 1997 was to the west with a gradient of 0.013. The groundwater gradient has increased, and the groundwater flow direction has remained unchanged since the previous quarterly monitoring on July 19, 1996.

Groundwater level data collected during the quarter are presented in Table 1. The groundwater flow direction at the site on January 31, 1997 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, groundwater sample from MW3 (near the 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, BTEX and MTBE were not detected. The laboratory analytical results of the groundwater sample collected from monitoring well MW3 shows that TPH-G was detected at a concentration of 5.5 ppm; benzene was detected at a concentration of 1.6 ppm; 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.

DISCUSSION AND RECOMMENDATIONS

Based on the laboratory analytical results of the water samples collected from the monitoring wells, P&D recommends that the quarterly groundwater monitoring of wells MW1, MW2, and MW3, the quarterly sampling of well MW3 and the semi-annual sampling of wells MW1 and MW2 be continued. During the next quarter, all of the wells should be monitored and well MW3 should be sampled.

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 judgement 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 judgement 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 Hydrogeologist

Don R. Braun

Certified Engineering Geologist

Registration No. : 1310

Expires: 6/30/98

РНК 0047.R16

Attachments: Tables 1 & 2

Site Location Map (Figure 1)

Site Plan (Figure 2) Field Parameter Form

Laboratory Analytical Results Chain of Custody Documentation 4.5

TABLE 1
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW1.	01/31/97 07/19/96 04/23/96 01/17/96 10/26/95 08/15/95 05/02/95 01/30/95 10/31/94 07/29/94 04/25/94 11/16/93 11/12/93*	180.83	7.62 8.81 8.17 9.66 10.00 9.23 8.56 9.50 11.55 10.86 10.70 11.63 11.53	173.21 172.02 172.66 171.17 170.83 171.60 172.27 171.33 169.28 169.97 170.13 169.20 169.30
MW2	01/31/97 07/19/96 04/23/96 01/17/96 10/26/95 08/15/95 05/02/95 01/30/95 10/31/94 07/29/94 04/25/94 11/16/93 11/12/93*	179.70	7.22 8.57 7.85 8.94 9.68 8.91 8.17 8.68 10.99 10.34 10.04 11.10	172.48 171.13 171.85 170.76 170.02 170.79 171.53 171.02 168.71 169.36 169.66 168.60 168.75
мw3	01/31/97 07/19/96 04/23/96 01/17/96 10/26/95 08/15/95 05/02/95 01/30/95 10/31/94 07/29/94 04/25/94 11/16/93 11/12/93*	178.98	7.30 8.42 7.76 8.61 9.39 8.62 8.04 8.46 10.58 10.03 9.64 10.63	171.68 170.56 171.22 170.37 169.59 170.36 170.94 170.52 168.40 168.95 169.34 168.35 168.32

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-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			s Collected ary 31, 1997			
MW1	NA	ИD	ND	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
MW3 +	NA	5.5	10.0	0.10	0.19	0.41
			s Collected ly 19, 1996	on		
MW1	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	. NA	NA
₩3++	NA	18	4.8	0.61	0.76	2.8
			s Collected ail 23, 1996	on		
MW1	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

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 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-Methylphenothalene which were detected at concentrations of 0.0094, 0.0028, 0.031, and 0.0048 ppm, respectively.
- ++ = 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 1,2Dichloroethane; 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.

TABLE 2 GROUNDWATER LABORATORY ANALYTICAL RESULTS (Continued)

Sample Location	TPH-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			s Collected			
MW1	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	NA	NA
MW3++++	NA	21	4.1	0.37	0.52	1.5
			s Collected ober 24, 199			
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
			s Collected ust 15, 1995			
MW1	NA	NA	NA	NA	NA	NA
MW2	NA	NA	NA	NA	NA	NA
MW3@	NA	7.0	2.4	0.23	0.26	0.73

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 0.0022
ppm Phenol, 0.0051 ppm 4-Methylphenol, 0.0029 ppm 2,4-Dimethylphenol,
0.032 ppm Naphthalene, and 0.010 ppm 2-Methylnaphthalene.

