

PO-370

Manmohan S. Chopra
4216 Warbler Loop
FREMONT, Ca 94555
OCT 20, 2003

Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, Ca 94502

REF: Groundwater Monitoring and Sampling Report for July 15, 2003
1401 Grand Ave. San Leandro, Ca

ATTN: Ms Eva Chu

Dear Ms. Chu,

Attached please find, for your information and review, the above mentioned report. The report is in standard format, but if you have any questions or comments, please contact the undersigned at 510-489-5696 or the consultant (Paul King) at P & D Environmental at 510-568-6916.

sincerely,



manmohan s. chopra

Attch: Groundwater Monitoring and Sampling Report

P & D ENVIRONMENTAL

A Division of Paul H. King, Inc.

4020 Panama Court

Oakland, CA 94611

(510) 658-6916

September 11, 2003

Report 0055.R17

Mr. Manmohan Chopra

4216 Warbler Loop

Fremont, CA 94555

SUBJECT: GROUNDWATER MONITORING AND SAMPLING REPORT

Former ARCO Service Station

1401 Grand Avenue

San Leandro, California

Dear Mr. Chopra:

P&D Environmental (P&D) is pleased to present this report documenting the results of the most recent monitoring and sampling of the eight groundwater monitoring wells at or near the subject site. This work was performed in accordance with P&D's proposal 022698.P1 dated February 26, 1998. All of the wells were monitored and sampled on July 15, 2003. A Site Location Map (Figure 1) and Site Plan (Figure 2) are attached with this report.

BACKGROUND

The site is presently used as an active gasoline station. It is P&D's understanding that on April 24, 1991 Aegis Environmental, Inc. (Aegis) personnel drilled four soil borings, designated as B-1 through B-4, to a vertical depth of approximately 40 feet at the site. The locations of the borings are shown on Figure 2. A total of nine soil samples collected from the boreholes were analyzed for total petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8260; and for total lead by EPA Method 7420. TPH-G concentrations ranged from below detection limit to 66 parts per million (ppm). Benzene concentrations ranged from not detected to 0.94 ppm. Total lead concentrations ranged from not detected to 3 ppm. Documentation of the subsurface investigation and results are presented in a report prepared by Aegis titled, "Soil Boring Results Report," dated June 10, 1991.

It is P&D's understanding that on April 14, 1992 Aegis personnel returned to the site to drill three slant borings, designated as B5 through B7, to a total vertical depth of approximately 49 feet at the site. The borings were drilled at an angle of approximately 26 to 28 degrees to collect samples from beneath the underground storage tanks. The locations of the borings are shown on Figure 2. A total of twenty-two soil samples were analyzed for TPH-G using EPA Method 5030; and for BTEX using EPA Method 8240. In addition, one of the samples was analyzed for total lead using EPA Method 7420, and several of the soil samples were analyzed for soluble lead using the California Waste Extraction Test. TPH-G concentrations ranged from not detected to 4,000 ppm. Benzene, concentrations ranged from not detected to 11 ppm. Total lead was not detected, and soluble lead concentrations ranged from not detected to 0.061 ppm. Documentation of the subsurface investigation and results are presented in a report prepared by Aegis titled, "Initial Subsurface Investigation Results Report," dated June 22, 1992.

It is P&D's understanding that between September 15 and 18, 1992 Aegis personnel returned to the site to install five groundwater monitoring wells, designated as MW1 through MW5. The wells were drilled to total depths of between 50 and 55 feet, and were constructed using four-inch diameter PVC pipe. Wells MW1 and MW2 were constructed with perforated casing between the depths of approximately 15 and 55 feet. Wells MW3, MW4 and MW5 were constructed with perforated casing between the depths of approximately 35 and 55 feet. Groundwater was reported as first encountered at a depth of 42 feet. The well locations are shown in Figure 2.

A total of thirty-one soil samples were analyzed for TPH-G using EPA Method 5030/8015; and for BTEX using EPA Method 8020. In addition, three soil samples containing TPH-G were analyzed for total metals concentrations of cadmium, chromium, lead, and zinc using EPA Method 6010 and 7421. One soil sample was collected from each borehole from below the air-water interface and analyzed for petrophysical properties, including saturated permeability and grain size distribution.

TPH-G concentrations ranged from not detected to 39 ppm. Benzene concentrations ranged from not detected to 0.27 ppm. The total metals concentrations were all less than 10 times their respective STLC values. The subsurface materials encountered in the borings indicate that soil types vary across the site, but generally consist of silty clay, silt, clayey silt and sandy silt from the surface to a depth of between 30 and 35 feet. Below the depth of 30 to 35 feet, layers of sand and sandy silt were reported to have been encountered.

It is P&D's understanding that on September 29, 1992 Aegis personnel collected groundwater samples from wells MW1, MW2, MW4 and MW5 at the site. A sample was not collected from well MW-3 due to the reported presence of 0.02 feet of floating hydrocarbons. The measured depth to water ranged from approximately 41.5 to 44.5 feet. The samples were analyzed for TPH-G using EPA Method 5030/8015; and for BTEX using EPA Method 8020. TPH-G concentrations ranged from 0.06 to 20 ppm, and benzene concentrations ranged from 0.16 to 10 ppm. Based upon the water level measurements in the wells, the groundwater flow direction was reported to be to the northwest. The water level measurements are summarized in Table 1. The analytical results are summarized in Table 2.

It is P&D's understanding that on October 7, 1992 Aegis personnel performed rising head slug tests wells MW1, MW2, and MW4 to estimate the saturated hydraulic conductivity at the site. In addition, two short-term soil vapor extraction tests were performed on wells MW1 and MW2. Wells MW-3, MW-4, and MW-5 were used as vacuum influence monitoring points. Documentation of the monitoring well groundwater sample collection, slug test and vapor extraction tests are presented in a report prepared by Aegis titled, "Problem Assessment Report," dated December 16, 1992.

On February 18, 1994 P&D personnel monitored the five groundwater monitoring wells at the site for depth to water and the presence of free product or sheen. The depth to water was measured using an electric water level indicator, and the presence of free product and sheen was

evaluated using a transparent bailer. The measured depth to water in the wells ranged from approximately 39.8 to 42.9 feet. No evidence of free product or sheen was detected in any of the wells. Based on the measured depth to water in the wells, the groundwater flow direction was calculated to be to the north with a gradient of 0.054. In a letter dated October 19, 1995 Mr. Scott Seery of the Alameda County Department of Environmental Health requested that all of the onsite and offsite wells be monitored and sampled for the quarterly monitoring and sampling program. The measured depth to water in the wells is presented in Table 1.

On June 15 and 16, 1995 P&D installed three offsite monitoring wells, designated as MW6 through MW8. The locations of the wells are shown on Figure 2. Documentation of the well installation and sample results is presented in P&D's report 0055.R5 dated August 23, 1995.

The underground storage tanks at the subject site were replaced in the first half of 1997. Following removal of the tanks, excavation of soil was performed in the area surrounding well MW1. As a result of the excavation activities, the elevation at the top of well MW1 was altered. The present elevation for the top of well MW1 is unknown.

In January, 2003 Ms. Eva Chu of the Alameda County Department of Environmental Health (ACDEH) requested that the wells be analyzed for fuel oxygenates using EPA Method 8260. In a letter dated June 20, 2003 Ms. Chu requested that the analysis be continued.

FIELD ACTIVITIES

On July 15, 2003 all eight of the wells in the groundwater monitoring network for the site were monitored, purged, 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 sheen was evaluated using a transparent bailer. No free product or sheen was observed in any of the wells. Depth to water level measurements and monitoring well groundwater surface elevations are presented in Table 1.

Prior to sampling, the 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, water samples were collected using a clean Teflon bailer. The water samples were transferred to 40-milliliter glass Volatile Organic Analysis (VOA) vials 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 were then transferred to a cooler with ice, and later 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.

HYDROGEOLOGY

The subsurface materials encountered in the borings drilled by Aegis indicate that soil types vary across the site, but generally consist of silty clay, silt, clayey silt and sandy silt from the surface to a depth of between 30 and 35 feet. Below the depth of 30 to 35 feet, layers of sand and sandy silt were reported to have been encountered. Groundwater has historically been encountered at the site at depths ranging from approximately 40 to 45 feet below grade.

