RO-413

August 19, 2002

AUG 2 3 2002

Ms. Eva Chu
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: property on 1970 Seminary Ave, Oakland CA

Dear Ms. Chu:

Enclosed please find a copy of the July 2002 Ground Water Sampling Report dated August 6, 2002 as prepared by Hoexter Consulting, Inc. If you have any questions regarding this report, please feel free to contact me directly or my consultant, Paul Hoffey of Erler and Kalinowski, Inc.

Sincerely,

Future monitoring events should have HVOC analysis using 8260, not 8010 or 602 using 9070

Angel LaMarca, (on behalf of Doyle, E. Grimit)
945 S. Lehigh Dr.
Anaheim Hills, CA 92807
714-282-7475 home
714-493-0121 cell phone, voicemail

cc: Paul Hoffey, Erler & Kalinowski, Inc

JULY, 2002
GROUND WATER SAMPLING REPORT
FOR
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA

August 6, 2002

Prepared by

HOEXTER CONSULTING, INC.
734 Torreya Court
Palo Alto, California 94303-4160

650-494-2505 (ph) (650) 494-2515 (fax)

Geology / Engineering Geology / Environmental Studies

HOEXTER CONSULTING, INC.
David F. Hoexter, RG-3536/CEG-1158/REA1-762

734 Torreya Court
Palo Alto, California 94303-4160

650-494-2505 (ph) (650) 494-2515 (fax)

August 6, 2002

E-10-1E-391E
HCQuartEnvtRpts:Sem.1970/17(7/02)

Mr. Doyle Grimit
c/o Angel La Marca
945 S. Lehigh St.
Anaheim Hills, California 92807

RE: **JULY, 2002**
GROUND WATER SAMPLING REPORT
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA

Dear Mr. Grimit:

Enclosed is our July, 2002 ground water sampling report for the property located at 1970 Seminary Avenue, corner of Harmon Avenue, in Oakland, California. Sampling at the site dates from August, 1990. The results of previous sampling events are included in the analytical results summary tables.

The results of this investigation indicate that the water samples from the nine wells continue to range from relatively low to elevated levels of total petroleum hydrocarbons as gasoline (TPH-G); purgeable aromatic compounds (BTEX) and MTBE; oil (total recoverable petroleum hydrocarbons, TRPH); and halogenated volatile compounds (HVOC). The analyses indicate that all analyzed compounds remain at levels of the same order-of-magnitude as previous results, with an overall, averaged moderate although highly variable decline in contaminant levels since initiation of sampling and in comparison to the previous February, 2002 sampling event.

Ground water levels declined from the previous February, 2002 sampling event. Ground water gradient directions, which differ between the "shallow" and "deep" wells, were similar to previous sampling events for the shallow wells and similar although further to the east for the deeper wells. The gradient inclination was similar to previous events.

We recommend that copies of the enclosed report be submitted to the Alameda County Health Care Services Agency. The next round of sampling is currently scheduled to be conducted during January, 2003. We understand that a corrective action work plan to conduct site remediation is currently being prepared by others.

We appreciate the opportunity to provide services to you on this project and trust this report meets your needs at this time. If you have any questions, or require additional information, please do not hesitate to call.

Very truly yours,

HOEXTER CONSULTING, INC.

David F. Hoexter, RG/CEG/REA (Geology registrations expire 11/30/03)
Principal Geologist

Copies: Addressee (4)

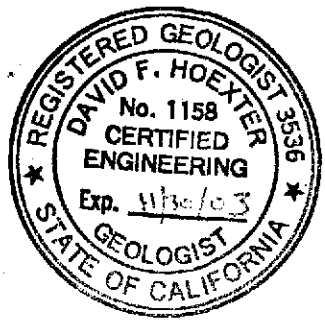
JULY, 2002
GROUND WATER SAMPLING REPORT

For

STID 553 - Grimit Auto and Repair
1970 Seminary Avenue
Oakland, California

To

Mr. Doyle Grimit
c/o Angel La Marca
945 S. Lehigh St.
Anaheim Hills, California 92807



August 6, 2002

David F. Hoexter, RG/CEG/REA
Principal Geologist

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JULY, 2002
GROUND WATER SAMPLING REPORT
FOR
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY
OAKLAND, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of the July, 2002 ground water sampling at 1970 Seminary Avenue, Oakland, California. The project location is shown on the Location Map, Figure 1. The scope of services provided during this investigation consisted primarily of collecting and analyzing ground water samples from each of the nine monitoring wells installed at the site. Ground water samples were analyzed for petroleum hydrocarbons and halogenated volatile organic compounds. Well locations are shown on Figure 2, Site Plan.

2.0 FIELD INVESTIGATION

The ground water monitoring wells were sampled by representatives of Hoexter Consulting, Inc. Generally, due to past, very slow equilibration of ground water levels, the well caps are loosened approximately 48 hours prior to the planned water level measurement, purging and sampling. The wells are then secured with the caps sufficiently loose to allow venting, and left to equilibrate until they are sampled. However, on this occasion it was not feasible to follow this procedure, and the wells were purged and sampled the same day as the water level measurements. The caps were left loose following sampling, and the ground water levels were measured three days after sampling. Some of the wells had still not fully equilibrated three days later, and thus the initial ground water depth data was utilized in this report.

Following ground water level measurement (Table 1) at the time of purging, each well was checked for free-product with the bailer, and then three to four well-casing volumes of water were purged from the well. A dedicated polyethylene bailer was employed for each well. Ground water parameters, including temperature, pH and specific conductivity, were measured prior to and following each purge volume removal.

The samples were collected using the dedicated bailer, placed in appropriate sample containers supplied by the analytical laboratory, labeled, and placed in refrigerated storage for transport to the laboratory under chain-of-custody control. All sampling equipment was thoroughly cleaned with "Alconox" detergent and rinsed with distilled water prior to sampling the well. Monitoring well sampling logs and the chain of custody are attached to this report as a part of Appendix A.

Prior to purging, ground water levels were measured in each well using the top of 2-inch PVC casing (generally the north side) as reference point. The average ground water elevation declined in all wells compared to the prior (February, 2002) sampling event. The "deeper" wells averaged an elevation decline of 3.53 feet, with each of the five wells declining in elevation; the "shallow" wells declined an average of 2.04 feet, with all four measured wells declining in elevation.

Well-top elevations, depth to water, and calculated water-surface elevations are presented in Table 1. These data have been used to generate the Ground Water Contour and Gradient Direction Maps, Figures 3A ("shallow wells") and 3B ("deep wells").

Table 1B summarizes the ground water gradient direction and inclination data for the site, including previous measurements. The ground water gradient direction and inclination are essentially consistent with the previous data. The data for the four "shallow" wells indicate a gradient direction towards Seminary Avenue. The apparent gradient varies across the site, but averages 0.24 foot per foot in the source area. The approximate gradient direction is N 51° W. The data for the five "deeper" wells indicate an opposing gradient direction away from Seminary Avenue towards the east and southeast. The apparent gradient varies across the site, but averages 0.11 foot per foot near the source area. The approximate gradient direction is S 85° E.

The data appear to indicate a downward gradient from a relatively shallow (perched ?) zone represented by the "shallow" wells to the deeper zone represented by the "deeper" wells, particularly in the source area. Based on the slow equilibration and recovery time following purging, we infer a relatively slow ground water flow rate, despite the unusually steep gradient.

3.0 ANALYTICAL RESULTS

3.1 Laboratory Procedures

The ground water samples were analyzed by McCampbell Analytical, Inc. of Pacheco, California. McCampbell Analytical is certified by the State of California EPA/DTSC for the conducted analyses. The samples were analyzed as follows:

- Total petroleum hydrocarbons as gasoline (TPH-G) using EPA Method 5030/8015.
- Purgeable aromatic compounds (BTEX) and MTBE using EPA Method 8020.
- Oil and grease (total recoverable petroleum, TRPH) using SM 5520B/F, gravimetric with cleanup.
- Halogenated volatile organic compounds (HVOC) by EPA Method 8010.

3.2 Observations and Analytical Results

A thin sheen (floating film) of oil was observed in well MW-1 following the initial sounding. The volume of product increased during well purging, with a prominent accumulation of product (although not a measurable thickness) accumulating on the surface of the purge water. This occurrence is typical of MW-1. There was no observed sheen or product in the initial or subsequent purge water of the other wells, except for a minor sheen from well MW-4. Five wells dewatered prior to completion of a complete four-volume purge. These wells included MW-3, 4, 5, 6, and 9. In most cases, these wells had recovered to near 80 per cent of initial water level prior to being sampled.

The results of the chemical analyses are summarized on Tables 2 through 6 and are attached to this report as a part of Appendix A. Analytical results of all previous testing are also included in the tables. The results in Tables 4 and 5 are of parameters not currently tested for; the results in Table 6 are from a one-time sampling event during February, 2002. The current analytical results indicate that TRPH, TPH-G, and BTEX compounds, as well as HVOCs, are present at elevated levels which are generally on the same order of magnitude as the most recent, previous analyses.

TPH-G, MTBE and BTEX levels generally declined in all nine wells, continuing a generally downward trend over the life of the wells. Detected levels in wells MW-2 through 9, as during previous sampling events, are generally one to two orders of magnitude less than in MW-1. Oil/grease were detected in well MW-1 only. Various HVOCs were detected in each well; BTEX compounds were also present at varying concentrations. See Tables 2 and 3 for the presence and concentrations of particular BTEX and HVOC compounds.

4.0 CONCLUSIONS AND RECOMMENDATIONS

All nine wells were available for sampling.

Overall contaminant levels remain elevated, with moderate average declines from the previous sampling event and over the life of the wells. The Alameda County Health Care Services Agency has concurred with our previous recommendation that a corrective action plan (CAP) be prepared to address this condition. We understand that a CAP is currently being prepared by others.

5.0 LIMITATIONS

This report has been prepared according to generally accepted geologic and environmental practices. No other warranty, either expressed or implied as to the methods, results, conclusions or professional advice provided is made. It should be recognized that certain limitations are inherent in the evaluation of subsurface conditions, and that certain conditions may not be detected during an investigation of this type. If you wish to reduce the level of uncertainty associated with this study, we should be contacted for additional consultation.

The analysis, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our investigation; review of previous reports relevant to the site conditions; and laboratory results from an outside analytical laboratory. Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes do occur, we should be advised so that we can review our report in light of those changes.