+++++ = 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 xx

= EPA 8010 compounds were not detected except for 0.0091 ppm 1,2Dichloroethane; 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.

TABLE 2 GROUNDWATER LABORATORY ANALYTICAL RESULTS (Continued)

Sample Location	TPH-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			s Collected ay 2, 1995	on	201120110	
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
			s Collected pary 30, 199			
MWl	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
			s Collected ober 31, 1994			
MW1	NA	ND	ND	ND	ND	ND
MW2	NA	ИD	ND	ND	ND	ND
MW3@@@@	0.60	8.7	2.6	0.26	0.32	0.92

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 0.014 ppm 1,2-Dichloroethane; EPA 8270 compounds were not detected except for 0.010 ppm 2-Methyl naphthalene and 0.062 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 0.018 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) Pthalate.

TABLE 2 GROUNDWATER LABORATORY ANALYTICAL RESULTS (Continued)

Sample Location	TPH-D	TPH-G	Benzene	Toluene	Ethyl- benzene	Xylenes
			s Collected ly 29, 1994	on		
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
÷			s Collected	on		
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
•			s Collected mber 16, 199			
MW1	NA	ND	0.0022	ND	ND	ND
MW2	NA	ND	ND	ND	ND	ND
## EWM	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 0.0077 ppm 1,2-Dichloroethane; EPA 8270 compounds not detected except for 0.008 ppm 2-Methylnaphthalene and 0.044 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 0.28 ppm 1,2-Dichloroethane; EPA 8270 compounds not detected except for 0.013 ppm 2-Methylanthalone and 0.084 ppm Naphthalone

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-Methylnapthalene.

P & D ENVIRONMENTAL

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



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



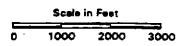
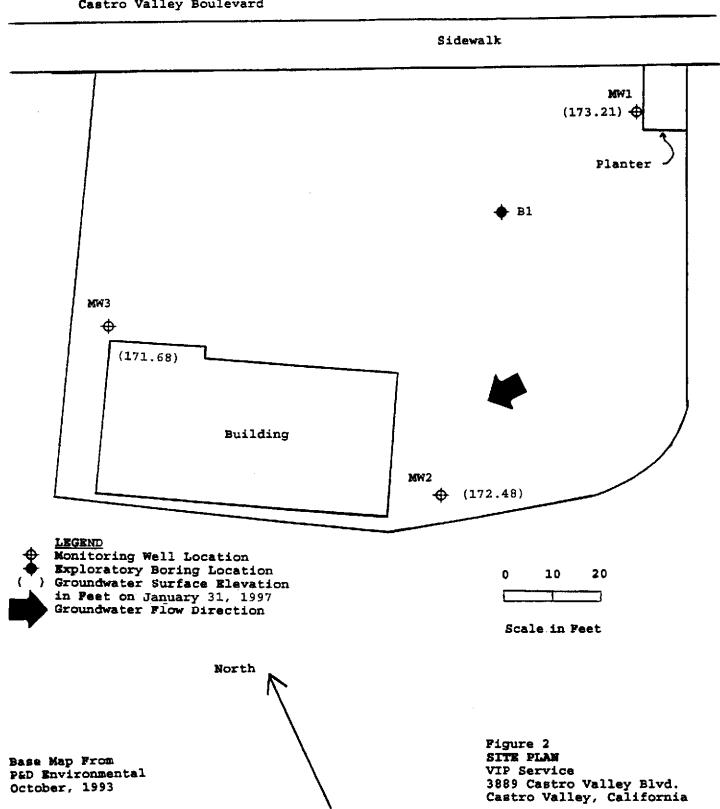


Figure 1
SITE LOCATION MAP
VIP Service
3889 Castro Valley Blvd.
Castro Valley, California

