

**JULY, 2001
GROUND WATER SAMPLING REPORT
FOR
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA**

August 23, 2001

Prepared by

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August 23, 2001

E-10-1E-391E
HCQuartEnvrRpts:Sem.1970/15(7/01)

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

RE: **JULY, 2001
GROUND WATER SAMPLING REPORT
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA**

Dear Mr. Gritmit:

Enclosed is our July, 2001 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 eight sampled on-site 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.

Ground water levels declined from the previous January, 2001 sampling event. Ground water gradient directions, which differ between the "shallow" and "deep" wells, were similar to previous sampling events.

One well, MW-6, was covered (temporarily) and not available for sampling. In our opinion, lack of data from this one well does not substantially affect our overall conclusions and recommendations related to the current sampling round.

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

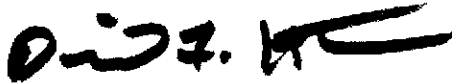
Mr. Doyle Gruit: E-10-1E-391E; August 23, 2001; Transmittal Letter Page 2

conducted during January, 2002. 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.

A handwritten signature in black ink, appearing to read "D. F. Hoexter", with a stylized flourish at the end.

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

Copies: Addressee (4)

JULY, 2001
GROUND WATER SAMPLING REPORT

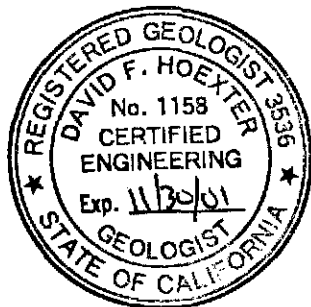
For

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

To

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

August 23, 2001



David F. Hoexter

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

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**JULY, 2001
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, 2001 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 eight of the nine on-site monitoring wells. 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 July 28, 2001 by representatives of Hoexter Consulting, Inc. One well, MW-6, was covered (temporarily) and not available for sampling. Due to past, very slow equilibration of ground water levels, the well caps were loosened on July 27, 2001 (approximately 24 hours prior to the planned water level measurement, purging and sampling). The wells were then secured with the caps sufficiently loose to allow venting, and left to equilibrate over the following approximately 24 hours. One well, MW-2, did not completely equilibrate by the time it was purged and sampled (the water level was rising at the time the "final" measurement was taken). The wells were purged and sampled on July 28, 2001, following water level measurements.

As noted, the well caps were loosened prior to the water level measurement, to allow the water level in the wells to equilibrate. 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 (north side) as reference point. The average ground water elevation increased in the four equilibrated "deeper" (MW-2 was excluded as it was not equilibrated) and the three "shallow" wells (MW-6 was not accessible), compared to the prior (January, 2001) sampling event. The "deeper" wells averaged an elevation decrease of 1.46 feet, with each of the wells decreasing in elevation; the "shallow" wells decreased an average of 1.33 feet, with all three measured wells decreasing 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").

The ground water gradient direction and inclination are essentially consistent with the previous data. The data for the three "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. This gradient direction is similar to previous sampling events. The data for the four "deeper" wells indicate an opposing gradient direction away from Seminary Avenue towards the southeast, on the west side of the site; and to the northwest at the northeast corner of the site. The apparent gradient varies across the site, but averages 0.05 foot per foot. Data from well MW-2 were incorporated into the gradient evaluation, although the water level in the well was still rising at the time the final water level measurement was made. Continued increase in water level in this well would have resulted in a steeper average gradient across the site. The approximate gradient direction is S 65° E. Both the deeper gradient inclination and apparent direction are similar to previous events.

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 measurable thickness of free product was not observed in the initial sounding of the wells, although a moderate sheen (floating film) of oil was observed in well MW-1 and lighter sheen was observed in wells MW- 4 and 5. The purge water from well MW-1 contained globules of "oil"; this condition was observed in previous sampling rounds.

The results of the chemical analyses are presented on Tables 2, 3 and 4, and are attached to this report as a part of Appendix A. Analytical results of all previous testing are also included. 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 variably rose and declined in all nine wells, although a slightly downward trend over the life of the wells was noted. 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 wells MW-1 and 4. Various HVOCs were detected in each well; BTEX compounds were also present at varying concentrations. See Table 3 for the presence and concentrations of particular HVOCs.

4.0 CONCLUSIONS AND RECOMMENDATIONS

One well, MW-6, was covered and not available for sampling. In our opinion, the absence of data from this one well does not substantially affect our overall conclusions and recommendations related to the current sampling round.