* *

TABLE 1A

GROUND WATER ELEVATION DATA
(All Measurements in Feet)

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
MW-1 ("deep")			
8/6/90	37.0	21.5	15.5
1/28/92		21.0	16.0
4/27/92		20.95	16.05
8/10/92		22.20	14.8
2/11/94		15.93 (3)	21.07 (3)
2/28/94		13.85 (4)	23.15 (4)
9/9/94		20.19	16.81
12/28/94		14.91	22.09
4/13/95		14.18	22.82
11/1/95		20.90	16.10
3/8/96		11.82	25.18
3/25-26/96	36.97	13.54	23.43
10/7/96		21.41	15.59
1/15/97		13.34	23.63
6/23/97	36.99	19.91	17.08
10/6/97		21.55	15.44
12/12/98		16.24	20.75
4/24/99		14.21	22.78
12/18/99		19.28	17.71
7/22/00		21.93	15.93
1/29/01		19.49	17.50
7/28/01		19.84	17.15
2/3/02		16.03	20.96
7/23/02		20.45	16.54
MW-2 ("deep")			
2/11/94	36.40	14.16 (3)	22.24 (3)
2/28/94		16.01 (4)	20.39 (4)
9/9/94		18.96	17.44
12/28/94		21.42	14.98
4/13/95		19.69	16.71
11/1/95		21.91	14.49
3/8/96		14.56 (6)	21.84 (6)
3/25-26/96	36.39	10.84	25.55
10/7/96		18.41	17.98
1/15/97		10.07	26.32
6/23/97	36.40	13.73	22.67
10/6/97		17.03	19.37
12/12/98		11.39	25.01
4/24/99		10.45	25.95
12/18/99		13.22	23.18
7/22/00		13.73	22.67

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
MW-2 ("deep") cont'			
1/29/01		12.25	24.15
7/28/01		16.73 (6)	19.67 (6)
2/3/02		11.40	25.00
7/23/02		13.42	22.98
MW-3 ("shallow")			
2/11/94	36.94	6.97 (3)	29.97 (3)
2/28/94		7.74 (4)	29.20 (4)
9/9/94		9.68	27.26
12/28/94		8.15	28.79
4/13/95		8.05	28.89
11/1/95		7.82	29.12
3/8/96		5.69	31.25
3/25-26/96	36.94	6.91	30.03
10/7/96		9.51	27.43
1/15/97		6.23	30.71
6/23/97	36.94	9.65	27.29
10/6/97		10.53	26.41
12/12/98		7.12	29.82
4/24/99		7.17	29.77
12/18/99		8.51	28.43
7/22/00		9.41	27.53
1/29/01		7.23	29.71
7/28/01		8.63	28.31
2/3/02		7.99	28.95
7/23/02		10.17	26.77
MW-4 ("deep")			
3/25-26/96	36.46	14.14	22.32
10/7/96		22.31	14.15
1/15/97		13.78	22.68
6/23/97	36.47	20.90	15.57
10/6/97		22.77	13.60
12/12/98		17.16	19.31
4/24/99		14.55	21.92
12/18/99		20.46	16.01
7/22/00		20.67	15.80
1/29/01		18.06	18.41
7/28/01		20.80	15.67
2/3/02		15.53	20.94
7/23/02		20.26	16.21

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
MW-5 ("deep")			
3/25-26/96	36.77	15.63	21.14
10/7/96		22.86	13.91
1/15/97		17.33	19.44
6/23/97	36.77	21.91	14.86
10/6/97		24.26	12.51
12/12/98		20.66	16.11
4/24/99		17.19	19.58
12/18/99		22.71	14.06
7/22/00		21.42	15.35
1/29/01		20.79	15.98
7/28/01		21.07	15.70
2/3/02		17.67	19.10
7/23/02		20.16	16.61
MW-6 ("shallow")			
3/25-26/96	36.42	8.52	27.90
10/7/96		12.82	23.60
1/15/97		7.72	28.70
6/23/97	36.42	11.42	25.00
10/6/97		12.67	23.75
12/12/98		9.15	27.27
4/24/99		8.56	27.86
12/18/99		10.53	25.89
7/22/00		11.50	24.92
1/29/01		9.34	27.08
7/28/01		N/A	N/A
2/3/02		9.32	27.10
7/23/02		11.33	25.09
MW-7 ("deep")			
6/23/97	36.83	19.93	16.90
10/6/97		21.43	15.40
12/12/98		16.56	20.27
4/24/99		14.48	22.35
12/18/99		19.40	17.43
7/22/00		19.85	16.98
1/29/01		17.59	19.24
7/28/01		20.05	16.78
2/3/02		15.89	20.94
7/23/02		19.57	17.26

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
MW-8 ("shallow")			
6/23/97	36.55	5.74	30.81
10/6/97		5.69	30.86
12/12/98		4.01	32.54
4/24/99		4.40	32.15
12/18/99		4.91	31.64
7/22/00		5.47	31.08
1/29/01		3.01	33.54
7/28/01		4.92	31.63
2/3/02		3.82	32.73
7/23/02		5.11	31.44
MW-9 ("shallow")			
6/23/97	36.70	17.04	19.66
10/6/97		19.17	20.53
12/12/98		14.18	22.52
4/24/99		12.33	24.37
12/18/99		16.14	20.56
7/22/00		15.78	20.92
1/29/01		14.65	22.05
7/28/01		15.33	21.37
2/3/02		12.59	24.11
7/23/02		15.27	21.43

Notes to Table 1A

(1) N/A = not applicable.
(2) Elevations from a survey conducted by Andreas Deak, California Licensed Land Surveyor, March 21, 1996, City of Oakland datum.
(3) Well under pressure when locking cap removed; water level may not have been stabilized.
(4) Depth to water was measured over a 120 minute period; indicated depths appear to be stabilized readings.
(5) Surveyed elevations of wells MW 1 and MW-2 varied to 0.02 foot on March 21, 1996 survey as compared to February 11, 1994 survey; previously calculated measurements of elevation have **not** been modified to reflect the new survey data. Similar slight survey differences on June 20, 1997 have not been corrected.
(6) Well not stabilized (water level rising).

TABLE 1B

SUMMARY OF GROUND WATER GRADIENT INFORMATION

Date	Shallow Wells		Deep Wells	
	Direction	Inclination	Direction	Inclination
8/6/90	N/A	N/A	N/A	N/A
1/28/92	N/A	N/A	N/A	N/A
4/27/92	N/A	N/A	N/A	N/A
8/10/92	N/A	N/A	N/A	N/A
2/11/94	N/A	N/A	N/A	N/A
2/28/94	N/A	N/A	N/A	N/A
9/9/94	N/A	N/A	N/A	N/A
12/28/94	N/A	N/A	N/A	N/A
4/13/95	N/A	N/A	N/A	N/A
11/1/95	N/A	N/A	N/A	N/A
3/8/96	N/A	N/A	N/A	N/A
3/25-26/96 (2)	N/A	N/A	N/A	0.01
10/7/96 (2)	N/A	N/A	N/A	0.02
1/15/97 (2)	N/A	N/A	S 33 E	0.13
6/23/97 (3)	N 44 W	0.24	S 68 E	0.07
10/6/97 (3)	N 47 W	0.29	S 55 E	0.11
12/12/98 (3)	N 33 W	0.32	S 47 E	0.05
4/24/99 (3)	N 59 W	0.17	S 44 E	0.07
12/18/99 (3)	N 55 W	0.26	S 44 E	0.07
7/22/00 (3)	N 56 W	0.24	S 65 E	0.19
1/29/01 (3)	N 47 W	0.30	S 65 E	0.20
7/28/01 (3)	N 51 W	0.24	S 65 E	0.05
2/3/02 (3)	N 50 W	0.23	S 65 E	0.05
7/23/02 (3)	N 51 W	0.24	S 85 E	0.11

Notes to Table 1B

(1) N/A = not applicable.
(2) Six wells.
(3) Nine wells.