P & D ENVIRONMENTAL

4020 Panama Court Oakland, CA 94611 Telephone (510) 658-6916

Castro Valley Boulevard



P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name VIP Service		Well No	mwl
Job No. 0047			1/31/97
TOC to Water (ft.) 7,62		Sheen	
Well Depth (ft.) 18.75		Free Produc	t Thickness
Well Diameter Z'		Sample Coll	ection Method
Gal./Casing Vol. /, 8		Teflon	Bailer
_TIME GAL. PURGED F	рĦ	TEMPERATURE (°F)	ELECTRICAL (US/CM)
10:45 0.9	6.53	59.8	1.32 x 1000
10:47 1.8	0.70	60.0	1.45
10:50 2.7	6.95	60.8	1.58
10.52 3.6	7.05	60.9	1.61
10:55 4.5	7.15	(el · 1	16.65
10:57 5.4	7.20	60.9	1.70
11:10 Sunded	,		
			•
			
	* · · · · · · · · · · · · · · · · · · ·		
	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
			
			
· 	· 		
NOTES: AOG			
Well Durged Using	Honda	ours & fo	not value
PURGE10.92	E Com. 1 prompts on	1:01	

P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name VIP Service	Well No. MwZ
Job No. <u>0047</u>	Date1/3/197
TOC to Water (ft.) 7,22	Sheen Nove
Well Depth (ft.) /4:50	Free Product Thickness 🖒
Well Diameter 2"	Sample Collection Method
Gal./Casing Vol. 2.0	To Flon Bailer
TIME GAL. PURGED PH	TEMPERATURE (F) ELECTRICAL CONDUCTIVITY (Polan)
11:30 1 5.72	6/.2 1,64 x1000
11:32 2 5.85	61.3 1.95
11:35 _ 3 6.35	60.9 1.45
11:37 4 6.45	61.5
11:40 5 6.40	61.4 1.75
11:43 6 6.45	61.3
12:00 Sampled	
	:
	
NOTES:	
AOG	
Well purged using Honda	pump & foot value
PURGE10.92	1 1

P&D ENVIRONMENTAL GROUNDWATER MONITORING/WELL PURGING DATA SHEET

Site Name VIP Service	Well No. MW3
Job No. OO47	Date 1/31/97
TOC to Water (ft.) 7.30	
	Sheen
Well Depth (ft.) 19.00	Free Product Thickness 🗡
Well Diameter 2"	Sample Collection Method
Gal./Casing Vol. /. 9	Teflon Bailer
TIME GAL. PURGED PH	TEMPERATURE (L) ELECTRICAL (Moleon)
	32 60.5 1.55
12123 1.8 6.4	40 60.6 1.45
12125 2.7 6.5	50 60.5 1.50
12:27 3.6 6.	75 60.7 1.51
12:30 4.5 6:	70 60.8 1.55
12:32 5.4 6.	40 60.7 1.53
12:35 6.3	80 60.9 1.54
12:50 Sampled	
NOTES: AOG	
	nde primp & footvalue
PURGE10.92	pour y voi more

P & D Environmental	Client Project ID: # 0047; VIP Service	Date Sampled: 01/31/97		
4020 Panama Court		Date Received: 01/31/97		
Oakland, CA 94611	Client Contact: Paul King	Date Extracted: 01/31-02/03/97		
	Client P.O:	Date Analyzed: 01/31-02/03/97		

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID (5030) Ethylben-% Rec. $TPH(g)^{+}$ Lab ID Client ID Matrix MTBE Benzene Toluene Xylenes zene Surrogate 73375 W ND MWI ND ND ND ND ND 101 73376 MW2 W ND ND ND ND ND ND 100 73377 MW3 W 5500.a 63 1600 100 190 410 103 W Reporting Limit unless 50 ug/L 5.0 0.5 0.5 0.5 0.5 otherwise stated; ND means not detected 0.005 0.005 0.005 S 0.05 0.005 $1.0 \, \text{mg/kg}$ above the reporting limit

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

[#]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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