Based upon the regional groundwater flow direction identified by Woodward-Clyde Consultants in a report titled, "Hydrogeology of Central San Leandro and Remedial Investigation of Regional Groundwater Contamination - San Leandro Plume - San Leandro, California - Volume I," prepared for the California Environmental Protection Agency and dated December 29, 1993 the regional groundwater flow direction to the west of the site appears to be to the southwest. However, based upon the measured depth to water in the five wells at the site on September 29, 1992 Aegis identified a northwesterly groundwater flow direction. Based upon water level measurements collected by P&D from the five wells at the site on February 18, July 5, and October 12, 1994, February 1, and May 4, 1995 the groundwater flow direction at the site was calculated to be to the north, towards San Leandro Creek. Based upon water level measurements collected in wells MW1 through MW8 by P&D personnel on June 23 and December 19, 1995, March 28 and June 21, 1996 the groundwater flow direction was calculated to be to the northwest.

The measured depth to water at or near the site on July 15, 2003 for all of the wells ranged from 38.04 to 41.34 feet. Since the previous monitoring on April 16, 2003, groundwater levels have decreased in all of the wells by between 0.61 and 1.14 feet. Based on the July 15, 2003 water level measurements, the groundwater flow direction on July 15, 2003 was to the northwest with a gradient of 0.048. The calculated water level in well MW3 appears to be inconsistent with the other wells in the groundwater monitoring network.

The groundwater flow direction and gradient have not changed since the previous water level measurements on April 16, 2003. The groundwater monitoring data are presented in Table 1. The groundwater flow direction at the site on July 15, 2003 is shown on Figure 2.

LABORATORY RESULTS

All of the groundwater samples collected from the monitoring wells were analyzed for TPH-G using EPA Method 5030 in conjunction with Modified EPA Method 8015 and for Volatile Organic Compounds (VOCs) and fuel oxygenates using EPA Method 8260 in accordance with a request from Ms. Eva Chu of the ACDEH.

The laboratory analytical results for the groundwater samples showed that TPH-G, BTEX, MTBE, and other fuel oxygenates were not detected in wells MW5, MW6, MW7, and MW8, except for

0.0014 ppm MTBE in well MW5 and 0.00066 ppm xylenes in well MW8. In wells MW1, MW3 and MW4, TPH-G was detected at concentrations ranging from 0.060 to 0.44 ppm, and at a concentration of 78 ppm in well MW2. MTBE was detected in wells MW1, MW2, MW3, and MW4 at concentrations of 0.053, 4.1, 0.66, and 6.8 ppm, respectively. Benzene was detected in well MW2 at a concentration 3.3 ppm, and was not detected in wells MW1, MW3, and MW4.

Since the previous sampling event, TPH-G concentrations have increased in wells MW1 and MW2, decreased in wells MW3 and MW4, and remained unchanged (not detected) in wells MW5 through MW8. MTBE concentrations have increased in wells MW3, MW4, and MW5, decreased in wells MW1 and MW2, and remained unchanged (not detected) in wells MW6, MW7, and MW8. Benzene concentrations have decreased in wells MW1 and MW2 and remained unchanged (not detected) in wells MW3 through MW8.

The laboratory analytical results are summarized in Table 2. Copies of the laboratory analytical report and chain of custody documentation are attached with this report.

DISCUSSION AND RECOMMENDATIONS

Based on the depth to water measurements on July 15, 2003 from all of the monitoring wells (MW1 through MW8), the groundwater flow direction is to the northwest, and is unchanged since the previous monitoring event. MTBE was detected only in wells MW1 through MW5. Other BTEX and fuel oxygenates were not detected in any of the wells other than well MW2 with the exception of 0.012 ppm TBA in well MW1.

P&D recommends that a quarterly groundwater monitoring and sampling program be continued.

DISTRIBUTION

Copies of this report should be forwarded to Ms. Donna Drogos at the ACDEH.

LIMITATIONS

This report was prepared solely for the use of Mr. Manmohan Chopra. 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 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 pits 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.

September 11, 2003
Report 0055.R17

6

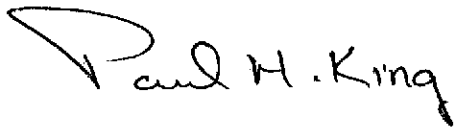
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the 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
President
California Registered Geologist #5901
Expires: 12/31/03

PHK/wrw
0055.R17

Attachments: Tables 1 & 2
Site Location Map (Figure 1)
Site Plan (Figure 2)
Field Parameter Forms
Laboratory Analytical Reports
Chain of Custody Documentation

P & D ENVIRONMENTAL

TABLE 1
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW1	7/15/03	Not Available	39.60	Not Available
	4/16/03	Not Available	38.91	Not Available
	1/20/03	Not Available	38.21	Not Available
	2/16/99	Not Available	34.58	Not Available
	1/25/98	Not Available	33.70	Not Available
	7/14/97	Not Available	39.45	Not Available
	3/11/97	87.98+	36.90	51.08
	6/21/96		38.56	49.42
	3/28/96		37.10	50.88
	12/19/95		40.16	47.82
	6/23/95		38.54	49.44
	5/04/95	87.96++	37.65	50.33
	2/01/95		38.46	49.52
	10/12/94		42.01	45.97
	7/05/94		41.36	46.62
	2/18/94		41.02	46.96
	9/29/92		42.77	45.21
	MW2	7/15/03	86.61+	38.15
4/16/03			37.50	49.11
1/20/03			37.04	49.57
2/16/99			33.51	53.10
1/25/98			32.80	53.81
7/14/97			38.46	48.15
3/11/97			35.71	50.90
6/21/96			37.30	49.31
3/28/96			35.97	50.64
12/19/95			38.80	47.81
6/23/95			37.40	49.21
5/04/95		86.60++	36.54	50.07
2/01/95			37.27	49.34
10/12/94			40.77	45.84
7/05/94			40.13	46.48
2/18/94			39.81	46.80
9/29/92		41.55	45.06	

NOTES:

Elevations are in feet Mean Sea Level.

ft. = Feet.

+ = Indicates survey data provided by Kier & Wright dated June 26, 1995.

++ = Indicates survey data provided by Aegis Environmental, Inc.

* = Indicates groundwater elevation corrected for the presence of free product.

TABLE 1 (Continued)
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)	
MW3	7/15/03	87.48+	41.34	46.14	
	4/16/03		40.60	46.88	
	1/20/03		39.81	47.67	
	2/16/99		34.91	52.57	
	1/25/98		33.91	53.57	
	7/14/97		40.61	46.87	
	3/11/97		38.71	48.77	
	6/21/96		40.61	46.87	
	3/28/96		38.75	48.73	
	12/19/95		42.20	45.28	
	6/23/95		40.65	46.83	
	5/04/95		87.50++	39.61	47.87
	2/01/95			40.13	47.35
	10/12/94			43.92	43.56
	7/05/94			43.32	44.16
	2/18/94			43.09	44.39
	9/29/92	44.60	42.88*		
MW4	7/15/03	86.21+	38.04	48.17	
	4/16/03		37.32	48.89	
	1/20/03		36.70	49.51	
	2/16/99		33.43	52.78	
	1/25/98		32.96	53.25	
	7/14/97		38.10	48.11	
	3/11/97		33.24	52.97	
	6/21/96		37.12	49.09	
	3/28/96		35.00	51.21	
	12/19/95		38.45	47.76	
	6/23/95		37.40	48.81	
	5/04/95		86.20++	36.33	49.88
	2/01/95			36.96	49.25
	10/12/94			40.48	45.73
	7/05/94			39.69	46.52
	2/18/94			39.36	46.85
	9/29/92	44.29	41.92		

NOTES:

Elevations are in feet Mean Sea Level.

ft. = Feet.

+ = Indicates survey data provided by Kier & Wright dated June 26, 1995.

++ = Indicates survey data provided by Aegis Environmental, Inc.