TABLE 2

GROUND WATER

SUMMARY OF ANALYTICAL TEST RESULTS -
PETROLEUM HYDROCARBONS
(Results reported in parts per billion, ppb/ug/l) (1)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
MW-1 ("deep")							
8/6/90 (2)	54,000	NA	3,500	3,200	1,900	9,400	7,600
1/28/92	2,000,000	NA	7,400	17,000	28,000	120,000	7,500 (5)
4/27/92 (3)	500,000	NA	3,400	6,400	10,000	45,000	440,000 (6)
4/27/92 (4)	175,000	NA	4,200	4,400	3,200	14,600	N/A
8/10/92	170,000	NA	4,200	4,200	3,300	15,900	120,000 (6)
2/11/94	1,800,000	NA	ND	5,100	5,200	23,900	16,000 (6)
9/9/94	23,000,000	NA	56,000	61,000	9,100	137,000	880,000 (6)
12/28/94	55,000	NA	3,700	5,300	1,400	5,800	83,000 (6)
4/13/95	45,000	NA	2,800	3,400	1,200	5,100	50,000 (5)
11/1/95	44,000	NA	2,600	3,400	1,400	5,900	52,000 (5)
3/25/96	45,000	NA	3,000	4,100	1,600	6,800	46,000 (5) (7)
10/8/96	55,000	490	3,300	4,500	1,700	7,100	11,000 (5) (7)
1/16/97	48,000	310	2,600	3,200	1,300	5,300	110,000 (5) (7)
6/23/97	40,000	ND<100	2,300	3,500	1,500	6,300	190,000 (5) (7)
10/7/97	45,000	ND<680	2,500	3,600	1,700	6,800	150,000 (5) (7)
12/12/98	39,000	ND<1,500	3,000	100	1,400	5,800	67,000 (5) (7)
4/24/99	33,000	ND<200	2,300	3,300	1,100	4,100	140,000 (5) (7)
4/24/99 (8)	41,000	1,100	2,500	3,700	1,500	5,700	N/A
12/18/99	43,000	ND<200	2,600	3,800	1,400	5,800	110,000 (5) (7)
7/22/00	37,000	ND<200	2,200	2,600	1,300	5,200	320,000 (5) (7)
1/29/01	36,000	ND<200	2,100	2,300	1,200	4,500	76,000 (5) (7)
7/28/01	99,000	ND<250	1,500	2,300	1,700	6,600	86,000 (5) (7)
2/3/02	42,000	ND<500	1,200	1,300	1,100	3,900	42,000 (5) (7)
7/23/02	53,000	ND<1000	1,700	2,800	1,500	5,100	170,000 (5) (7)
MW-2 ("deep")							
2/11/94	130	NA	22	1.1	5.2	7.3	ND (6)
9/9/94	1,000	NA	89	ND	ND	6.9	ND (6)
12/28/94	330	NA	100	3.8	5.4	4.7	5100 (6)
4/13/95	1,300	NA	280	6.9	33	23	ND (5)
11/1/95	100	NA	9.9	ND	ND	ND	ND (5)
3/25/96	4,500	NA	470	57	220	280	ND (5) (7)
10/8/96	710	41	1.9	0.54	1.0	1.0	ND (5) (7)
1/16/97	330	12	41	2.4	1.3	9.9	ND (5) (7)
6/23/97	280	10	12	0.69	ND	13	NA (7)
10/7/97	320	ND<35	4.5	ND	ND	ND	NA (7)
12/12/98	290	ND<11	21	0.76	10	19	ND (5) (7)
4/24/99	360	21	36	1.3	9.2	19	ND<5000 (5) (7)
12/18/99	210	ND<200	13	ND	2.9	7.7	ND<5000 (5) (7)
7/22/00	180	ND<5	10	ND	4.5	6.0	ND<5000 (5) (7)
1/29/01	130	ND<5	16	ND	1.9	3.8	ND<5000 (5) (7)
7/28/01	ND<50	ND<5	2.7	ND	0.64	0.69	ND<5000 (5) (7)
2/3/02	140	ND<5	5.5	ND	9.0	12	ND<5000 (5) (7)
7/23/02	780	ND<15	52	2.0	44	6.2	ND<5000 (5) (7)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
MW-3 ("shallow")							
2/11/94	ND	NA	ND	ND	ND	ND	ND (6)
9/9/94	710	NA	10	ND	ND	3.5	ND (6)
12/28/94	2,300	NA	7.8	ND	130	73	ND (6)
4/13/95	1,700	NA	2.9	ND	61	24	ND (5)
11/1/95	1,100	NA	4.4	ND	27	22	ND (5)
3/25/96	2,300	NA	4.0	0.96	120	65	ND (5) (7)
10/8/96	160	ND	ND	0.5	1.2	0.77	ND (5) (7)
1/16/97	1,800	7.1	2.8	0.68	48	66	ND<5000 (5) (7)
6/23/97	ND	ND	ND	ND	ND	ND	NA (7)
10/7/97	ND	ND	ND	ND	ND	ND	NA (7)
12/12/98	1,900	ND	1.8	0.78	78	42	ND (5) (7)
4/24/99	2,100	ND	1.5	0.85	79	43	ND<5000 (5) (7)
12/18/99	330	ND	0.51	ND	ND	ND	ND<5000 (5) (7)
7/22/00	230	ND	0.89	2.4	ND	ND	ND<5000 (5) (7)
1/29/01	450	ND<5	1.1	1.6	11	3.6	ND<5000 (5)
7/28/01	ND<50	ND<5	ND<0.5	ND	ND	ND	ND<5000 (5)
2/3/02	98	ND<5	ND<0.5	ND	ND	ND	ND<5000 (5)
7/23/02	ND<50	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5)
MW-4 ("deep")							
3/26/96	9,900	NA	4,000	40	71	100	ND (5) (7)
10/8/96	7,800	140	3,900	33	31	40	ND (5) (7)
1/16/97	4,800	84	1,900	21	2.5	27	5,200 (5) (7)
6/23/97	6,200	160	2,800	20	20	23	ND (5) (7)
10/7/97	4,400	85	1,800	14	18	14	ND (5) (7)
12/12/98	3,500	110	1,500	13	39	14	ND (5) (7)
4/24/99	3,100	ND<10	1,700	22	67	21	7,500 (5) (7)
12/18/99	2,600	33	1,000	12	32	10	ND<5000 (5) (7)
7/22/00	2,700	60	940	14	31	12	7,000 (5) (7)
1/29/01	2,500	ND<5	980	11	35	5	ND<5000 (5) (7)
7/28/01	1,100	27	250	6.3	19	4.8	90,000 (5) (7)
2/3/02	2,100	ND<25	890	23	41	20	7,400 (5) (7)
7/23/02	1,200	ND<17	490	11	22	8.8	ND<5000 (5) (7)
MW-5 ("deep")							
3/26/96	1,200	NA	43	8.2	83	95	ND (5) (7)
10/8/96	6,700	190	260	92	410	370	ND (5) (7)
1/16/97	3,000	90	150	68	190	180	ND (5) (7)
6/23/97	12,000	150	410	170	920	800	NA (7)
10/7/97	10,000	ND<480	310	62	530	500	NA (7)
12/12/98	11,000	ND<660	400	120	740	480	ND (5) (7)
4/24/99	9,300	ND<100	390	290	820	770	ND<5000 (5) (7)
12/18/99	7,000	ND<100	250	52	500	300	ND<5000 (5) (7)
7/22/00	14,000	ND<100	290	140	770	630	12,000 (5) (7)
1/29/01	8,200	ND<5	180	42	420	250	11,000 (5) (7)
7/28/01	9,100	ND<70	190	67	540	430	ND<5000 (5) (7)
2/3/02	11,000	ND<100	250	160	730	540	ND<5000 (5)
7/23/02	6,400	ND<110	160	67	540	390	ND<5000 (5)
MW-6 ("shallow")							
3/26/96	9,900	NA	1,000	150	470	720	ND (5) (7)
10/8/96	1,300	57	120	2.3	1.4	4.0	ND (5) (7)
1/15/97	6,500	220	570	65	170	630	ND (5) (7)
6/23/97	3,100	100	410	16	110	140	NA (7)
10/7/97	960	ND<74	78	3.4	1.8	5.8	NA (7)
12/12/98	2,500	ND<160	230	10	92	110	ND (5) (7)
4/24/99	2,900	ND<10	430	33	160	200	ND<5000 (5) (7)
12/18/99	2,300	ND<200	170	6.6	56	63	ND<5000 (5) (7)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
MW-6 ("shallow") (continued)							
7/22/00	2,200	ND<10	290	9.6	80	43	ND<5000 (5) (7)
1/29/01	2,500	ND<10	220	11	150	230	ND<5000 (5) (7)
7/28/01	NA	NA	NA	NA	NA	NA	NA
2/3/02	2,500	ND<50	290	18	88	330	ND<5000 (5) (7)
7/23/02	1,100	ND<20	160	6.5	54	35	ND<5000 (5) (7)
MW-7 (deep")							
6/23/97	8,700	ND<20	950	260	520	380	ND (5) (7)
10/7/97	7,500	ND<310	1,100	86	280	150	ND (5) (7)
12/12/98	5,000	ND<190	640	43	200	55	ND (5) (7)
4/24/99	5,500	ND<10	640	180	290	210	ND<5000 (5) (7)
12/18/99	5,500	ND<10	570	27	91	31	ND<5000 (5) (7)
7/22/00	7,400	ND<80	620	180	240	180	10,000 (5) (7)
1/29/01	4,000	ND<10	410	21	22	21	7,000 (5) (7)
7/28/01	4,200	ND<70	540	120	110	110	ND<5000 (5) (7)
2/3/02	6,300	ND<25	560	110	190	140	ND<5000 (5) (7)
7/23/02	3,400	ND<50	440	6.3	87	61	ND<5000 (5) (7)
MW-8 ("shallow")							
6/23/97	610	5.9	25	1.4	4.3	2.4	ND (5) (7)
10/7/97	120	ND	6.9	ND	ND	ND	ND (5) (7)
12/12/98	ND	ND	ND	ND	ND	ND	ND (5) (7)
4/24/99	ND	ND	ND	ND	ND	ND	ND<5000 (5) (7)
12/18/99	ND	ND	ND	ND	ND	ND	ND<5000 (5) (7)
7/22/00	ND	ND	ND	ND	ND	ND	ND<5000 (5) (7)
1/29/01	ND	ND<5	0.87	ND	ND	ND	ND<5000 (5) (7)
7/28/01	ND	ND<5	ND	ND	ND	ND	ND<5000 (5) (7)
2/3/02	ND	16	ND	ND	ND	ND	ND<5000 (5) (7)
7/23/02	ND<50	ND<5	0.87	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)
MW-9 ("shallow")							
6/23/97	32,000	250	340	280	1,500	4,300	ND (5) (7)
10/7/97	33,000	ND<690	880	350	1900	4,700	ND (5) (7)
12/12/98	3,400	ND<78	160	14	220	210	ND (5) (7)
4/24/99	3,100	22	130	18	220	190	ND (5) (7)
12/18/99	7,500	100	220	44	440	650	ND<5000 (5) (7)
7/22/00	4,900	ND<10	93	15	240	250	71,000 (5) (7)
1/29/01	3,800	ND<10	160	35	260	310	5,000
7/28/01	5,700	ND<20	43	27	210	420	ND<5000 (5) (7)
2/3/02	7,800	ND<50	98	51	450	640	ND<5000 (5) (7)
7/23/02	2,300	ND<50	29	14	120	96	ND<5000 (5) (7)
EB-4 ("grab" gw sample)							
3/8/96	15,000	NA	780	840	1,300	590	7,500 (5) (7)
MCL	NA	13/5 (9)	1	150	700	1,750	NA

Notes to Table 2

(1) ND - non-detect; N/A - not applicable
(2) Kaldveer Associates report, September, 1990
(3) Sequoia Analytical Laboratory
(4) Applied Remediation Laboratory
(5) Gravimetric Method
(6) Infrared Method
(7) **HVOC detected:** see Table 3
(8) Free-phase product observed in bailer (additional sample)
(9) Primary and secondary MCL, respectively.

TABLE 3

GROUND WATER

SUMMARY OF ANALYTICAL TEST RESULTS -
HALOGENATED VOLATILE ORGANIC COMPOUNDS (HVOC)
(Results reported in parts per billion, ppb/ug/l) (1) (2)

Well and Date	CA	1,2 DCB	1,2 DCA	cis 1,2 DCE	trns 1,2 DCE	1,2 DCP	PCE	TCE	VCL
MW-1 ("deep")									
3/25/96	ND<5	7.2	5.3	82	ND<5	ND<5	ND<5	7.8	25
10/8/96	ND<20	ND<20	ND<20	45	ND<20	ND<20	ND<20	ND<20	26
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97	ND<2	10	4.1	130	3.7	ND<2	5.0	23	54
10/7/97	3.5	7.4	2.2	82	3.8	ND<2	ND<3	9.5	68
12/12/98	ND<2.5	7.4	ND<2.5	26	ND<2.5	ND<2.5	ND<2.7	ND<2.5	7.3
4/24/99 (8)	2.1	9.9	3.5	61	2.8	2.0	ND<4.2	ND<1.5	22
12/18/99 (9)	3.3	8.0	1.2	12	2.8	1.2	ND<0.5	ND<0.5	7.2
7/22/00 (10)	ND<2.5	16.0	ND<2.5	15	ND<2.5	ND<2.5	ND<5.0	ND<2.5	8.2
1/29/01 (11)	ND<10.0	23.0	ND<10	23	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
7/28/01 (12)	7.4	9.0	0.97	14	6.4	0.95	ND<0.5	ND<0.5	15
2/3/02 (13)	5.5	10.0	1.4	23	5.5	0.59	ND<0.5	ND<0.5	7.4
7/23/02 (14)	ND<10.0	2.5	ND<10.0	15	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
MW-2 ("deep")									
3/25/96	ND<0.5	ND<0.5	8.7	11	ND<0.5	1.0	ND<0.5	3.2	0.92
10/8/96	ND<0.5	ND<0.5	15	9.6	ND<0.5	1.1	ND<0.5	6.6	ND<0.5
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97	ND<0.5	ND<0.5	9.7	8.0	ND<0.5	0.86	ND<0.5	9.6	ND<0.5
10/7/97	ND<0.5	ND<0.5	18	11	ND<0.5	1.2	ND<0.5	15	ND<0.5
12/12/98	ND<0.5	ND<0.5	16	9.4	ND<0.5	1.1	ND<1	7.5	ND<0.5
4/24/99	ND<0.5	ND<0.5	13	7.8	ND<0.5	0.92	ND<0.5	8.4	ND<0.5
12/18/99	ND<0.5	ND<0.5	15	9.0	ND<0.5	1.5	ND<0.5	ND<0.5	ND<0.5
7/22/00	ND<0.5	ND<0.5	17	10	ND<0.5	1.2	ND<1.0	12.0	ND<0.5
1/29/01	ND<0.5	ND<0.5	12	9.1	ND<0.5	0.9	ND<5.0	12.0	ND<0.5
7/28/01	ND<0.5	ND<0.5	9.7	7.8	ND<0.5	0.95	ND<5.0	12.0	ND<0.5
2/3/02	ND<0.5	ND<0.5	7.1	6.7	ND<0.5	0.72	ND<0.5	9.0	ND<0.5
7/23/02	ND<0.5	ND<0.5	1.7	2.1	ND<0.5	ND<0.5	ND<0.5	0.97	ND<0.5
MW-3 ("shallow")									
3/25/96	ND<0.5	ND<0.5	0.56	1.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
10/8/96	ND<0.5	ND<0.5	1.1	0.87	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97	ND<0.5	ND<0.5	0.54	0.76	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
10/7/97	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
12/12/98	ND<0.5	ND<0.5	0.51	0.82	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<0.5
4/24/99	ND<0.5	ND<0.5	ND<0.5	0.65	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
12/18/99	ND<0.5	ND<0.5	0.72	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
7/22/00	ND<0.5	ND<0.5	0.52	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<0.5
1/29/01	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5
7/28/01	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
2/3/02	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
7/23/02	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-4 ("deep")									
3/26/96	ND<8	22	ND<8	300	9.2	ND<8	38	150	44
10/8/96	ND<15	22	4.9	320	ND<15	ND<15	52	130	60
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97 (5)	3.6	21	5.3	340	10	ND<3	11	110	83
10/7/97	ND<8	20	ND<8	380	9.9	ND<8	ND<12	56	56
12/12/98 (7)	ND<3.5	18	ND<3.5	150	12	ND<8	ND<4.5	12	57
4/24/99	ND<8.5	20	ND<8.5	390	12	ND<8.5	33	240	43
12/18/99	ND<10.0	27	ND<10.0	390	13	ND<10.0	ND<10.0	39	ND<10.0