P & D Environmental	Client Project ID: # 0047	; VIP Service	Date Sampled: 01/31/97		
4020 Panama Court		Date Received: 01/31/97			
Oakland, CA 94611	Client Contact: Paul Kin	g	Date Extrac	ted: 02/03/97	
	Client P.O:	· · · · · · · · · · · · · · · · · · ·	Date Analy	zed: 02/03/97	
	Volatile Halo	carbons			
EPA method 601 or 8010	52255				
Lab ID	73377				
Client ID	MW3				
Matrix	<u> </u>	<u> </u>	*		
Compound Bromodichloromethane	ND	Concentrat	ЮЙ		
Bromoform ^(b)	ND ND			···	
Bromotorm Bromomethane	ND ND				
Carbon Tetrachloride (c)	ND ND	h li		<u> </u>	
Chlorobenzene	ND ND			· -	
Chloroethane	ND ND			-	
2-Chloroethyl Viny l Ether (d)	ND ND				
Chloroform (e)	ND			-	
Chloromethane	ND ND				
Dibromochloromethane	ND				
1,2-Dichlorobenzene	ND				
1,3-Dichlorobenzene	ND				
1,4-Dichlorobenzene	ND				
Dichlorodifluoromethane	ND ND				
1,1-Dichloroethane	ND				
1,2-Dichloroethane	14				
1,1-Dichloroethene	ND 14			:	
cis 1,2-Dichloroethene	ND				
trans 1,2-Dichloroethene	ND ND				
1,2-Dichloropropane	ND				
cis 1,3-Dichloropropene	ND ND				
trans 1,3-Dichloropropene	ND				
Methylene Chloride ^(f)	ND< 1				
1,1,2,2-Tetrachloroethane	ND				
Tetrachloroethene	ND ND				
1,1,1-Trichloroethane	ND				
1,1,2-Trichloroethane	ND				
Trichloroethene	ND				
Trichlorofluoromethane	ND				
Vinyl Chloride ^(g)	ND				
% Recovery Surrogate	102				
Comments	102			1	

Reporting limit unless otherwise stated: water/TCLP extracts, ND< 0.5ug/L; soil and sludge, ND< 5ug/kg

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

(b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy) ethene; (e) trichloromethane; (f) dichloromethane; (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 510-798-1620 Fax: 510-798-1622

. 2

QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/30/97-01/31/97 Matrix: Water

	Concentr	cation	ion (mg/L)		% Recovery		
Analyte	Sample			Amount			RPD
	(#73220) 	MS	MSD	Spiked 	MS	MSD	
TPH (gas)	0.0	95.0	91.8	100.0	95.0	91.8	3.4
Benzene	0.0	9.2	8.7	10.0	92.0	87.0	5.6
Toluene	0.0	9.2	8.9	10.0	92.0	89.0	3.3
Ethyl Benzene	0.0	9.3	9.0	10.0	93.0	90.0	3.3
Xylenes	0.0	27.9	26.7	30.0 	93.0	89.0	4.4
TPH (diesel)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRPH (oil & grease)	 N/A 	N/A	N/A	N/A	N/A	N/A	N/A

% Rec. = (MS - Sample) / amount spiked x 100

RPD = $(MS - MSD) / (MS + MSD) \times 2 \times 100$

QC REPORT FOR HYDROCARBON ANALYSES

Date: 02/03/97

Matrix: Water

	% Recovery						
Analyte	Sample			Amount			RPD
	(#73336) 	MS	MSD	Spiked	MS	MSD	
TPH (gas)	0.0	96.6	93.5	100.0	96.6	93.5	3.3
Benzene	0.0	9.5	8.6	10.0	95.0	86.0	9.9
Toluene	0.0	9.6	8.7	10.0	96.0	87.0	9.8
				!!!			
Ethyl Benzene	0.0	9.8	8.9	10.0	98.0	89.0	9.6
Xylenes	0.0	29.1	26.5	30.0 	97.0	88.3	9.4
 TPH (diesel) 	 N/A 	N/A	N/A	 N/A 	N/A	N/A	N/A
TRPH (oil & grease)	0	27600	27600	23700	116	116	0.0

% Rec. = (MS - Sample) / amount spiked x 100

RPD = $(MS - MSD) / (MS + MSD) \times 2 \times 100$

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QC REPORT FOR EPA 8010/8020/EDB

Date: 02/03/97

Matrix: Water

	Con	centrat	ion (ug/L	% Recovery			
Analyte	Sample (#72743 		MSD	Amount Spiked	 MS 	MSD	RPD
1,1-DCE	0.0	10.1	10.2	10.0	101	102	1.0
Trichloroethene	0.0	8.9	9.1	10.0	89	91	2.2
EDB	0.0	8.5	8.6	10.0	85	86	1.2
Chlorobenzene	0.0	9.4	9.6	10.0	94	96	2.1
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
J]			.1	.]		