** = Indicates depth to water measurements prior to groundwater monitoring well development.

TABLE 1 (Continued)
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW5	7/15/03	89.10+	41.06	48.04
	4/16/03		39.92	49.18
	1/20/03		39.50	49.60
	2/16/99		35.08	54.02
	1/25/98		34.08	55.02
	7/14/97		41.20	47.90
	3/11/97		38.02	51.08
	6/21/96		40.03	49.07
	3/28/96		38.30	50.80
	12/19/95		41.79	47.31
	6/23/95		39.87	49.23
	5/04/95	89.06++	38.94	50.16
	2/01/95		39.94	49.16
	10/12/94		43.81	45.29
	7/05/94		43.08	46.02
	2/18/94		42.88	46.22
	9/29/92		44.53	44.57
MW6	7/15/03	84.02+	38.61	45.41
	4/16/03		38.00	46.02
	1/20/03		37.21	46.81
	2/16/99		32.82	51.20
	1/25/98		31.64	52.38
	7/14/97		39.04	44.98
	3/11/97		36.32	47.70
	6/21/96		38.00	46.02
	3/28/96		36.18	47.84
	12/19/95		39.25	44.77
	6/23/95		38.17	45.85
6/21/95**		38.11	45.91	

NOTES:

Elevations are in feet Mean Sea Level.

ft. = Feet.

+ = Indicates survey data provided by Kier & Wright dated June 26, 1995.

++ = Indicates survey data provided by Aegis Environmental, Inc.

** = Indicates depth to water measurements prior to groundwater monitoring well development.

TABLE 1 (Continued)
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW7	7/15/03	87.11+	41.30	45.81
	4/16/03		40.63	46.48
	1/20/03		39.77	47.34
	2/16/99		34.59	52.52
	1/25/98		33.47	53.64
	7/14/97		41.97	45.14
	3/11/97		38.96	48.15
	6/21/96		40.80	46.31
	3/28/96		38.94	48.17
	12/19/95		42.26	44.85
	6/23/95		41.00	46.11
	6/21/95**		40.30	46.81
MW8	7/15/03	89.70+	40.50	49.20
	4/16/03		39.52	50.18
	1/20/03		38.94	50.76
	2/16/99		33.92	55.78
	1/25/98		32.73	56.97
	7/14/97		39.98	49.72
	3/11/97		36.74	52.96
	6/21/96		38.69	51.01
	3/28/96		36.98	52.72
	12/19/95		40.35	49.35
	6/23/95		38.36	51.34
	6/21/95**		38.20	51.50

NOTES:

Elevations are in feet Mean Sea Level.

ft. = Feet.

+ = Indicates survey data provided by Kier & Wright dated June 26, 1995.

** = Indicates depth to water measurements prior to groundwater monitoring well development.

TABLE 2
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(MW1)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	0.060	0.053	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND, except t-Butyl Alcohol (TBA) = 0.012
04/17/03	0.052	0.056	0.0011	ND<0.001	ND<0.001	ND<0.001	ND, except t-Butyl Alcohol (TBA) = 0.013
01/20/03	0.17	0.085	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND
02/17/99	0.97	0.29	0.067	0.12	0.0093	0.058	--
01/25/98	0.30	ND<0.014	0.021	0.00073	0.0076	0.0010	--
07/14/97	0.20	0.035	0.020	0.0055	0.0012	0.0023	--
03/11/97	0.60	0.014	0.053	0.00095	0.003	0.0015	--
06/21/96	1.4	0.019	0.30	0.0087	0.033	0.0098	--
03/28/96	1.3	0.022	0.32	0.0023	0.034	0.0046	--
12/19/95	0.50	0.0081	0.087	0.0015	0.011	0.0035	--
06/23/95	Not	Sampled					
05/4/95	2.4	--	0.67	0.0028	0.076	0.0060	--
02/01/95	4.6	--	1.8	0.0099	0.23	0.030	--
10/12/94	2.5	--	0.82	0.0039	0.10	0.020	--
07/05/94	3.0	--	1.3	0.0038	0.035	0.0025	--
09/29/92	3.1	--	0.16	ND	ND	0.0060	--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

TABLE 2 (Continued)
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(MW2)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	78	4.1	3.3	4.4	1.8	9.3	ND, except Naphthalene = 0.29 1,2,4-Trimethylbenzene = 1.3 1,3,5-Trimethylbenzene = 0.32 n-Propyl benzene = 0.15
04/17/03	57	5.6	3.4	5.1	2.8	10	ND, except Naphthalene = 0.43 1,2,4-Trimethylbenzene = 2.2 n-propylbenzene = 0.26 1,3,5-Trimethylbenzene = 0.55
01/20/03	48	3.8	2.9	3.0	2.0	11	ND, except Naphthalene = 0.35 1,2,4-Trimethylbenzene = 1.4 1,3,5-Trimethylbenzene = 0.32 Isopropylbenzene = 0.069 n-Propyl benzene = 0.16
02/17/99	7.3	0.29	0.067	0.12	0.0093	0.058	--
01/25/98	24	2.7	2.7	4.9	0.70	4.0	--
07/14/97	43	1.6	6.2	8.9	1.5	7.4	--
03/11/97	28	0.71	4.0	4.5	0.99	4.3	--
06/21/96	49	0.53	6.6	6.3	1.4	6.2	--
03/28/96	38	0.45	5.8	4.7	1.1	5.1	--
12/19/95	25	0.45	5.2	3.8	0.86	3.8	--
06/23/95	Not	Sampled					
05/4/95	63	--	10	11	1.6	8.8	--
02/01/95	45	--	7.0	5.1	1.2	6.1	--
10/12/94	24	--	4.4	2.8	0.73	3.5	--
07/05/94	46	--	9.1	7.0	1.4	7.3	--
09/29/92	20	--	4.6	3.8	0.26	3.3	--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

TABLE 2 (Continued)
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(MW3)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	0.16	0.66	ND<0.0012	ND<0.0012	ND<0.0012	ND<0.0012	ND
04/17/03	0.18	0.34	ND	ND	ND	ND	ND
01/20/03	0.12	0.25	ND<0.005	ND<0.005	ND<0.005	0.0052	ND
02/17/99	ND	0.29	0.067	0.12	0.0093	0.058	--
01/25/98	0.49	0.71	0.0079	0.0061	0.0053	0.029	--
07/14/97	0.40	0.11	0.00093	0.010	0.0013	0.00068	--
03/11/97	1.1	0.68	0.053	0.013	0.063	0.017	--
06/21/96	1.3	0.3	0.094	0.0021	0.039	0.002	--
03/28/96	4.6	1.1	1.4	0.012	0.17	0.020	--
12/19/95	0.95	0.12	0.16	0.0023	0.015	0.0016	--
06/23/95	Not	Sampled					
05/4/95	7.2	--	3.1	0.038	0.20	0.062	--
02/01/95	11	--	4.2	0.031	0.33	0.29	--
10/12/94	1.7	--	0.39	0.00090	0.018	0.0057	--
07/05/94	3.6	--	1.6	0.0083	0.076	0.047	--
09/29/92	Not	Sampled					--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

TABLE 2 (Continued)
 GROUNDWATER
 LABORATORY ANALYTICAL RESULTS
 (MW4)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	0.44	6.8	ND<0.12	ND<0.12	ND<0.12	ND<0.12	ND
04/17/03	0.38	5.4	ND<0.12	ND<0.12	ND<0.12	ND<0.12	ND
01/20/03	0.21	3.0	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND
02/17/99	0.23	0.20	0.065	0.0022	0.0096	0.033	--
01/25/98	0.91	0.23	0.15	0.019	0.31	0.14	--
07/14/97	0.98	0.40	0.21	0.0017	0.090	0.046	--
03/11/97	3.8	1.1	1.1	0.053	0.24	0.26	--
06/21/96	11	1.2	2.4	0.083	0.53	0.91	--
03/28/96	5.6	0.64	1.4	0.038	0.31	0.30	--
12/19/95	2.0	0.21	0.70	0.029	0.089	0.15	--
06/23/95	Not	Sampled					
05/4/95	3.3	--	0.89	0.068	0.15	0.30	--
02/01/95	1.4	--	0.39	0.055	0.049	0.18	--
10/12/94	0.68	--	0.14	0.0087	0.014	0.052	--
07/05/94	2.6	--	0.47	0.045	0.084	0.25	--
09/29/92	0.63	--	0.17	0.06	0.0073	0.65	--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