Well and Date	CA	1,2 DCB	1,2 DCA	cis 1,2 DCE	trns 1,2 DCE	1,2 DCP	PCE	TCE	VCL
MW-4 ("deep") (continued)									
7/22/00	ND<10.0	38	ND<10.0	620	ND<10.0	ND<10.0	ND<10.0	19	97
1/29/01	ND<5.0	35	ND<5.0	380	15	ND<5.0	ND<5.0	19	97
7/28/01	ND<7.5	29	ND<5.0	310	18	ND<5.0	ND<5.0	8.4	150
2/3/02 (13)	ND<7.0	22	ND<7.0	310	16	ND<7.0	ND<7.0	20	120
7/23/02	ND<0.5	30	ND<0.5	240	17	ND<0.5	ND<0.5	ND<0.5	230
MW-5 ("deep")									
3/26/96	1.4	ND<0.5	2.1	6.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10
10/8/96	ND<2.5	ND<2.5	4.9	4.4	ND<2.5	ND<2.5	ND<2.5	ND<2.5	9.4
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97 (5)	2.0	2.1	2.0	7.2	0.71	ND<0.5	ND<0.5	ND<0.5	13
10/7/97	1.9	1.4	2.8	3.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10
12/12/98	1.4	2.0	1.1	3.7	ND<1	ND<1	ND<1.5	ND<1	5.8
4/24/99	ND<1	1.9	1.9	4.8	ND<1	ND<1	ND<1	ND<1	6.3
12/18/99	1.6	1.7	1.8	1.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.9
7/22/00	1.8	2.4	1.4	2.6	ND<1.0	ND<1.0	ND<1.0	ND<1.0	5.0
1/29/01	ND<1.0	2.2	2.6	2.2	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.2
7/28/01	1.4	1.3	1.7	1.4	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.6
2/3/02 (13)	1.8	2.0	2.1	3.9	0.95	ND<0.5	ND<0.5	ND<0.5	4.6
7/23/02	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
MW-6 ("shallow")									
3/26/96	ND<0.5	ND<0.5	3.9	15	ND<0.5	1.9	0.77	2	ND<0.5
10/8/96	ND<0.5	ND<0.5	2.3	9.9	ND<0.5	ND<0.5	ND<0.5	0.57	ND<0.5
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97	ND<0.5	ND<0.5	1.6	10	ND<0.5	ND<0.5	ND<0.5	0.63	0.50
10/7/97	ND<0.5	ND<0.5	3.4	7.9	ND<0.5	ND<0.5	ND<0.5	0.82	ND<0.5
12/12/98 (7)	ND<0.5	ND<0.5	1.5	8.4	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<0.5
4/24/99	ND<0.5	ND<0.5	2.3	17	ND<0.5	0.89	ND<1	0.73	0.59
12/18/99	ND<0.5	ND<0.5	2.2	8.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.62
7/22/00	ND<0.5	ND<0.5	1.2	9.3	ND<0.5	ND<0.5	ND<1.0	ND<0.5	0.97
1/29/01	ND<0.5	ND<0.5	1.1	11	ND<0.5	ND<0.5	ND<5.0	ND<0.5	0.77
7/28/01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2/3/02	ND<0.5	ND<0.5	1.5	13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
7/23/02	ND<1.0	ND<1.0	ND<1.0	9.3	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW-7 ("deep")									
6/23/97	0.93	1.6	ND<0.5	2.4	1.2	ND<0.5	9.8	17	1.5
10/7/97	ND<2	ND<2	ND<2	8.5	2.4	ND<2	38	110	ND<2
12/12/98	ND<2	2.2	ND<2	97	ND<2	ND<2	ND<3.5	ND<2	ND<2
4/24/99	ND<2	2.4	ND<2	31	ND<2	ND<2	9.3	82	ND<2
12/18/99 (9)	ND<3	5.7	ND<3	120	ND<3	ND<3	ND<3	12	ND<3
7/22/00 (10)	ND<5	18	ND<5	170	ND<5	ND<5	ND<5	8	ND<5
1/29/01 (11)	ND<5	18	ND<5	170	ND<5	ND<5	ND<5	8	ND<5
7/28/01 (12)	ND<5	11	ND<5	170	ND<5	ND<5	ND<5	6.9	6.1
2/3/02	ND<5.0	ND<5.0	ND<5.0	94	ND<5.0	ND<5.0	ND<5.0	30	ND<5.0
7/23/02	ND<10.0	12.0	ND<10.0	180	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
MW-8 ("shallow")									
6/23/97	ND<1	5.4	ND<1	64	ND<1	ND<1	97	100	ND<1
10/7/97	ND<0.5	1.1	ND<0.5	16	ND<0.5	ND<0.5	30	27	ND<0.5
12/12/98	ND<0.5	ND<0.5	ND<0.5	3.4	ND<0.5	ND<0.5	4.8	4.7	ND<0.5
4/24/99	ND<0.5	ND<0.5	ND<0.5	1.9	ND<0.5	ND<0.5	3.4	3.4	ND<0.5
12/18/99	ND<0.5	ND<0.5	ND<0.5	5.3	ND<0.5	ND<0.5	5.9	6.4	ND<0.5
7/22/00	ND<0.5	ND<0.5	ND<0.5	1.7	ND<0.5	ND<0.5	2.4	1.6	ND<0.5
1/29/01	ND<0.5	ND<0.5	ND<0.5	10	ND<0.5	ND<0.5	ND<5.0	8.8	ND<0.5
7/28/01	ND<0.5	ND<0.5	ND<0.5	2.6	ND<0.5	ND<0.5	ND<1.5	2.1	ND<0.5
2/3/02	ND<0.5	ND<0.5	ND<0.5	6.6	ND<0.5	ND<0.5	3.3	4.6	ND<0.5
7/23/02	ND<0.5	ND<0.5	ND<0.5	8.4	ND<0.5	ND<0.5	3.5	5.2	ND<0.5

Well and Date	CA	1,2 DCB	1,2 DCA	cis 1,2 DCE	trns 1,2 DCE	1,2 DCP	PCE	TCE	VCL
MW-9 (shallow")									
6/23/97 **(5)**	ND<1	**2.1**	ND<1	**7.4**	ND<1	ND<1	**3.5**	**1.4**	ND<1
10/7/97 **(6)**	ND<0.5	**1.6**	**2.1**	**21**	ND<0.5	**0.7**	**ND<2**	**0.53**	**2.7**
12/12/98	ND<0.5	**0.7**	**0.53**	**1.9**	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<0.5
4/24/99	ND<0.5	**0.81**	**0.52**	**3.1**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
12/18/99	ND<0.5	**1.1**	**0.67**	**3.7**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**0.63**
7/22/00	ND<1	**1.4**	ND<1	**1.6**	ND<1	ND<1	ND<1	ND<1	ND<1
1/29/01	ND<0.5	**1.2**	**0.71**	ND<0.5	**8.2**	ND<0.5	ND<5.0	ND<0.5	**0.53**
7/28/01	ND<0.5	**0.87**	ND<0.5	**0.92**	ND<0.5	ND<0.5	ND<5.0	**2.5**	ND<0.5
2/3/02	ND<0.5	**1.2**	ND<0.5	**2.4**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
7/23/02	ND<2.5	**3.5**	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
EB-4 (grab)									
3/8/96	ND	ND	ND	**42**	ND	ND	**130**	**340**	ND
MCL	NA	**600**	**0.5**	**6**	**10**	**5**	**7**	**5**	**0.5**

Notes to Table 3

(1) ND = non-detect; reporting limit 0.5 ug/l (ppb) unless otherwise stated
(2) N/A = not applicable
(3) Composite
(4) Abbreviations as follows:

CA	Chloroethane	1,2 DCP	1,2 Dichloropropane
1,2 DCB	1,2 Dichlorobenzene	PCE	Tetrachloroethene (perchloroethe
1,2 DCA	1,2 Dichloroethane	TCE	trichloroethene
cis 1,2 DCE	cis 1,2 Dichloroethene	VCL	vinyl chloride
trans 1,2 DCE	trans 1,2 Dichloroethene		

(5) 6/23/97 additional detections:
MW-4: 4.8 ppb 1,4-Dichlorobenzene
MW-5: 0.53 ppb 1,4-Dichlorobenzene
MW-9: 2.1 ppb chloroform (tetrachloromethane)
(6) 10/7/97 additional detections:
MW-9: 0.65 chloroform (tetrachloromethane)
(7) 12/12/98 additional detections:
MW-4: 6.2 ppb 1,3-Dichlorobenzene
MW-4: 4.8 ppb 1,4-Dichlorobenzene
MW-6: 8.9 ppb 1,1,1-Trichloroethane
• 4/24/99 additional detections:
MW-1: 1.6 ppb Chloroform
MW-1: 2.5 ppb 1,4-Dichlorobenzene
(9) 12/18/99 additional detections:
MW-1: 1.3 ppb Dibromochloromethane
MW-1: 1.2 ppb 1,3-Dichlorobenzene
MW-1: 2.2 ppb 1,4-Dichlorobenzene
MW-1: 9.9 ppb 1,4-Dichlorobenzene
(10) 7/22/00 additional detections:
MW-1: 5.0 ppb 1,4 Dichlorobenzene
MW-7: 6.1 ppb 1,4 Dichlorobenzene
(11) 1/29/01 additional detections:
MW-1: 23.0 ppb 1,3 Dichlorobenzene
MW-4: 6.3 ppb 1,3 Dichlorobenzene
MW-4: 9.0 ppb 1,4 Dichlorobenzene

Notes to Table 3 continued

(12) 7/28/01 additional detections:
MW-1: 0.60 ppb 2-Chloroethyl Vinyl Ether
MW-1: 1.2 ppb 1,3 Dichlorobenzene
MW-1: 3.0 ppb 1,4 Dichlorobenzene
MW-4: 26 ppb 1,4 Dichlorobenzene
MW-7: 5.9 ppb 1,4 Dichlorobenzene

(13) 2/3/02 additional detections:
MW-1: 0.73 ppb 2-Chloroethyl Vinyl Ether
MW-1: 1.8 ppb 1,3 Dichlorobenzene
MW-1: 3.8 ppb 1,4 Dichlorobenzene
MW-4: 9.8 ppb 1,4 Dichlorobenzene
MW-5: 0.59 ppb 1,4 Dichlorobenzene