Overall contaminant levels remain elevated, with moderate average declines 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 1
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	36.97	11.82	25.18	
3/25-26/96		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	
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
1/29/01			12.25	24.15
7/28/01		16.73 (6)	19.67 (6)	

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
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
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
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
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

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
MW-6 ("shallow") cont.			
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
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
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
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

Notes to Table 1

- (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 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)
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)
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)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
MW-3 ("shallow") (continued)							
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)
7/28/01	ND<50	ND<5	ND<0.5	ND	ND	ND	ND<5000 (5) (7)
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)
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)
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)
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
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)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
MW-7 ("deep")(continued)							
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)
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)
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)
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	23.0	ND<10	23	ND<10	ND<10	ND<10	ND<10	ND<10
7/28/01 (11)	7.4	9.0	0.97	14	6.4	0.95	ND<0.5	ND<0.5	15
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
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
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	27	ND<10	390	13	ND<10	ND<10	39	ND<10

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	38	ND<10	620	ND<10	ND<10	ND<10	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
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
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
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
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
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

Well and Date	CA	1,2 DCB	1,2 DCA	cis 1,2 DCE	trans 1,2 DCE	1,2 DCP	PCE	TCE	VCL
MW-9 ("shallow") (continued)									
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

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 (perchloroethene)
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
- (8) 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
- (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

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
12/12/98	N/A	N/A
MCL	N/A	N/A

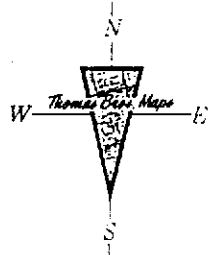
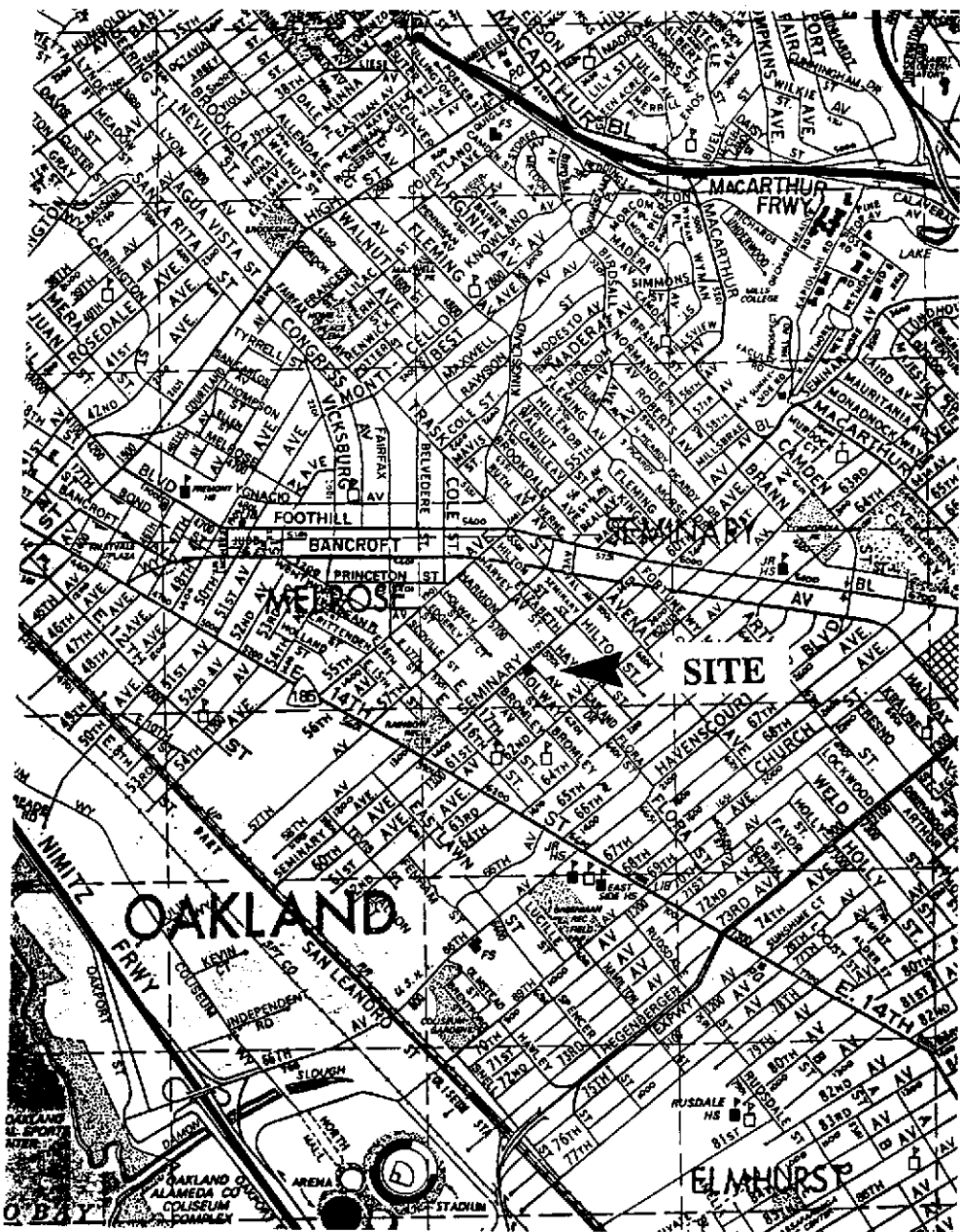
Notes to Table 4