TABLE 2 (Continued)
 GROUNDWATER
 LABORATORY ANALYTICAL RESULTS
 (MW5)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	ND	0.0014	ND	ND	ND	ND	ND
04/17/03	ND	ND	ND	ND	ND	ND	ND
01/20/03	ND	ND	ND	ND	ND	ND	ND
02/17/99	0.17	ND	ND	0.00074	ND	ND	--
01/25/98	ND	ND	ND	ND	ND	ND	--
07/14/97	ND	ND	ND	ND	ND	ND	--
03/11/97	ND	ND	ND	ND	ND	0.00077	--
06/21/96	ND	ND	ND	ND	ND	ND	--
03/28/96	ND	ND	ND	ND	ND	ND	--
12/19/95	ND	ND	ND	ND	ND	ND	--
06/23/95	Not	Sampled					
05/4/95	ND	--	ND	ND	ND	ND	--
02/01/95	ND	--	ND	ND	ND	ND	--
10/12/94	ND	--	ND	ND	ND	ND	--
07/05/94	ND	--	ND	ND	ND	0.0010	--
09/29/92	0.06	--	10	0.0071	ND	0.0069	--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

TABLE 2 (Continued)
 GROUNDWATER
 LABORATORY ANALYTICAL RESULTS
 (MW6)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	ND	ND	ND	ND	ND	ND	ND, except Chloroform = 0.00084 1,2-Dibromo- 3-chloropropane = 0.00066 Tetrachloroethene = 0.00067
04/17/03	ND	ND	ND	ND	ND	ND	ND, except Chloroform = 0.0012
01/20/03	ND	0.0012	ND	ND	ND	ND	ND, except Chloroform = 0.0011
02/17/99	ND	ND	ND	ND	ND	ND	--
01/25/98	ND	ND	ND	ND	ND	ND	--
07/14/97	ND	0.019	ND	ND	ND	ND	--
03/11/97	ND	ND	ND	ND	ND	ND	--
06/21/96	ND	ND	ND	ND	ND	ND	--
03/28/96	ND	ND	ND	ND	ND	ND	--
12/19/95	ND	0.01	ND	ND	ND	ND	--
06/23/95	ND	0.003	ND	ND	ND	ND	--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

TABLE 2 (Continued)
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(MW7)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	ND	ND	ND	ND	ND	ND	ND, except Chloroform = 0.00061 1,2-Dibromo- 3-chloropropane = 0.00064 Tetrachloroethene = 0.001.2
04/17/03	ND	ND	ND	ND	ND	ND	ND, except Chloroform = 0.00075 Tetrachloroethene = 0.0012
01/20/03	ND	ND	ND	ND	ND	ND	ND, except Chloroform = 0.00056
02/17/99	ND	ND	ND	ND	ND	ND	--
01/25/98	ND	ND	ND	ND	ND	ND	--
07/14/97	ND	ND	ND	ND	ND	ND	--
03/11/97	ND	ND	ND	ND	ND	ND	--
06/21/96	ND	ND	ND	ND	ND	ND	--
03/28/96	ND	ND	ND	ND	ND	ND	--
12/19/95	ND	ND	ND	ND	ND	ND	--
06/23/95	ND	ND	ND	ND	ND	ND	--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

TABLE 2 (Continued)
GROUNDWATER
LABORATORY ANALYTICAL RESULTS
(MW8)

Date	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other VOCs by EPA 8260
07/15/03	ND	ND	ND	ND	ND	0.00066	ND, except Chloroform = 0.0014 1,2-Dibromo- 3-chloropropane = 0.00052
04/17/03	ND	ND	ND	ND	ND	ND	ND, except Chloroform = 0.0018
01/20/03	ND	ND	ND	ND	ND	ND	ND, except Chloroform = 0.0013
02/17/99	ND	ND	ND	ND	ND	ND	--
01/25/98	ND	ND	ND	ND	ND	ND	--
07/14/97	ND	ND	ND	ND	ND	ND	--
03/11/97	ND	ND	ND	ND	ND	ND	--
06/21/96	ND	ND	ND	ND	ND	ND	--
03/28/96	ND	ND	ND	ND	ND	ND	--
12/19/95	ND	ND	ND	ND	ND	ND	--
06/23/95	ND	ND	ND	ND	ND	ND	--

NOTES:

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

MTBE = Methyl Tert Butyl Ether.

VOCs = Volatile Organic Compounds

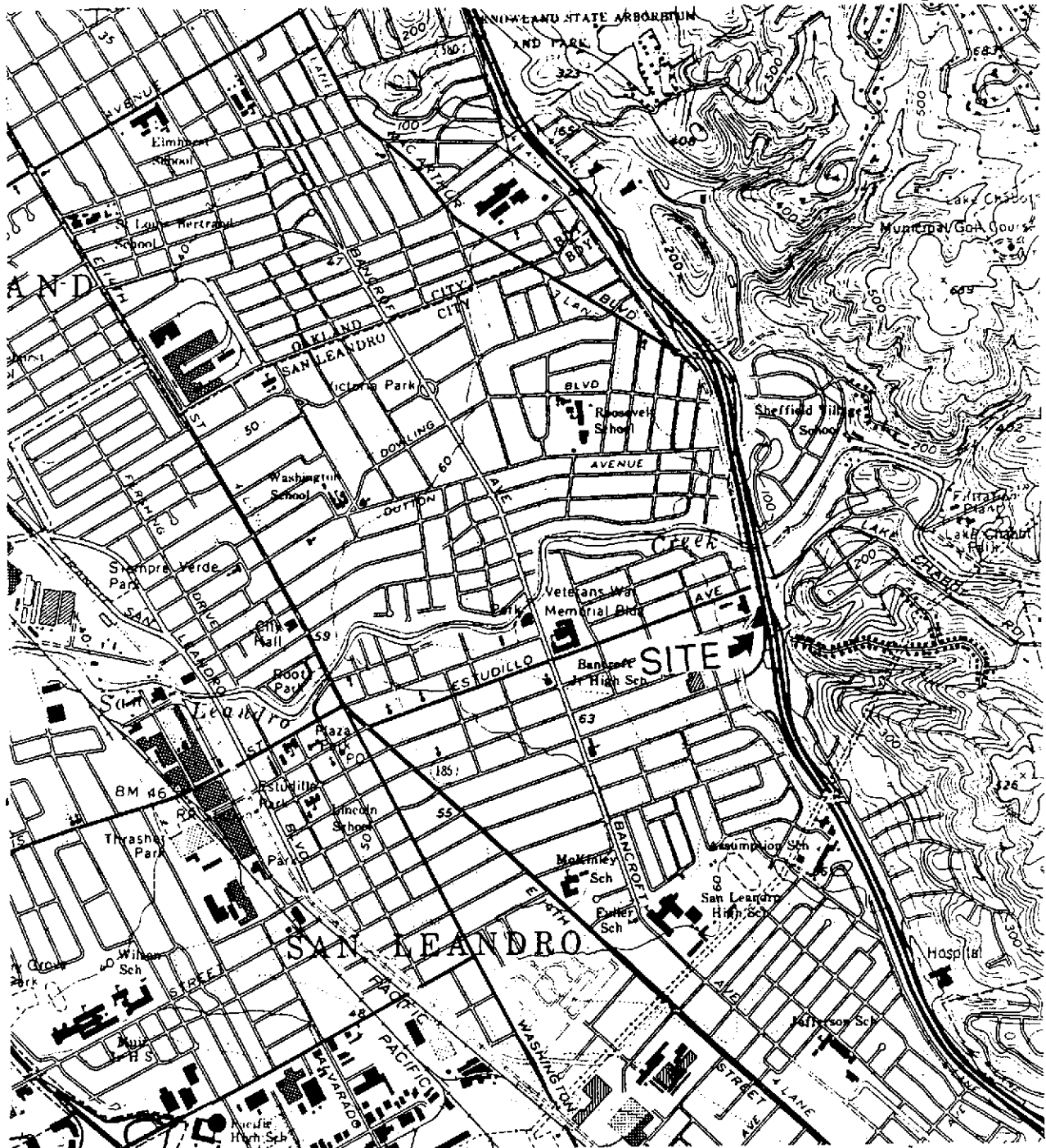
ND = Not Detected.

-- = Sample not analyzed for this compound during this sampling event.

Results are in parts per million (ppm), unless otherwise specified.

P & D ENVIRONMENTAL

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



Base Map from:
U.S. Geological Survey
San Leandro, Calif.
7.5 Minute Quadrangle
Photorevised 1980

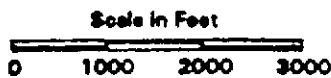
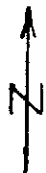


Figure 1
SITE LOCATION MAP
Former ARCO Service Station
1401 Grand Avenue
San Leandro, California

P & D ENVIRONMENTAL

A Division of Paul H. King, Inc.