(14) 7/23/02 additional detections:
MW-1: 112 ppb 1,3 Dichlorobenzene

TABLE 4

GROUND WATER

SUMMARY OF ANALYTICAL TEST RESULTS -
POLYNUCLEAR AROMATIC HYDROCARBONS (PNA, PAH)
(Results reported in parts per **billion**, ppb/ug/l) (1) (2) (3)

Well and Date	**Phenanthrene**	**Naphthalene**
MW-1 ("deep")		
6/23/97	**12**	**2200**
10/7/97	ND<100	**810**
MCL	N/A	N/A

Notes to Table 4

(1) ND = non-detect
(2) N/A = not applicable
(3) Detected compounds only

TABLE 5

GROUND WATER

SUMMARY OF ANALYTICAL TEST RESULTS - ADDITIONAL CHEMICAL PARAMETERS

(Results reported in parts per million, mg/l) (1)

Well and Date	Dissolved Oxygen	Ferrous Iron	Nitrate	Sulfate
MW-1 ("deep")				
10/8/96	1.5	ND	ND	ND
1/16/97	1.4	3.6	ND	ND
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
MW-2 ("deep")				
10/8/96	3.7	ND	3	25
1/16/97	5.4	0.28	3	25
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
MW-3 ("shallow")				
10/8/96	3.8	ND	ND	5
1/16/97	5.2	ND	ND	5
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
MW-4 ("deep")				
10/8/96	3.0	ND	ND	ND
1/16/97	4.7	0.75	ND	5
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A

Well and Date	Dissolved Oxygen	Ferrous Iron	Nitrate	Sulfate
MW-4 ("deep") continued				
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
MW-5 ("deep")				
10/8/96	**2.8**	ND	ND	**8**
1/16/97	**3.4**	**0.38**	ND	**9**
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
MW-6 ("shallow")				
10/8/96	**2.7**	ND	ND	**6**
1/16/97	**2.7**	**0.28**	ND	**8**
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
MW-7 ("deep")				
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
MW-8 ("shallow")				
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A

Well and Date	Dissolved Oxygen	Ferrous Iron	Nitrate	Sulfate
MW-9 ("shallow")				
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/01	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A

Notes to Table 5

(1) ND = non-detect
(2) N/A = not applicable

TABLE 6

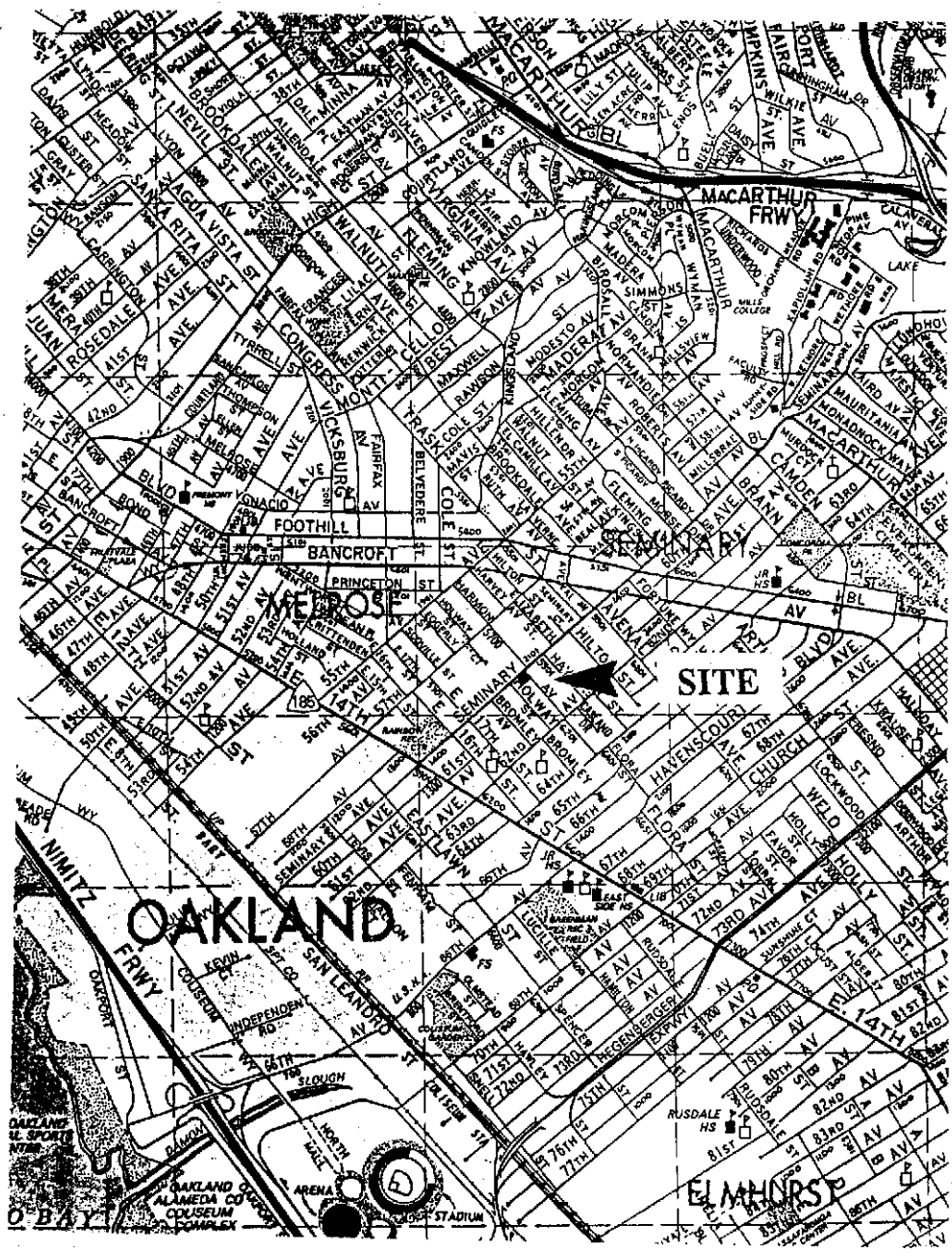
GROUND WATER

SUMMARY OF ANALYTICAL TEST RESULTS - FUEL FINGERPRINT WITH SILICA GEL CLEAN UP

Well and Date	Fuel Fingerprint (2)
MW-1 ("deep")	
2/3/02	Significant hydrocarbon pattern between C6 and C12 that resembles gasoline. Also shows a hydrocarbon pattern between C18 and C30 that resembles oil.
MW-2 ("deep")	
2/3/02	ND < 50 ug/L
MW-3 ("shallow")	
2/3/02	ND < 50 ug/L
MW-4 ("deep")	
2/3/02	Significant hydrocarbon pattern between C9 and C12 that resembles stoddard solvent. Also shows a hydrocarbon pattern between C18 and C30 that resembles oil.
MW-5 ("deep")	
2/3/02	Significant hydrocarbon pattern between C6 and C12 that resembles fresh gasoline.
MW-6 ("shallow")	
2/3/02	Significant hydrocarbon pattern between C6 and C12 that resembles fresh gasoline.
MW-7 ("deep")	
2/3/02	Significant hydrocarbon pattern between C6 and C12 that resembles fresh gasoline.
MW-8 ("shallow")	
2/3/02	ND < 50 ug/L
MW-9 ("shallow")	
2/3/02	Significant hydrocarbon pattern between C6 and C12 that resembles fresh gasoline.

Notes to Table 6

(1) ND = non-detect
(2) See laboratory report for chromatograms.



ALAMEDA COUNTY

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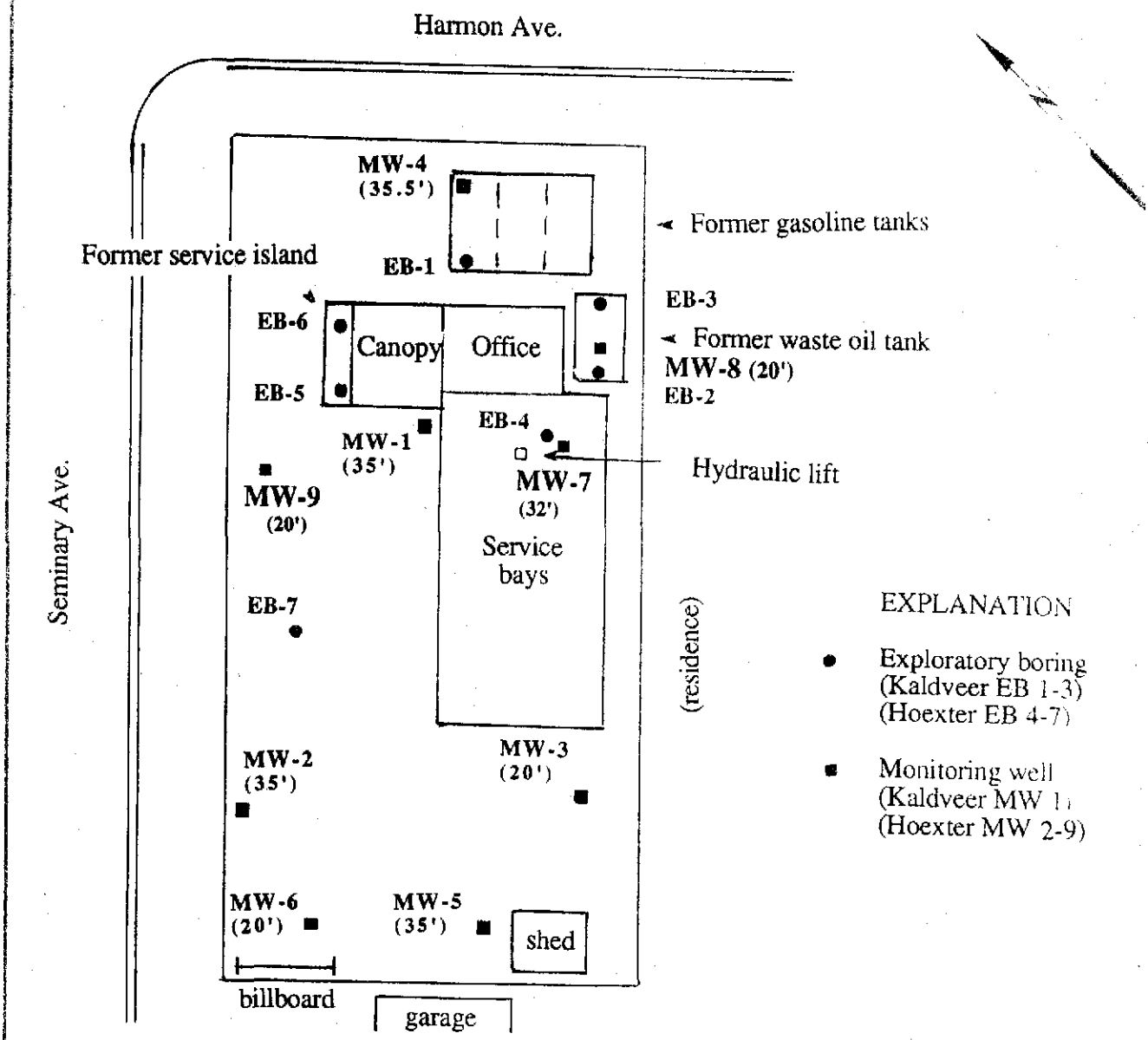
LOCATION MAP