% Rec. = (MS - Sample) / amount spiked x 100

 $RPD = (MS - MSD) / (MS + MSD) \times 2 \times 100$

CHROMALAB, INC.

Environmental Services (SDB)

February 7, 1997

Submission #: 9701377

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: P-VIPS

Project#: 8038

Received: January 31, 1997

re: One sample for Semivolatile Organic Compounds (B/NAs) analysis.

Method: SW846 Method 8270A Nov 1990

Client Sample ID: MW-3

Spl#: 116354 Sampled: January 31, 1997 Matrix: WATER Extracted: February 6, 1997 Run#: 5218 Analyzed: February 6, 1997

REPORTING BLANK BLANK DILUTION RESULT LIMIT RESULT SPIKE FACTOR ANALYTE (ug/L) (ug/L) (ug/L) (왕) PHENOL 2.0 1 23.7 BIS (2-CHLOROETHYL) ETHER N.D. N.D. 2.0 2-CHLOROPHENOL N.D. 2.0 N.D. 1 53.7 1,3-DICHLOROBENZENE N.D. 2.0 N.D. 1 1,4-DICHLOROBENZENE N.D. N.D. 58.3 1 BÉNZYL ALCOHOL 1,2-DICHLOROBENZENE N.D. 5.0 N.D. - -1 N.D. 2.0 N.D. 2-METHYLPHENOL N.D. 2.0 N.D. BIS (2-CHLOROISOPROPYL) ETHER N.D. 2.0 N.D. 4-METHYLPHENOL N.D. N.D. N-NITROSO-DI-N-PROPYLAMINE N.D. 2.0 N.D. 68.0 1111111111 HEXACHLOROETHANE 2.0 N.D. N.D. NITROBENZENE N.D. 2.0 N.D. **ISOPHORONE** N.D. 2.0 N.D. 2-NITROPHENOL N.D. N.D. 2,4-DIMETHYLPHENOL 2.0 2.8 N.D. BIS (2-CHLOROETHOXY) METHANE N.D. 5.0 N.D. _ _ 2,4-DICHLOROPHENOL 2.0 N.D. N.D. 1,2,4-TRICHLOROBENZENE N.D. 2.0 57.7 N.D. NAPHTHALENE 31 2.0 1 N.D. 4-CHLOROANILINE N.D. 2.0 N.D. 1 1 1 HEXACHLOROBUTADIENE 2.0 N.D. N.D. 4-CHLORO-3-METHYLPHENOL N.D. 5.0 79.3 N.D. 2-METHYLNAPHTHALENE 2.0 4.8 N.D. **HEXACHLOROCYCLOPENTADIENE** N.D. 2.0 N.D. 2,4,6-TRICHLOROPHENOL 2.0 N.D. N.D. 2,4,5-TRICHLOROPHENOL N.D. 2.0 N.D. 2-CHLORONAPHTHALENE N.D. 2.0 N.D. 2-NITROANILINE N.D. N.D. 10 DIMETHYL PHTHALATE N.D. 5.0 N.D. ACENAPHTHYLENE N.D. 2.0 N.D. 3-NITROANILINE N.D. 10 N.D. 1 1 1 ACENAPHTHENE N.D. 2.0 N.D. 71.0 2,4-DINITROPHENOL N.D. 10 N.D. 4-NITROPHENOL N.D. 10 13.1 111 N.D. DIBENZOFURAN N.D. 2.0 N.D. 2,4-DINITROTOLUENE 2.0 43.0 N.D. N.D. 2,6-DINITROTOLUENE 5.0 N.D. N.D. DIETHYL PHTHALATE N.D. 5.0 N.D. 4-CHLOROPHENYL PHENYL ETHER 2.0 1

CHROMALAB, INC.

Environmental Services (SDB)

February 7, 1997

Submission #: 9701377

page 2

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: P-VIPS

Project#: 8038

Received: January 31, 1997

re: One sample for Semivolatile Organic Compounds (B/NAs) analysis,

continued.