4020 Panama Court

Oakland, CA 94611

(510) 658-6916

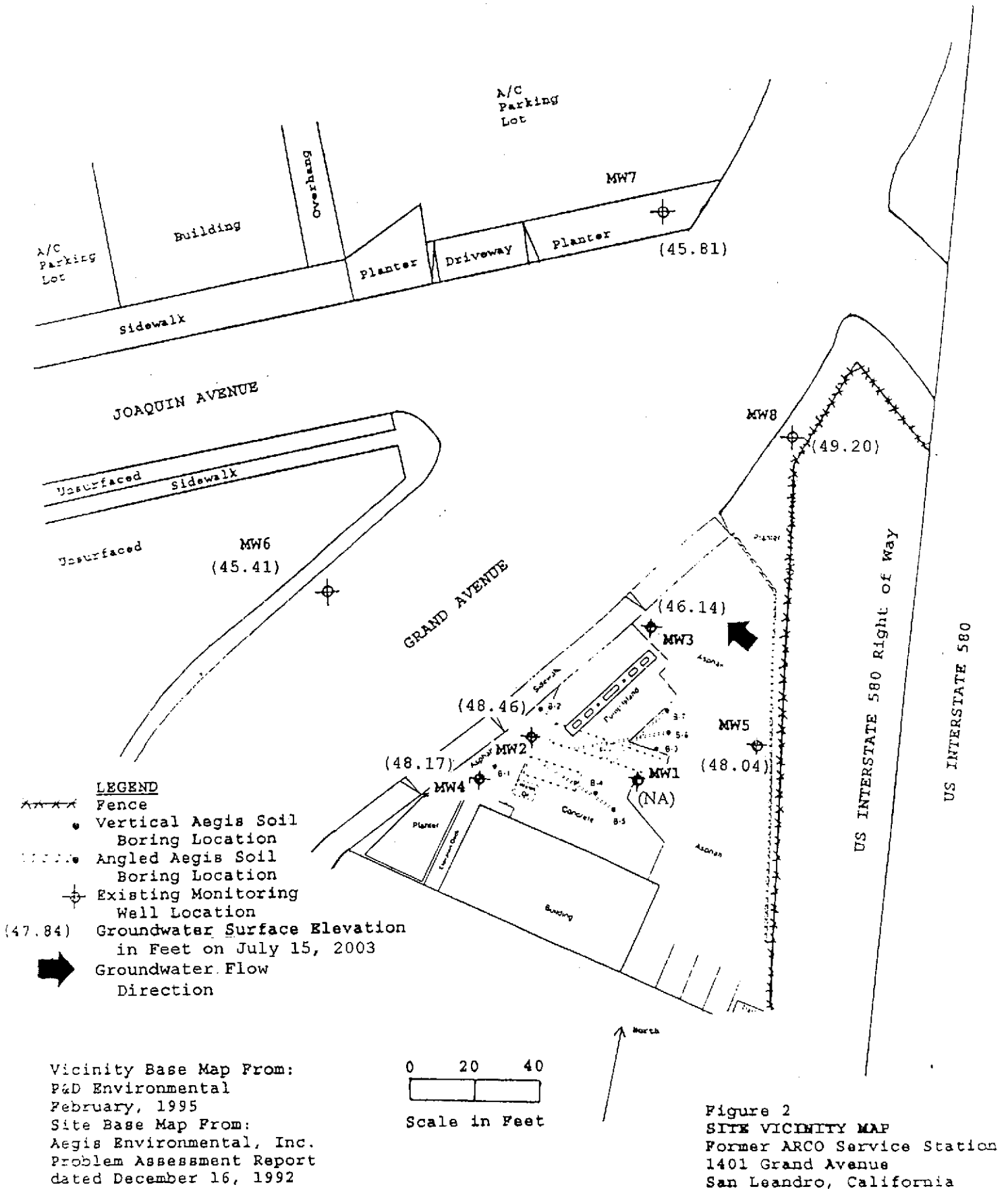


Figure 2
SITE VICINITY MAP
 Former ARCO Service Station
 1401 Grand Avenue
 San Leandro, California



McC Campbell Analytical Inc.

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

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

Client Project ID: #0055; Former Haber
 Oil
 Client Contact: Paul King
 Client P.O.:

Date Sampled: 07/15/03
 Date Received: 07/16/03
 Date Extracted: 07/16/03-07/21/03
 Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID	0307254-001B
Client ID	MWI
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<10	2.0	5.0	tert-Amyl methyl ether (TAME)	ND<1.0	2.0	0.5
Benzene	ND<1.0	2.0	0.5	Bromobenzene	ND<1.0	2.0	0.5
Bromochloromethane	ND<1.0	2.0	0.5	Bromodichloromethane	ND<1.0	2.0	0.5
Bromoform	ND<1.0	2.0	0.5	Bromomethane	ND<1.0	2.0	0.5
2-Butanone (MEK)	ND<2.0	2.0	1.0	t-Butyl alcohol (TBA)	12	2.0	5.0
n-Butyl benzene	ND<1.0	2.0	0.5	sec-Butyl benzene	ND<1.0	2.0	0.5
tert-Butyl benzene	ND<1.0	2.0	0.5	Carbon Disulfide	ND<1.0	2.0	0.5
Carbon Tetrachloride	ND<1.0	2.0	0.5	Chlorobenzene	ND<1.0	2.0	0.5
Chloroethane	ND<1.0	2.0	0.5	2-Chloroethyl Vinyl Ether	ND<1.0	2.0	0.5
Chloroform	ND<1.0	2.0	0.5	Chloromethane	ND<1.0	2.0	0.5
2-Chlorotoluene	ND<1.0	2.0	0.5	4-Chlorotoluene	ND<1.0	2.0	0.5
Dibromochloromethane	ND<1.0	2.0	0.5	1,2-Dibromo-3-chloropropane	ND<1.0	2.0	0.5
1,2-Dibromoethane (EDB)	ND<1.0	2.0	0.5	Dibromomethane	ND<1.0	2.0	0.5
1,2-Dichlorobenzene	ND<1.0	2.0	0.5	1,3-Dichlorobenzene	ND<1.0	2.0	0.5
1,4-Dichlorobenzene	ND<1.0	2.0	0.5	Dichlorodifluoromethane	ND<1.0	2.0	0.5
1,1-Dichloroethane	ND<1.0	2.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND<1.0	2.0	0.5
1,1-Dichloroethene	ND<1.0	2.0	0.5	cis-1,2-Dichloroethene	ND<1.0	2.0	0.5
trans-1,2-Dichloroethene	ND<1.0	2.0	0.5	1,2-Dichloropropane	ND<1.0	2.0	0.5
1,3-Dichloropropane	ND<1.0	2.0	0.5	2,2-Dichloropropane	ND<1.0	2.0	0.5
1,1-Dichloropropene	ND<1.0	2.0	0.5	cis-1,3-Dichloropropene	ND<1.0	2.0	0.5
trans-1,3-Dichloropropene	ND<1.0	2.0	0.5	Diisopropyl ether (DIPE)	ND<1.0	2.0	0.5
Ethanol	ND<100	2.0	50	Ethylbenzene	ND<1.0	2.0	0.5
Ethyl tert-butyl ether (ETBE)	ND<1.0	2.0	0.5	Hexachlorobutadiene	ND<1.0	2.0	0.5
2-Hexanone	ND<1.0	2.0	0.5	Iodomethane (Methyl iodide)	ND<10	2.0	5.0
Isopropylbenzene	ND<1.0	2.0	0.5	4-Isopropyl toluene	ND<1.0	2.0	0.5
Methanol	ND<1000	2.0	500	Methyl-t-butyl ether (MTBE)	53	2.0	0.5
Methylene chloride	ND<1.0	2.0	0.5	4-Methyl-2-pentanone (MIBK)	ND<1.0	2.0	0.5
Naphthalene	ND<1.0	2.0	0.5	n-Propyl benzene	ND<1.0	2.0	0.5
Styrene	ND<1.0	2.0	0.5	1,1,1,2-Tetrachloroethane	ND<1.0	2.0	0.5
1,1,2,2-Tetrachloroethane	ND<1.0	2.0	0.5	Tetrachloroethene	ND<1.0	2.0	0.5
Toluene	ND<1.0	2.0	0.5	1,2,3-Trichlorobenzene	ND<1.0	2.0	0.5
1,2,4-Trichlorobenzene	ND<1.0	2.0	0.5	1,1,1-Trichloroethane	ND<1.0	2.0	0.5
1,1,2-Trichloroethane	ND<1.0	2.0	0.5	Trichloroethene	ND<1.0	2.0	0.5
Trichlorofluoromethane	ND<1.0	2.0	0.5	1,2,3-Trichloropropane	ND<1.0	2.0	0.5
1,2,4-Trimethylbenzene	ND<1.0	2.0	0.5	1,3,5-Trimethylbenzene	ND<1.0	2.0	0.5
Vinyl Acetate	ND<10	2.0	5.0	Vinyl Chloride	ND<1.0	2.0	0.5
Xylenes	ND<1.0	2.0	0.5				

Surrogate Recoveries (%)

%SS1:	101	%SS2:	84.9
%SS3:	101		

Comments:

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

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 organic content.