1970 Seminary Ave.
Oakland, California

Project No.	Date	Figure
E-10-1E-391E	August, 2002	1



Base: A. Deak, Licensed Land Surveyor, 3/21/96 (wells, streets & property line); Hoexter field sketch, 10/25/93 (explor. borings, other features)

20 0 20 40

Approximate Scale in Feet

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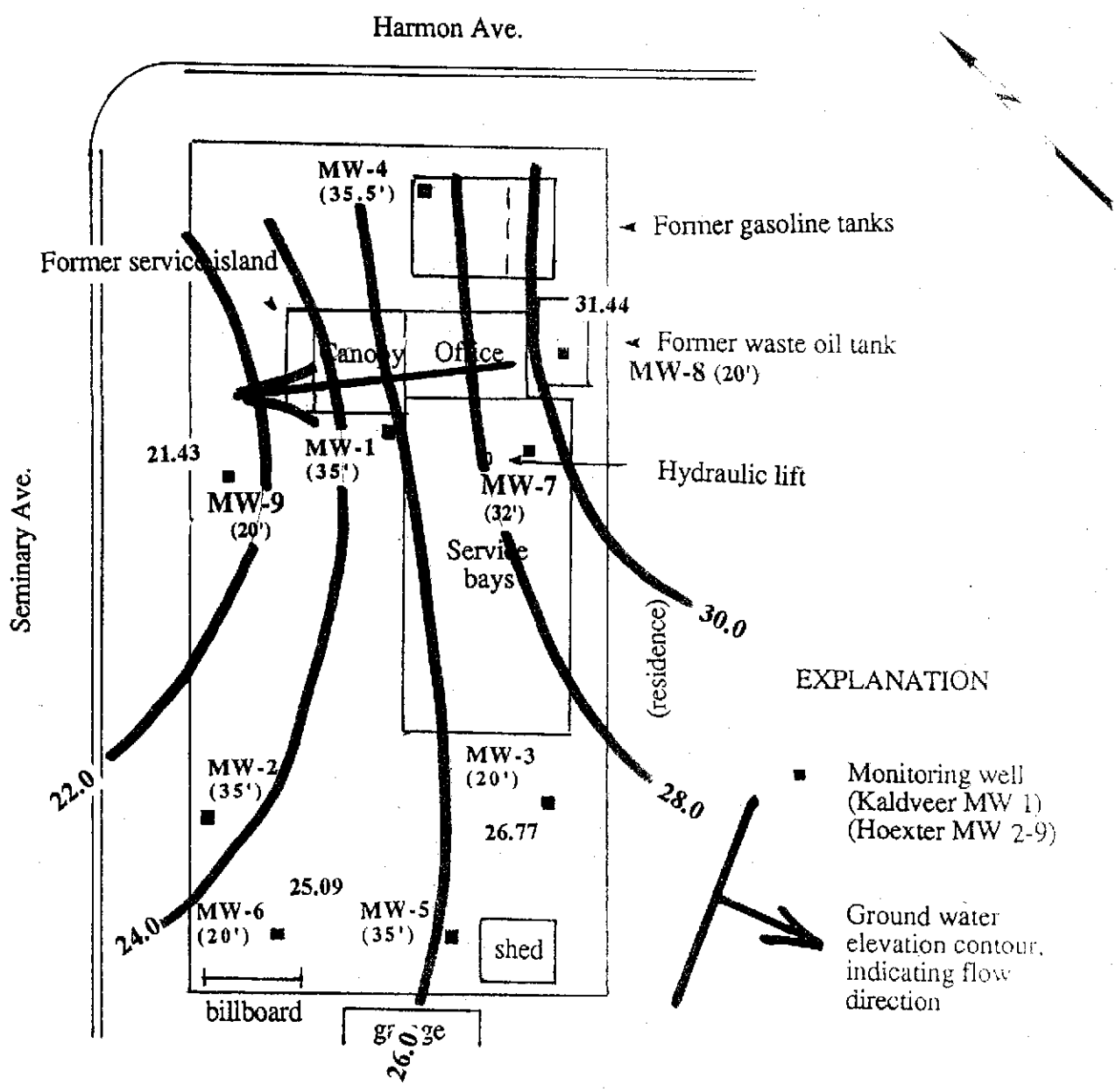
SITE PLAN

1970 Seminary Ave.
Oakland, California

Project No.	Date	Figure 2
E-10-1E-391E	August, 2002	



Base: A. Deak, Licensed Land Surveyor, 3/21/96 (wells, streets & property line); Hoexter field sketch, 10/25/93 (explor. borings, other features)

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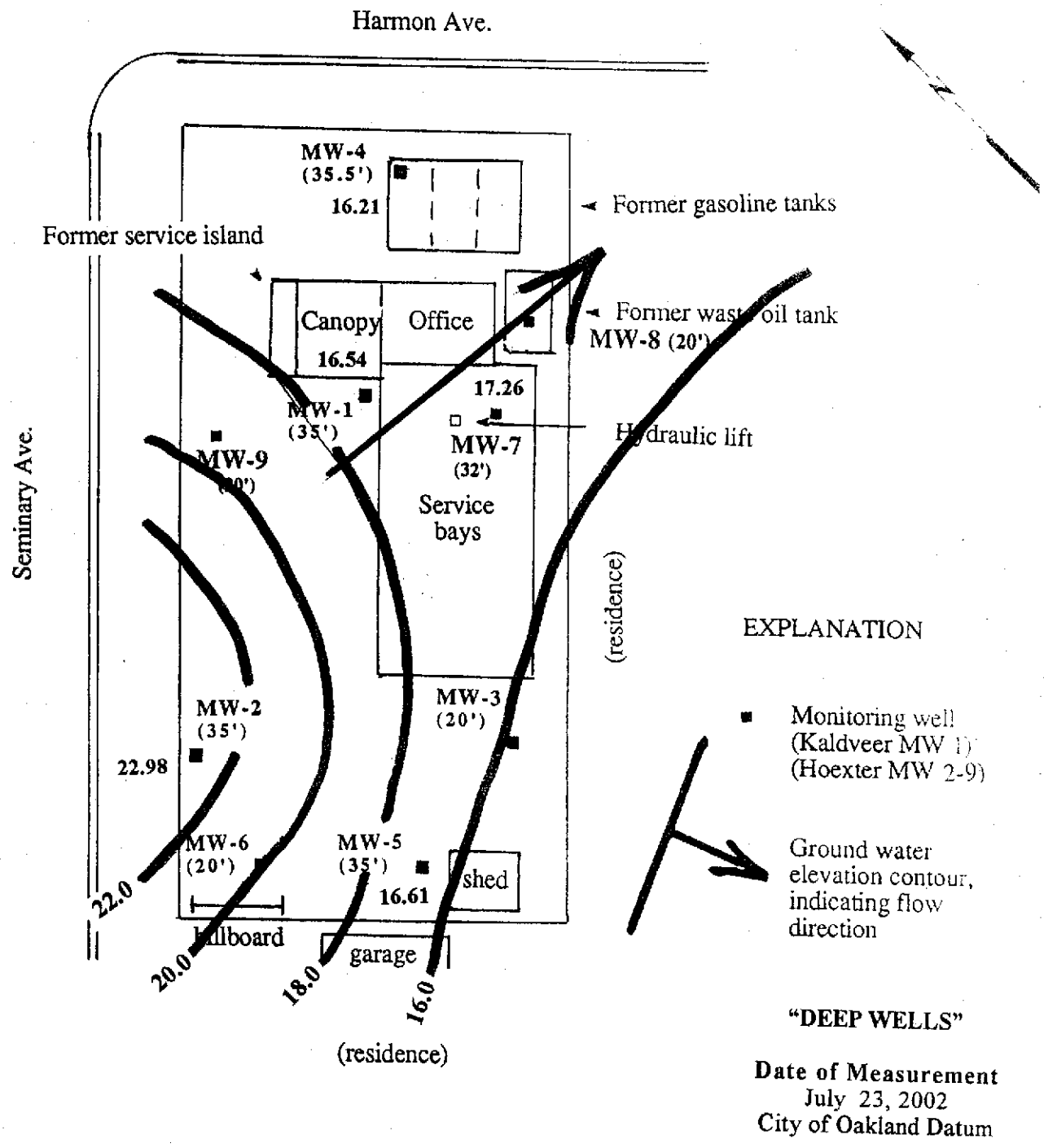
GROUND WATER CONTOUR AND GRADIENT DIRECTION MAP

1970 Seminary Ave.
Oakland, California

Project No.	Date	Figure
E-10-1E-391E	August, 2002	3A



Base: A. Deak, Licensed Land Surveyor, 3/21/96 (wells, streets & property line); Hoexter field sketch, 10/25/93 (explor. borings, other features)

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GROUND WATER CONTOUR AND GRADIENT DIRECTION MAP

1970 Seminary Ave.
Oakland, California

Project No.	Date	Figure
E-10-1E-391E	August, 2002	3B

APPENDIX A

WATER SAMPLE LOGS
CHAIN OF CUSTODY
ANALYTICAL TEST RESULTS

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: 1970 Seminary Dr. Oakland CA
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe / D. Hoexter
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: ____
Date: 7/23/02
Sample Location/I.D.: MW-1
Start Time: ____

Depth of Well (feet): 35
Depth to Water (feet): 20.45
Sample Depth (feet): ____

Calculated Purged Volume: 9.2
Actual Purged Volume 10

35 - 21 = 14 → 2.3 gal/vol

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1433	2.5	2.5	6.60	1290	68.6	V. slightly cloudy	
1440	5.0	↓	7.22	1153	69.6		
1447	7.5	↓	6.57	1313	69.2		
1520	10.0	↓	6.52	1207	68.4	Developed/Recovered	

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK + petrol. odor
Remarks: SI. product initial extraction; increased oil/product subsequent purge volumes. Sampled 2 VOA 1 Amber 1658

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: 1970 Seminary Dr. Oakland, CA
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe / D. Hoexter
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: ____
Date: 7/23/02
Sample Location/I.D.: MW-3
Start Time: ____

Depth of Well (feet): 35
Depth to Water (feet): 13.42
Sample Depth (feet): ____

Calculated Purged Volume: 13.6
Actual Purged Volume 14

35 - 14 = 21'

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1255	3.5	3.5	6.57	889	66.9	clear	SL. odor No sheen
1307	7.0		6.61	880	67.0		
1315	10.5		6.66	881	68.5		
1325	14.0		6.64	885	67.6		

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ____ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: No product, sheen, odor initial extraction. Sampled 2 VOA 1 amber 1730

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

E-10-1E-391.

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: 1970 Seminary Dr. Oakland CA
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe / D. Hoexter
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: ____
Date: 7/23/02
Sample Location/I.D.: MW-3
Start Time: ____

Depth of Well (feet): 20
Depth to Water (feet): 10.17
Sample Depth (feet): ____

Calculated Purged Volume: 6.2
Actual Purged Volume 6

20 - 10.5 = 9.5' → 1.55 gal/vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1145	2	2	6.36	533	64.8	clear	
1150	4		6.33	532	63.8		
1225	6	√	6.50	545	65.8	Dewatered	

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: NO product, sheen, odor initial extraction. Sampled 2 VOA 1 amber 1735.