Method: SW846 Method 8270A Nov 1990

Client Sample ID: MW-3

Spl#: 116354
Sampled: January 31, 1997

Matrix: WATER Extracted: February 6, 1997

Run#: 5218 Analyzed: February 6, 1997

samplea. Calladi, Si, 155,	Itulii -	/210 A1	Maryzea: repractly, 0, 1997		
		REPORTING	BLANK	BLANK D	LLUTION
	RESULT	LIMIT	RESULT	SPIKE J	FACTOR
ANALYTE	(ug/L)	(ug/L)	(ug/L)	(%)	
FLUORENE	N.D.	5.0	N.D.		1
4-NITROANILINE	N.D.	10	N.D.		ī
2-METHYL-4,6-DINITROPHENOL	N.D.	10	N.D.		ī
N-NITROSO-DI-N-PHENYLAMINE	N.D.	2.0	N.D.		1
4-BROMOPHENYL PHENYL ETHER	N.D.	5.0	N.D.		1
HEXACHLOROBENZENE	N.D.	2.0	N.D.		1
PENTACHLOROPHENOL	N.D.	10	N.D.	45.8	1
PHENANTHRENE	N.D.	2.0	N.D.		1
ANTHRACENE	N.D.	2.0	N.D.		1
DI-N-BUTYL PHTHALATE	N.D.	5.0	N.D.		1
FLUORANTHENE	N.D.	2.0	N.D.		1
PYRENE	N.D.	2.0	N.D.	84.0	1
BUTYL BENZYL PHTHALATE	N.D.	5.0	N.D.		1
3,3'-DICHLOROBENZIDINE	${\tt N}.{\tt D}.$	5.0	N.D.		1
BENZO (A) ANTHRACENE	N.D.	2.0	N.D.		1
BIS (2-ETHYLHEXYL) PHTHALATE	N.D.	5.0	N.D.		1
CHRYSENE	Ŋ.D.	2.0	N.D.		1
DI-N-OCTYL PHTHALATE	N.D.	5.0	N.D.		1
BENZO (B) FLUORANTHENE	N.D.	2.0	Ŋ.D.		1
BENZO (K) FLUORANTHENE	N.D.	2.0	N.D.		1
BENZO (A) PYRENE	N.D.	2.0	N.D.		1
INDENO(1,2,3 C,D)PYRENE DIBENZO(A,H)ANTHRACENE	N.D.	2.0	Ŋ.D.		1
	N.D.	2.0	N.D.		Ŧ
BENZO(G,H,I) PERYLENE BENZO IC AC ID	N.D.	2.0	N.D.		1
DEIVLOTC HOLD	N.D.	10	N.D.		1
(finiclas !		4	(m	1.	
		(~//	

Michael Lee Chemist Chip Poalinelli Operations Manager

P & D Environmental

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

CHAIN OF CUSTODY RECORD

8038 APD 205 PAGE _ OF _ PROJECT NUMBER: PROJECT NAME: 0047 VIP Service NUMBER OF CONTAINERS SAMPLED BY: (PRINTED AND SIGNATURE) REMARKS Ahmad Ghandork SAMPLE LOCATION SAMPLE NUMBER DATE TIME TYPE Normal Turn Brown Y31/97 Water MWI (+)mw2 11 mw3 7/337/3 VOAS 108G II METALS I OTHITI PRESERVATIVE: **ROOD CONDITION** HEAD SPACE ABSENT Same DW Con Hero \$ 555 TOTAL NO. OF SAMPLES (THIS SHEWENT) RELINQUISHED BY: (SIGNATURE) DATE TIME LABORATORY: 13/57 McCampbel Analytical TOTAL NO. OF CONTAINERS
(THIS SHPMENT) 230 DATE TIME LABORATORY CONTACT: LABORATORY PHONE NUMBER: 13147 Ed Hamilton (SIO)798-1620 RELINQUISHED BY: (SIGNATURE) REDEIVED FOR LABORATORY BY: DATE SAMPLE ANALYSIS REQUEST SHEET (SIGNATURE) ATTACHED: ()YES (X)NO REMARKS: VOA's present with Hel