McC Campbell Analytical Inc.

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

P & D Environmental 4020 Panama Court Oakland, CA 94611-4931	Client Project ID: #0055; Former Haber Oil	Date Sampled: 07/15/03
	Client Contact: Paul King	Date Received: 07/16/03
	Client P.O.:	Date Extracted: 07/16/03-07/21/03
		Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID	0307254-002B
Client ID	MW2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1200	250	5.0	tert-Amyl methyl ether (TAME)	ND<120	250	0.5
Benzene	3300	250	0.5	Bromobenzene	ND<120	250	0.5
Bromochloromethane	ND<120	250	0.5	Bromodichloromethane	ND<120	250	0.5
Bromoform	ND<120	250	0.5	Bromomethane	ND<120	250	0.5
2-Butanone (MEK)	ND<250	250	1.0	t-Butyl alcohol (TBA)	ND<1200	250	5.0
n-Butyl benzene	ND<120	250	0.5	sec-Butyl benzene	ND<120	250	0.5
tert-Butyl benzene	ND<120	250	0.5	Carbon Disulfide	ND<120	250	0.5
Carbon Tetrachloride	ND<120	250	0.5	Chlorobenzene	ND<120	250	0.5
Chloroethane	ND<120	250	0.5	2-Chloroethyl Vinyl Ether	ND<120	250	0.5
Chloroform	ND<120	250	0.5	Chloromethane	ND<120	250	0.5
2-Chlorotoluene	ND<120	250	0.5	4-Chlorotoluene	ND<120	250	0.5
Dibromochloromethane	ND<120	250	0.5	1,2-Dibromo-3-chloropropane	ND<120	250	0.5
1,2-Dibromoethane (EDB)	ND<120	250	0.5	Dibromomethane	ND<120	250	0.5
1,2-Dichlorobenzene	ND<120	250	0.5	1,3-Dichlorobenzene	ND<120	250	0.5
1,4-Dichlorobenzene	ND<120	250	0.5	Dichlorodifluoromethane	ND<120	250	0.5
1,1-Dichloroethane	ND<120	250	0.5	1,2-Dichloroethane (1,2-DCA)	ND<120	250	0.5
1,1-Dichloroethene	ND<120	250	0.5	cis-1,2-Dichloroethene	ND<120	250	0.5
trans-1,2-Dichloroethene	ND<120	250	0.5	1,2-Dichloropropane	ND<120	250	0.5
1,3-Dichloropropane	ND<120	250	0.5	2,2-Dichloropropane	ND<120	250	0.5
1,1-Dichloropropene	ND<120	250	0.5	cis-1,3-Dichloropropene	ND<120	250	0.5
trans-1,3-Dichloropropene	ND<120	250	0.5	Diisopropyl ether (DIPE)	ND<120	250	0.5
Ethanol	ND<5000	250	50	Ethylbenzene	1800	250	0.5
Ethyl tert-butyl ether (ETBE)	ND<120	250	0.5	Hexachlorobutadiene	ND<120	250	0.5
2-Hexanone	ND<120	250	0.5	Iodomethane (Methyl iodide)	ND<1200	250	5.0
Isopropylbenzene	ND<120	250	0.5	4-Isopropyl toluene	ND<120	250	0.5
Methanol	ND<50,000	250	500	Methyl-t-butyl ether (MTBE)	4100	250	0.5
Methylene chloride	ND<120	250	0.5	4-Methyl-2-pentanone (MIBK)	ND<120	250	0.5
Naphthalene	290	250	0.5	n-Propyl benzene	150	250	0.5
Styrene	ND<120	250	0.5	1,1,1,2-Tetrachloroethane	ND<120	250	0.5
1,1,2,2-Tetrachloroethane	ND<120	250	0.5	Tetrachloroethene	ND<120	250	0.5
Toluene	4400	250	0.5	1,2,3-Trichlorobenzene	ND<120	250	0.5
1,2,4-Trichlorobenzene	ND<120	250	0.5	1,1,1-Trichloroethane	ND<120	250	0.5
1,1,2-Trichloroethane	ND<120	250	0.5	Trichloroethene	ND<120	250	0.5
Trichlorofluoromethane	ND<120	250	0.5	1,2,3-Trichloropropane	ND<120	250	0.5
1,2,4-Trimethylbenzene	1300	250	0.5	1,3,5-Trimethylbenzene	320	250	0.5
Vinyl Acetate	ND<1200	250	5.0	Vinyl Chloride	ND<120	250	0.5
Xylenes	9300	250	0.5				

Surrogate Recoveries (%)

%SS1:	102	%SS2:	97.8
%SS3:	90.5		

Comments:

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

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 organic content.



P & D Environmental 4020 Panama Court Oakland, CA 94611-4931	Client Project ID: #0055; Former Haber Oil	Date Sampled: 07/15/03
	Client Contact: Paul King	Date Received: 07/16/03
	Client P.O.:	Date Extracted: 07/16/03-07/21/03
		Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID	0307254-003B
Client ID	MW3
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<120	25	5.0	tert-Amyl methyl ether (TAME)	ND<12	25	0.5
Benzene	ND<12	25	0.5	Bromobenzene	ND<12	25	0.5
Bromochloromethane	ND<12	25	0.5	Bromodichloromethane	ND<12	25	0.5
Bromoform	ND<12	25	0.5	Bromomethane	ND<12	25	0.5
2-Butanone (MEK)	ND<25	25	1.0	t-Butyl alcohol (TBA)	ND<120	25	5.0
n-Butyl benzene	ND<12	25	0.5	sec-Butyl benzene	ND<12	25	0.5
tert-Butyl benzene	ND<12	25	0.5	Carbon Disulfide	ND<12	25	0.5
Carbon Tetrachloride	ND<12	25	0.5	Chlorobenzene	ND<12	25	0.5
Chloroethane	ND<12	25	0.5	2-Chloroethyl Vinyl Ether	ND<12	25	0.5
Chloroform	ND<12	25	0.5	Chloromethane	ND<12	25	0.5
2-Chlorotoluene	ND<12	25	0.5	4-Chlorotoluene	ND<12	25	0.5
Dibromochloromethane	ND<12	25	0.5	1,2-Dibromo-3-chloropropane	ND<12	25	0.5
1,2-Dibromoethane (EDB)	ND<12	25	0.5	Dibromomethane	ND<12	25	0.5
1,2-Dichlorobenzene	ND<12	25	0.5	1,3-Dichlorobenzene	ND<12	25	0.5
1,4-Dichlorobenzene	ND<12	25	0.5	Dichlorodifluoromethane	ND<12	25	0.5
1,1-Dichloroethane	ND<12	25	0.5	1,2-Dichloroethane (1,2-DCA)	ND<12	25	0.5
1,1-Dichloroethene	ND<12	25	0.5	cis-1,2-Dichloroethene	ND<12	25	0.5
trans-1,2-Dichloroethene	ND<12	25	0.5	1,2-Dichloropropane	ND<12	25	0.5
1,3-Dichloropropane	ND<12	25	0.5	2,2-Dichloropropane	ND<12	25	0.5
1,1-Dichloropropene	ND<12	25	0.5	cis-1,3-Dichloropropene	ND<12	25	0.5
trans-1,3-Dichloropropene	ND<12	25	0.5	Diisopropyl ether (DIPE)	ND<12	25	0.5
Ethanol	ND<1200	25	50	Ethylbenzene	ND<12	25	0.5
Ethyl tert-butyl ether (ETBE)	ND<12	25	0.5	Hexachlorobutadiene	ND<12	25	0.5
2-Hexanone	ND<12	25	0.5	Iodomethane (Methyl iodide)	ND<120	25	5.0
Isopropylbenzene	ND<12	25	0.5	4-Isopropyl toluene	ND<12	25	0.5
Methanol	ND<12,000	25	500	Methyl-t-butyl ether (MTBE)	660	25	0.5
Methylene chloride	ND<12	25	0.5	4-Methyl-2-pentanone (MIBK)	ND<12	25	0.5
Naphthalene	ND<12	25	0.5	n-Propyl benzene	ND<12	25	0.5
Styrene	ND<12	25	0.5	1,1,1,2-Tetrachloroethane	ND<12	25	0.5
1,1,2,2-Tetrachloroethane	ND<12	25	0.5	Tetrachloroethene	ND<12	25	0.5
Toluene	ND<12	25	0.5	1,2,3-Trichlorobenzene	ND<12	25	0.5
1,2,4-Trichlorobenzene	ND<12	25	0.5	1,1,1-Trichloroethane	ND<12	25	0.5
1,1,2-Trichloroethane	ND<12	25	0.5	Trichloroethene	ND<12	25	0.5
Trichlorofluoromethane	ND<12	25	0.5	1,2,3-Trichloropropane	ND<12	25	0.5
1,2,4-Trimethylbenzene	ND<12	25	0.5	1,3,5-Trimethylbenzene	ND<12	25	0.5
Vinyl Acetate	ND<120	25	5.0	Vinyl Chloride	ND<12	25	0.5
Xylenes	ND<12	25	0.5				