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

E-10-14-39

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: 1970 Seminary Dr. Oakland CA
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe / D. Hoexter
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: ____
Date: 7/25/02
Sample Location/I.D.: MW-4
Start Time: ____

Depth of Well (feet): 35.5
Depth to Water (feet): 20.26
Sample Depth (feet): ____

Calculated Purged Volume: 10
Actual Purged Volume 7.5
35.5 - 21 = 14.5' → 2.5 gal/in

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1345	2.5	2.5	6.64	809	67.3	Sl. sheen odor	
1355	5.0	"	6.59	805	67.3	cloudy	
1402	7.5	"	6.63	806	66.8	"green"	
						Dewatered	

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: No sheen, slight odor initial extraction. Sheen on following extraction. Sampled 2 VOA 1 amber 1714

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

E-10-14-39

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: 1970 Seminary Dr. Oakland CA
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe / D. Hoexter
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: ____
Date: 7/23/02
Sample Location/I.D.: MW-5
Start Time: ____

Depth of Well (feet): 35
Depth to Water (feet): 20.16
Sample Depth (feet): ____

Calculated Purged Volume: 10
Actual Purged Volume 5.5
35 - 21 => 14
=> 2.5 gal/ft

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1239	2.5	2.5	6.50	721	65.9	clear	
1248	5.0	"	6.56	869	65.4	"	
1259	7.5	"	6.56	863	65.8	"	Light gray
1310	8.5	1.0	6.80	872	66.7	Developed	"

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: No product, sheen, odor, Sampled with bailer @ 16:42

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft.
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

E-10-1E-341

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: 1970 Seminary Dr, Oakland (A) Lab I.D.:
Client: D. Grimit Date: 7/23/02
Project Manager: D.F. Hoexter Sample Location/I.D.: MW-6
Sampler: J. Forsythe / D. Hoexter Start Time:
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Depth of Well (feet): 20
Depth to Water (feet): 11.33
Sample Depth (feet): ____

Calculated Purged Volume: 6
Actual Purged Volume 4.5

20 - 12 = 8'
→ 1.5 gal/ft

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1320	1.5	1.5	6.53	901	68.4	clear	
1328	3.0	1	6.51	883	67.0		
1338	4.5	V	6.58	874	66.7	Sl. cloudy / slight sheen	
						Dense Tarry	

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: NO product, sheen, odor. Sampled 2 VOA, 1 amber 1617.

Signature: J. Forsythe

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: 1970 Seminary Dr Calabasas 04 Lab I.D.:
Client: D. Grimit Date: 7/23/02
Project Manager: D.F. Hoexter Sample Location/I.D.: MW-1
Sampler: J. Forsythe / D. Hoexter Start Time:
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other:

Depth of Well (feet): 32
Depth to Water (feet): 19.57
Sample Depth (feet):

Calculated Purged Volume: 8
Actual Purged Volume 8

32 - 20 = 12'
⇒ 2 x 4 Vol

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1354	2	2	6.56	835	66.2	clear	
1405	4	|	6.88	763	65.7	V. sl. cloudy	
1415	6	|	6.69	735	66.1	|	
1426	8	V	6.67	723	66.1	V	

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: No product or sheen, sl. possible H_2S (?) odor.
Sampled 2 VOA I amber 16:32.

Signature: D. Hoexter

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: 1970 Seminary Dr. Oakland CA Lab I.D.:
Client: D. Grimit Date: 7/25/07
Project Manager: D.F. Hoexter Sample Location/I.D.: MW-6
Sampler: J. Forsythe / D. Hoexter Start Time:
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Depth of Well (feet): 20
Depth to Water (feet): 5.11
Sample Depth (feet): ____

Calculated Purged Volume: 10
Actual Purged Volume: 10
20 - 6 = 14'
→ 2.5 gal/ft

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1155	2.5	2.5	6.80	520	67.5	clear	
1205	5.0	"	6.71	524	67.3	"	
1230	7.5	"	6.82	518	67.6	"	
1238	10.0	"	6.76	518	67.5	"	

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: NO product, sheen, odor. Sampled 7 vol off pump @ 1405

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

E-10-16-391.6

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: 1970 Seminary Dr. Oakland CA
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe / D. Hoexter
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: ____
Date: 7/23/02
Sample Location/I.D.: MW-9
Start Time: ____

Depth of Well (feet): 20
Depth to Water (feet): 15.27
Sample Depth (feet): ____

Calculated Purged Volume: 2.6
Actual Purged Volume 1.5
20 - 16 = 4'
→ 0.65 Gal/Vol

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1130	0.75	0.75	6.39	930	67.3	V.sl.cloudy / tan	
1135	1.50	0.75	6.39	955	67.0	decolored -	

Purge Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer ____ Well Wizard ✓ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: NO product, sheen, sl. H2S odor.
Sampled 2 VOA / amber 1742.

Signature: J. Forsythe

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

McCampbell 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

Hoexter Consulting Eng. Geology 734 Torreya Court Palo Alto, CA 94303-4160	Client Project ID: E-10-1E-391E; 1970 Seminery Ave. Oakland CA	Date Sampled: 07/23/02 Date Received: 07/24/02
	Client Contact: David E. Hoexter	Date Reported: 07/30/02
	Client P.O.:	Date Completed: 07/30/02

July 30, 2002

Dear David:

Enclosed are:

1). the results of 9 samples from your **E-10-1E-391E; 1970 Seminery Ave. Oakland CA project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical Inc.
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http://www.mccampbell.com E-mail: main@mccampbell.com

Hoexter Consulting Eng. Geology	Client Project ID: E-10-1E-391E: 1970 Seminery Ave. Oakland CA	Date Sampled: 07/23/02
734 Torreya Court		Date Received: 07/24/02
Palo Alto, CA 94303-4160	Client Contact: David E. Hoexter	Date Extracted: 07/26/02-07/28/02
	Client P.O.:	Date Analyzed: 07/26/02-07/28/02

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0207536

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	53,000,a,h	ND<1000	1700	2800	1500	5100	200	103
002A	MW-2	W	780,a	ND<15	52	2.0	44	6.2	1	---#
003A	MW-3	W	ND	ND	ND	ND	ND	ND	1	103
004A	MW-4	W	1200,a	ND<17	490	11	22	8.8	3.3	119
005A	MW-5	W	6400,a	ND<110	160	67	540	390	10	119
006A	MW-6	W	1100,a	ND<20	160	6.5	54	35	2	---#
007A	MW-7	W	3400,a	ND<50	440	63	87	61	10	109
008A	MW-8	W	ND	ND	0.87	ND	ND	ND	1	---#
009A	MW-9	W	2300,a	ND<50	29	14	120	96	10	109
Reporting Limit for DF =1; ND means not detected at or above the reporting limit		W	50	5.0	0.5	0.5	0.5	0.5		ug/L
		S	1.0	0.05	0.005	0.005	0.005	0.005		mg/Kg

*water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, wipe samples in ug/wipe, and TCLP extracts in ug/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 (stoddard solvent); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Hoexter Consulting Eng. Geology 734 Torreya Court Palo Alto, CA 94303-4160	Client Project ID: E-10-1E-391E; 1970 Seminery Ave. Oakland CA	Date Sampled: 07/23/02
		Date Received: 07/24/02
	Client Contact: David E. Hoexter	Date Extracted: 07/24/02
	Client P.O.:	Date Analyzed: 07/25/02

Petroleum Oil & Grease with Silica Gel Clean-Up*

Analytical Method: SM5520B/F

Work Order: 0207336

Lab ID	Client ID	Matrix	POG
0207336-001C	MW-1	W	170,h
0207336-002C	MW-2	W	ND
0207336-003C	MW-3	W	ND
0207336-004C	MW-4	W	ND
0207336-005C	MW-5	W	ND
0207336-006C	MW-6	W	ND
0207336-007C	MW-7	W	ND
0207336-008C	MW-8	W	ND
0207336-009C	MW-9	W	ND
Method Accuracy and Reporting Units		W	5.0 mg/L
		S	NA

DHS Certification No. 1644

Edward Hamilton, Lab Director

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http://www.mccampbell.com E-mail: main@mccampbell.com

Hoexter Consulting Eng. Geology	Client Project ID: E-10-1E-391E: 1970 Seminery Ave. Oakland CA	Date Sampled: 07/23/02
734 Torreya Court		Date Received: 07/24/02
Palo Alto, CA 94303-4160	Client Contact: David E. Hoexter	Date Extracted: 07/24/02-07/25/02
	Client P.O.:	Date Analyzed: 07/24/02-07/25/02

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8021B Work Order: 0207336

Lab ID	0207336-001B	0207336-002B	0207336-003B	0207336-004B	Reporting Limit for DF =1	
Client ID	MW-1	MW-2	MW-3	MW-4		
Matrix	W	W	W	W		
DF	20	1	1	20	S	W
Compound	**Concentration**				ug/kg	µg/L
Bromodichloromethane	ND<10	ND	ND	ND<10	NA	0.5
Bromoform	ND<10	ND	ND	ND<10	NA	0.5
Bromomethane	ND<10	ND	ND	ND<10	NA	0.5
Carbon Tetrachloride	ND<10	ND	ND	ND<10	NA	0.5
Chlorobenzene	ND<10	ND	ND	ND<10	NA	0.5
Chloroethane	ND<10	ND	ND	ND<10	NA	0.5
2-Chloroethyl vinyl ether	ND<10	ND	ND	ND<10	NA	0.5
Chloroform	ND<10	ND	ND	ND<10	NA	0.5
Chloromethane	ND<10	ND	ND	ND<10	NA	0.5
Dibromochloromethane	ND<10	ND	ND	ND<10	NA	0.5
1,2-Dichlorobenzene	25	ND	ND	30	NA	0.5
1,3-Dichlorobenzene	12	ND	ND	ND<10	NA	0.5
1,4-Dichlorobenzene	ND<10	ND	ND	ND<10	NA	0.5
Dichlorodifluoromethane	ND<10	ND	ND	ND<10	NA	0.5
1,1-Dichloroethane	ND<10	ND	ND	ND<10	NA	0.5
1,2-Dichloroethane	ND<10	1.7	ND	ND<10	NA	0.5
1,1-Dichloroethene	ND<10	ND	ND	ND<10	NA	0.5
cis-1,2-Dichloroethene	15	2.1	ND	240	NA	0.5
trans-1,2-Dichloroethene	ND<10	ND	ND	17	NA	0.5
1,2-Dichloropropane	ND<10	ND	ND	ND<10	NA	0.5
cis-1,3-Dichloropropene	ND<10	ND	ND	ND<10	NA	0.5
trans-1,3-Dichloropropene	ND<10	ND	ND	ND<10	NA	0.5
Methylene chloride	ND<10	ND	ND	ND<10	NA	0.5
1,1,2,2-Tetrachloroethane	ND<10	ND	ND	ND<10	NA	0.5
Tetrachloroethene	ND<10	ND	ND	ND<10	NA	0.5
1,1,1-Trichloroethane	ND<10	ND	ND	ND<10	NA	0.5
1,1,2-Trichloroethane	ND<10	ND	ND	ND<10	NA	0.5
Trichloroethene	ND<10	0.97	ND	ND<10	NA	0.5
Trichlorofluoromethane	ND<10	ND	ND	ND<10	NA	0.5
Vinyl Chloride	ND<10	ND	ND	230	NA	0.5
	Surrogate Recoveries (%)					
%SS:	99.9	103	96.1	102		
Comments	h					