Surrogate Recoveries (%)

%SS1:	99.8	%SS2:	102
%SS3:	102		

Comments:

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

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 organic content.



McC Campbell Analytical Inc.

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 4020 Panama Court Oakland, CA 94611-4931	Client Project ID: #0055; Former Haber Oil	Date Sampled: 07/15/03
	Client Contact: Paul King	Date Received: 07/16/03
	Client P.O.:	Date Extracted: 07/16/03-07/21/03
		Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID	0307254-004B
Client ID	MW4
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1200	250	5.0	tert-Amyl methyl ether (TAME)	ND<120	250	0.5
Benzene	ND<120	250	0.5	Bromobenzene	ND<120	250	0.5
Bromochloromethane	ND<120	250	0.5	Bromodichloromethane	ND<120	250	0.5
Bromoform	ND<120	250	0.5	Bromomethane	ND<120	250	0.5
2-Butanone (MEK)	ND<250	250	1.0	t-Butyl alcohol (TBA)	ND<1200	250	5.0
n-Butyl benzene	ND<120	250	0.5	sec-Butyl benzene	ND<120	250	0.5
tert-Butyl benzene	ND<120	250	0.5	Carbon Disulfide	ND<120	250	0.5
Carbon Tetrachloride	ND<120	250	0.5	Chlorobenzene	ND<120	250	0.5
Chloroethane	ND<120	250	0.5	2-Chloroethyl Vinyl Ether	ND<120	250	0.5
Chloroform	ND<120	250	0.5	Chloromethane	ND<120	250	0.5
2-Chlorotoluene	ND<120	250	0.5	4-Chlorotoluene	ND<120	250	0.5
Dibromochloromethane	ND<120	250	0.5	1,2-Dibromo-3-chloropropane	ND<120	250	0.5
1,2-Dibromoethane (EDB)	ND<120	250	0.5	Dibromomethane	ND<120	250	0.5
1,2-Dichlorobenzene	ND<120	250	0.5	1,3-Dichlorobenzene	ND<120	250	0.5
1,4-Dichlorobenzene	ND<120	250	0.5	Dichlorodifluoromethane	ND<120	250	0.5
1,1-Dichloroethane	ND<120	250	0.5	1,2-Dichloroethane (1,2-DCA)	ND<120	250	0.5
1,1-Dichloroethene	ND<120	250	0.5	cis-1,2-Dichloroethene	ND<120	250	0.5
trans-1,2-Dichloroethene	ND<120	250	0.5	1,2-Dichloropropane	ND<120	250	0.5
1,3-Dichloropropane	ND<120	250	0.5	2,2-Dichloropropane	ND<120	250	0.5
1,1-Dichloropropene	ND<120	250	0.5	cis-1,3-Dichloropropene	ND<120	250	0.5
trans-1,3-Dichloropropene	ND<120	250	0.5	Diisopropyl ether (DIPE)	ND<120	250	0.5
Ethanol	ND<12,000	250	50	Ethylbenzene	ND<120	250	0.5
Ethyl tert-butyl ether (ETBE)	ND<120	250	0.5	Hexachlorobutadiene	ND<120	250	0.5
2-Hexanone	ND<120	250	0.5	Iodomethane (Methyl iodide)	ND<1200	250	5.0
Isopropylbenzene	ND<120	250	0.5	4-Isopropyl toluene	ND<120	250	0.5
Methanol	ND<120,000	250	500	Methyl-t-butyl ether (MTBE)	6800	250	0.5
Methylene chloride	ND<120	250	0.5	4-Methyl-2-pentanone (MIBK)	ND<120	250	0.5
Naphthalene	ND<120	250	0.5	n-Propyl benzene	ND<120	250	0.5
Styrene	ND<120	250	0.5	1,1,1,2-Tetrachloroethane	ND<120	250	0.5
1,1,2,2-Tetrachloroethane	ND<120	250	0.5	Tetrachloroethene	ND<120	250	0.5
Toluene	ND<120	250	0.5	1,2,3-Trichlorobenzene	ND<120	250	0.5
1,2,4-Trichlorobenzene	ND<120	250	0.5	1,1,1-Trichloroethane	ND<120	250	0.5
1,1,2-Trichloroethane	ND<120	250	0.5	Trichloroethene	ND<120	250	0.5
Trichlorofluoromethane	ND<120	250	0.5	1,2,3-Trichloropropane	ND<120	250	0.5
1,2,4-Trimethylbenzene	ND<120	250	0.5	1,3,5-Trimethylbenzene	ND<120	250	0.5
Vinyl Acetate	ND<1200	250	5.0	Vinyl Chloride	ND<120	250	0.5
Xylenes	ND<120	250	0.5				

Surrogate Recoveries (%)

%SS1:	95.3	%SS2:	99.4
%SS3:	103		

Comments:

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

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 organic content.



McC Campbell Analytical Inc.

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

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

Client Project ID: #0055; Former Haber Oil
 Client Contact: Paul King
 Client P.O.:

Date Sampled: 07/15/03
 Date Received: 07/16/03
 Date Extracted: 07/16/03-07/21/03
 Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID	0307254-005B
Client ID	MW5
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	1.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	0.5
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethanol	ND	1.0	50	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Hexachlorobutadiene	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Iodomethane (Methyl iodide)	ND	1.0	5.0
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methanol	ND	1.0	500	Methyl-t-butyl ether (MTBE)	1.4	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Acetate	ND	1.0	5.0	Vinyl Chloride	ND	1.0	0.5
Xylenes	ND	1.0	0.5				

Surrogate Recoveries (%)

%SS1:	101	%SS2:	100
%SS3:	98.4		

Comments:

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

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 organic content.



McC Campbell Analytical Inc.

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

P & D Environmental

4020 Panama Court

Oakland, CA 94611-4931

Client Project ID: #0055; Former Haber Oil

Client Contact: Paul King

Client P.O.:

Date Sampled: 07/15/03

Date Received: 07/16/03

Date Extracted: 07/16/03-07/21/03

Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID		0307254-006B					
Client ID		MW6					
Matrix		Water					
Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	1.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	0.5
Chloroform	0.84	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	0.66	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethanol	ND	1.0	50	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Hexachlorobutadiene	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Iodomethane (Methyl iodide)	ND	1.0	5.0
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methanol	ND	1.0	500	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	0.67	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Acetate	ND	1.0	5.0	Vinyl Chloride	ND	1.0	0.5
Xylenes	ND	1.0	0.5				

Surrogate Recoveries (%)

%SS1:	99.9	%SS2:	101
%SS3:	97.3		

Comments:

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

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 organic content.



McC Campbell Analytical Inc.

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 4020 Panama Court Oakland, CA 94611-4931	Client Project ID: #0055; Former Haber Oil	Date Sampled: 07/15/03
	Client Contact: Paul King	Date Received: 07/16/03
	Client P.O.:	Date Extracted: 07/16/03-07/21/03
		Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID	0307254-007B
Client ID	MW7
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	1.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	0.5
Chloroform	0.61	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	0.64	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethanol	ND	1.0	50	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Hexachlorobutadiene	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Iodomethane (Methyl iodide)	ND	1.0	5.0
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methanol	ND	1.0	500	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	1.2	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Acetate	ND	1.0	5.0	Vinyl Chloride	ND	1.0	0.5
Xylenes	ND	1.0	0.5				

Surrogate Recoveries (%)

%SS1:	101	%SS2:	99.1
%SS3:	96.9		

Comments:

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

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 organic content.



P & D Environmental 4020 Panama Court Oakland, CA 94611-4931	Client Project ID: #0055; Former Haber Oil	Date Sampled: 07/15/03
	Client Contact: Paul King	Date Received: 07/16/03
	Client P.O.:	Date Extracted: 07/16/03-07/21/03
		Date Analyzed: 07/16/03-07/21/03

Volatiles Organics + Oxygenates by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0307254

Lab ID	0307254-008B
Client ID	MW8
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	1.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	0.5
Chloroform	1.4	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	0.52	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	ND	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	ND	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethanol	ND	1.0	50	Ethylbenzene	ND	1.0	0.5
Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5	Hexachlorobutadiene	ND	1.0	0.5
2-Hexanone	ND	1.0	0.5	Iodomethane (Methyl iodide)	ND	1.0	5.0
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methanol	ND	1.0	500	Methyl-t-butyl ether (MTBE)	ND	1.0	0.5
Methylene chloride	ND	1.0	0.5	4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	ND	1.0	0.5
Toluene	ND	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	ND	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Acetate	ND	1.0	5.0	Vinyl Chloride	ND	1.0	0.5
Xylenes	0.66	1.0	0.5				

Surrogate Recoveries (%)

%SS1:	101	%SS2:	100
%SS3:	96.5		

Comments:

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

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 organic content.



McC Campbell Analytical Inc.

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0307254

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 7835			Spiked Sample ID: 0307254-001A			
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	22.79	60	131, F1	141, F1	5.64	107	107	0	70	130
MTBE	62.46	10	NR	NR	NR	99.2	101	1.30	70	130
Benzene	0.6751	10	106	105	0.447	99.8	96.7	3.20	70	130
Toluene	0.5749	10	100	102	1.45	95.2	92.5	2.91	70	130
Ethylbenzene	ND	10	105	105	0	106	103	2.63	70	130
Xylenes	ND	30	96.7	100	3.39	100	95.7	4.43	70	130
%SS:	116	100	112	108	3.14	99.7	99.3	0.352	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

F1 = MS / MSD exceed acceptance criteria. LCS - LCSD validate prep batch.

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 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.

£ 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 = 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.



McC Campbell Analytical Inc.

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W

WorkOrder: 0307254

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 7839		Spiked Sample ID: 0307264-002B				
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex) [£]	ND	60	106	110	3.65	97.5	98.5	0.988	70	130
MTBE	ND	10	115	114	1.35	97.1	102	5.32	70	130
Benzene	ND	10	107	107	0	95.9	99.7	3.89	70	130
Toluene	ND	10	99.6	98.7	0.839	101	105	4.10	70	130
Ethylbenzene	ND	10	105	105	0	103	108	4.62	70	130
Xylenes	ND	30	96.3	96.3	0	107	110	3.08	70	130
%SS:	100	100	103	102	0.825	101	101	0	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.

% 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.

£ 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 = 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.



QC SUMMARY REPORT FOR SW8260B

Matrix: W

WorkOrder: 0307254

EPA Method: SW8260B		Extraction: SW5030B		BatchID: 7838			Spiked Sample ID: 0307254-005B			
	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	92.7	94.6	1.93	91.4	95.2	4.05	70	130
Benzene	ND	10	104	110	6.02	103	102	1.09	70	130
Chlorobenzene	ND	10	111	110	0.882	108	112	3.54	70	130
1,2-Dibromoethane (EDB)	ND	10	121	119	1.88	119	122	2.20	70	130
1,2-Dichloroethane (1,2-DCA)	ND	10	103	106	3.63	104	101	2.41	70	130
1,1-Dichloroethene	ND	10	90.7	97.1	6.86	91.6	91.4	0.255	70	130
Diisopropyl ether (DIPE)	ND	10	100	104	4.14	99.3	99.6	0.294	70	130
Ethanol	ND	500	97.7	89.1	9.16	92.9	95.6	2.81	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	92.8	92.8	0	90.5	91.2	0.778	70	130
Methanol	ND	2500	99.2	104	4.57	74.6	103	31.9	70	130
Methyl-t-butyl ether (MTBE)	1.393	10	82.9	94.4	11.2	94.1	94.7	0.664	70	130
Toluene	ND	10	127	127	0	123	128	3.78	70	130
Trichloroethene	ND	10	103	110	6.57	102	105	2.64	70	130
%SS1:	101	100	96.9	105	7.93	98.8	96.4	2.38	70	130
%SS2:	100	100	100	101	0.794	100	101	0.582	70	130
%SS3:	98.4	100	95.4	95.9	0.496	94.7	96.3	1.68	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.

$$\% \text{ Recovery} = 100 * (\text{MS} - \text{Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) * 2.$$

* 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.

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

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

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

0307254

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: 0055		PROJECT NAME: Former Haber Oil			NUMBER OF CONTAINERS	ANALYSIS(ES): TPH(G) 8260 + Fuel Oil Organics + Lead scavengers	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) Wilhelm Welzenbach <i>Wilhelm Welzenbach</i>								
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION				
+ MW1	7/15/03		water		5	XX	ICE	Normal Turnaround
+ MW2								" "
+ MW3								" "
+ MW4								" "
+ MW5								" "
+ MW6								" "
+ MW7								" "
+ MW8								" "
ICE <input checked="" type="checkbox"/> GOOD CONDITION PRESERVED IN LAB <input checked="" type="checkbox"/> PRESERVATION APPROPRIATE CONTAINERS <input checked="" type="checkbox"/> PRESERVED IN LAB								
RELINQUISHED BY: (SIGNATURE) <i>Wilhelm Welzenbach</i>		DATE 7/16/03	TIME 1110	RECEIVED BY: (SIGNATURE) <i>Tim Perry 298</i>		TOTAL NO. OF SAMPLES (THIS SHIPMENT) 8	LABORATORY: McCampbell Analytical	
RELINQUISHED BY: (SIGNATURE) <i>Tim Perry 298</i>		DATE 7/16/03	TIME 1242	RECEIVED BY: (SIGNATURE) <i>Maia Valle</i>		TOTAL NO. OF CONTAINERS (THIS SHIPMENT) 40	LABORATORY CONTACT: Angela Rydelius LABORATORY PHONE NUMBER: (925) 798-1620	
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: () YES (X) NO		
				REMARKS: VOAs preserved to HCL				

McC Campbell Analytical Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0307254

Client:

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

TEL: (510) 658-6916
 FAX: (510) 658-9074
 ProjectNo: #0055; Former Haber Oil
 PO:

Date Received: 7/16/03

Date Printed: 7/16/03

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests						
					N8021B/8015C	SW8260B					
0307254-001	MW1	Water	7/15/03	<input type="checkbox"/>	A	B					
0307254-002	MW2	Water	7/15/03	<input type="checkbox"/>	A	B					
0307254-003	MW3	Water	7/15/03	<input type="checkbox"/>	A	B					
0307254-004	MW4	Water	7/15/03	<input type="checkbox"/>	A	B					
0307254-005	MW5	Water	7/15/03	<input type="checkbox"/>	A	B					
0307254-006	MW6	Water	7/15/03	<input type="checkbox"/>	A	B					
0307254-007	MW7	Water	7/15/03	<input type="checkbox"/>	A	B					
0307254-008	MW8	Water	7/15/03	<input type="checkbox"/>	A	B					

Prepared by: Melissa Valles

Comments:

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.