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

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.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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http://www.mccampbell.com E-mail: main@mccampbell.com

Hoexter Consulting Eng. Geology	Client Project ID: E-10-1E-391E: 1970 Seminery Ave. Oakland CA	Date Sampled: 07/23/02
734 Torreya Court		Date Received: 07/24/02
Palo Alto, CA 94303-4160	Client Contact: David E. Hoexter	Date Extracted: 07/24/02-07/25/02
	Client P.O.:	Date Analyzed: 07/24/02-07/25/02

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8021B Work Order: 0207336

Lab ID	0207336-005B	0207336-006B	0207336-007B	0207336-008B	Reporting Limit for DF =1	
Client ID	MW-5	MW-6	MW-7	MW-8		
Matrix	W	W	W	W		
DF	5	2	20	1	S	W
Compound	**Concentration**				ug/kg	µg/l
Bromodichloromethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
Bromoform	ND<2.5	ND<1	ND<10	ND	NA	0.5
Bromomethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
Carbon Tetrachloride	ND<2.5	ND<1	ND<10	ND	NA	0.5
Chlorobenzene	ND<2.5	ND<1	ND<10	ND	NA	0.5
Chloroethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
2-Chloroethyl vinyl ether	ND<2.5	ND<1	ND<10	ND	NA	0.5
Chloroform	ND<2.5	ND<1	ND<10	ND	NA	0.5
Chloromethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
Dibromochloromethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,2-Dichlorobenzene	ND<2.5	ND<1	12	ND	NA	0.5
1,3-Dichlorobenzene	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,4-Dichlorobenzene	ND<2.5	ND<1	ND<10	ND	NA	0.5
Dichlorodifluoromethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,1-Dichloroethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,2-Dichloroethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,1-Dichloroethene	ND<2.5	ND<1	ND<10	ND	NA	0.5
cis-1,2-Dichloroethene	ND<2.5	9.3	180	8.4	NA	0.5
trans-1,2-Dichloroethene	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,2-Dichloropropane	ND<2.5	ND<1	ND<10	ND	NA	0.5
cis-1,3-Dichloropropene	ND<2.5	ND<1	ND<10	ND	NA	0.5
trans-1,3-Dichloropropene	ND<2.5	ND<1	ND<10	ND	NA	0.5
Methylene chloride	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,1,2,2-Tetrachloroethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
Tetrachloroethene	ND<2.5	ND<1	ND<10	3.5	NA	0.5
1,1,1-Trichloroethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
1,1,2-Trichloroethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
Trichloroethene	ND<2.5	ND<1	ND<10	5.2	NA	0.5
Trichlorofluoromethane	ND<2.5	ND<1	ND<10	ND	NA	0.5
Vinyl Chloride	ND<2.5	ND<1	ND<10	ND	NA	0.5
Surrogate Recoveries (%)						
%SS:	109	100	92.3	99.6		
Comments						

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

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.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCampbell 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

Hoexter Consulting Eng. Geology	Client Project ID: E-10-1E-391E: 1970 Seminery Ave. Oakland CA	Date Sampled: 07/23/02
734 Torreya Court		Date Received: 07/24/02
Palo Alto, CA 94303-4160	Client Contact: David E. Hoexter	Date Extracted: 07/24/02-07/25/02
	Client P.O.:	Date Analyzed: 07/24/02-07/25/02

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8021B Work Order: 0207336

		Reporting Limit for DF =1	
Lab ID	0207336-009B		
Client ID	MW-9		
Matrix	W		
DF	5	S	W
Compound	**Concentration**	ug/kg	µg/L
Bromodichloromethane	ND<2.5	NA	0.5
Bromoform	ND<2.5	NA	0.5
Bromomethane	ND<2.5	NA	0.5
Carbon Tetrachloride	ND<2.5	NA	0.5
Chlorobenzene	ND<2.5	NA	0.5
Chloroethane	ND<2.5	NA	0.5
2-Chloroethyl vinyl ether	ND<2.5	NA	0.5
Chloroform	ND<2.5	NA	0.5
Chloromethane	ND<2.5	NA	0.5
Dibromochloromethane	ND<2.5	NA	0.5
1,2-Dichlorobenzene	3.5	NA	0.5
1,3-Dichlorobenzene	ND<2.5	NA	0.5
1,4-Dichlorobenzene	ND<2.5	NA	0.5
Dichlorodifluoromethane	ND<2.5	NA	0.5
1,1-Dichloroethane	ND<2.5	NA	0.5
1,2-Dichloroethane	ND<2.5	NA	0.5
1,1-Dichloroethene	ND<2.5	NA	0.5
cis-1,2-Dichloroethene	ND<2.5	NA	0.5
trans-1,2-Dichloroethene	ND<2.5	NA	0.5
1,2-Dichloropropane	ND<2.5	NA	0.5
cis-1,3-Dichloropropene	ND<2.5	NA	0.5
trans-1,3-Dichloropropene	ND<2.5	NA	0.5
Methylene chloride	ND<2.5	NA	0.5
1,1,2,2-Tetrachloroethane	ND<2.5	NA	0.5
Tetrachloroethene	ND<2.5	NA	0.5
1,1,1-Trichloroethane	ND<2.5	NA	0.5
1,1,2-Trichloroethane	ND<2.5	NA	0.5
Trichloroethene	ND<2.5	NA	0.5
Trichlorofluoromethane	ND<2.5	NA	0.5
Vinyl Chloride	ND<2.5	NA	0.5
Surrogate Recoveries (%)			
%SS:	105		
Comments			

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

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.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCampbell 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

QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0207336

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 3130 Spiked Sample ID: 0207334-004A

Compound	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(gas)	ND	60	96	97.3	1.30	92.3	89.8	2.66	80	120
MTBE	ND	10	86.8	85.8	1.14	85	84.1	1.13	80	120
Benzene	ND	10	97.5	93.1	4.62	90.4	87.2	3.61	80	120
Toluene	ND	10	100	99.5	0.699	95.6	92.4	3.38	80	120
Ethylbenzene	ND	10	103	102	0.810	98.6	95.2	3.50	80	120
Xylenes	ND	30	103	100	3.28	99.3	95	4.46	80	120
%SS:	104	100	100	99.7	0.285	98.5	99.1	0.655	80	120

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

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

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

% 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.

McCampbell 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

QC SUMMARY REPORT FOR SM5520B/F

Matrix: W

WorkOrder: 0207336

EPA Method: SM5520B/F Extraction: PRHEM-SGT_ BatchID: 3136 Spiked Sample ID: N/A

Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
POG	N/A	100	N/A	N/A	N/A	111	112	0.897	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

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

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

% 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.

McCampbell 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

QC SUMMARY REPORT FOR SW8021B

Matrix: W WorkOrder: 0207336

EPA Method: SW8021B	Extraction: SW5030B		BatchID: 3135			Spiked Sample ID: N/A				
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Chlorobenzene	N/A	10	N/A	N/A	N/A	98.7	97.5	1.24	70	130
1,1-Dichloroethene	N/A	10	N/A	N/A	N/A	107	107	0.0995	70	130
Trichloroethene	N/A	10	N/A	N/A	N/A	97	95.9	1.14	70	130
%SS:	N/A	100	N/A	N/A	N/A	97.8	97.5	0.336	70	130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

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

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

% 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.

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0207336

Client:
Hoexter Consulting Eng. Geology
734 Torreya Court
Palo Alto, CA 94303-4160

TEL: (650) 494-2505
FAX: (650) 494-7920
ProjectNo: E-10-1E-391E; 1
PO:

24-Jul-02

Sample ID	ClientSampID	Matrix	Collection Date	Bottle	Requested Tests		
					SM5520B/F	SW8021B	8021B/8015
0207336-001	MW-1	Water	7/23/02 4:58:00 PM		C	B	A
0207336-002	MW-2	Water	7/23/02 5:30:00 PM		C	B	A
0207336-003	MW-3	Water	7/23/02 5:35:00 PM		C	B	A
0207336-004	MW-4	Water	7/23/02 5:14:00 PM		C	B	A
0207336-005	MW-5	Water	7/23/02 4:42:00 PM		C	B	A
0207336-006	MW-6	Water	7/23/02 4:17:00 PM		C	B	A
0207336-007	MW-7	Water	7/23/02 4:32:00 PM		C	B	A
0207336-008	MW-8	Water	7/23/02 4:08:00 PM		C	B	A
0207336-009	MW-9	Water	7/23/02 5:42:00 PM		C	B	A

Comments:

	Date/Time		Date/Time
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	
Relinquished by:		**Received by:**	

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

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

HCEP

U2076836

CHAIN-OF-CUSTODY RECORD

1 of 2

Project Number	Project Name
E-10-1E-391E	1970 Seminary Ave. Oakland CA

Sampler's Name (printed): D. Hoexter, J. Forsythe

Boring Number	Date	Time	Soil	Water	Sample Location or Depth	Sample Number	Number/Type of Containers	Analytical Tests: TPH-G/BTEX/MTBE	SCW HVOC	SM 5520B/F&O&G	Preserved HCl	Remarks
MW-1	7/23/02	1658					2 VOA	X	X			X	
							1-L			X			
2		1733					2 VOA	X	X			X	
							1-L			X			
3		1733					2 VOA	X	X			X	
							1-L			X			
4		1714					2 VOA	X	X			X	
							1-L			X			
5		1642					2 VOA	X	X			X	
							1-L			X			
6		1617					2 VOA	X	X			X	
							1-L			X			
7		1632					2 VOA	X	X			X	
							1-L			X			
													Continued on pg 2

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
D. Hoexter	7/24/02 9	C. Burton
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
B. Burton	7/24	Melissa Valles
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Ship To: Mc Campbell Anal - Pachaco CA

Attention:

Phone No:

Requested Turnaround Time: Normal

Contact: David F. Hoexter

Phone 650-494-2520

Fax 650-494-2515

Remarks:

[redacted]

Hoexter Consulting
Engineering Geology
734 Torreya Court
Palo Alto, CA 94303

0207334

CHAIN-OF-CUSTODY RECORD

2 of 2

Project Number	Project Name
E-10-1E-391E	1970 Seminary Ave. Oakland CA

Sampler's Name (printed): J.F. LOTH

Boring Number	Date	Time	Soil	Water	Sample Location or Depth	Sample Number	Number/Type of Containers	TPH-G/BTEX/MTBE	8010 HVOC	SM5520 B/F oil			Remarks
+ MW-8	7/24/02	1605		↓			2 VoA	X	X			X	
							1 L			X			
+ MW-9	↓	1742		↓			2 VoA	X	X			X	
							1 L			X			

Analytical Tests (additional column heading): Preserved (HCl)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
David F. Hoexter	7/24/02 8	B. Butt
B. Butt	7/24	
		Received for Laboratory by: (Signature)

Ship To: McCampbell Anal. Pacheco CA

Attention:

Phone No:

Requested Turnaround Time: Normal

Contact: David F. Hoexter

Phone 650-494-2505

Fax 650-494-2515

Remarks:

VOAS | O&G | METALS | OTHER

PRESERVATION

APPROPRIATE CONTAINERS

Hoexter Consulting
Engineering Geology
734 Torreya Court
Palo Alto, CA 94303