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

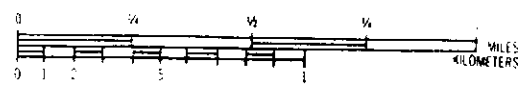
TABLE 5
GROUND WATER
SUMMARY OF ANALYTICAL TEST RESULTS -
ADDITIONAL CHEMICAL PARAMETERS
(Results reported in parts per million, mg/l) (1)

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
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
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
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
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A

Well and Date	Dissolved Oxygen	Ferrous Iron	Nitrate	Sulfate
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
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
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
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
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



ALAMEDA COUNTY
 1991 *Thomas Guide.*

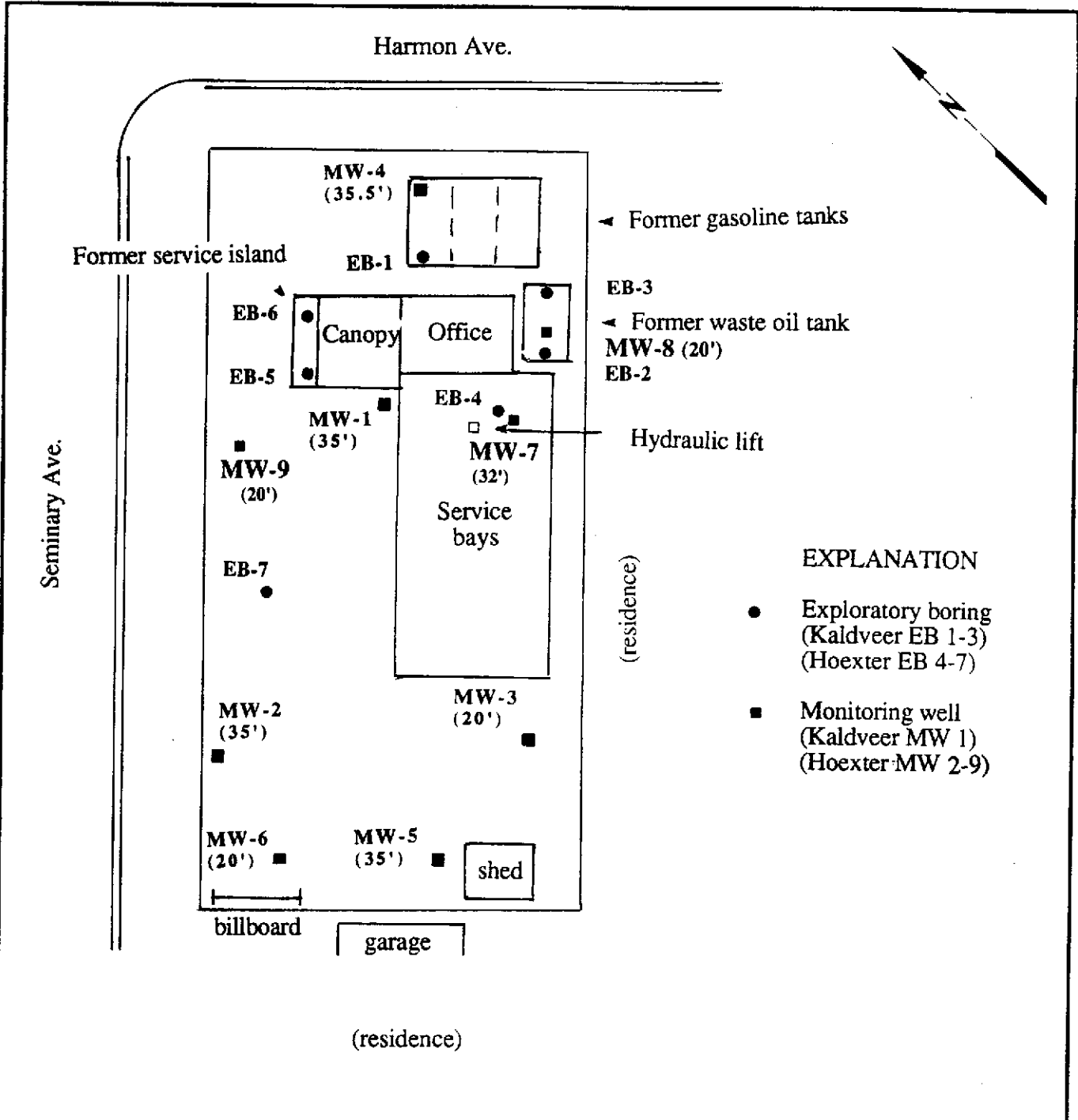


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LOCATION MAP

1970 Seminary Ave.
 Oakland, California

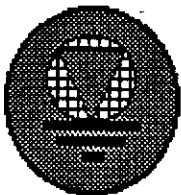
Project No.	Date	Figure 1
E-10-1E-391E	August, 2001	



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



Approximate Scale in Feet

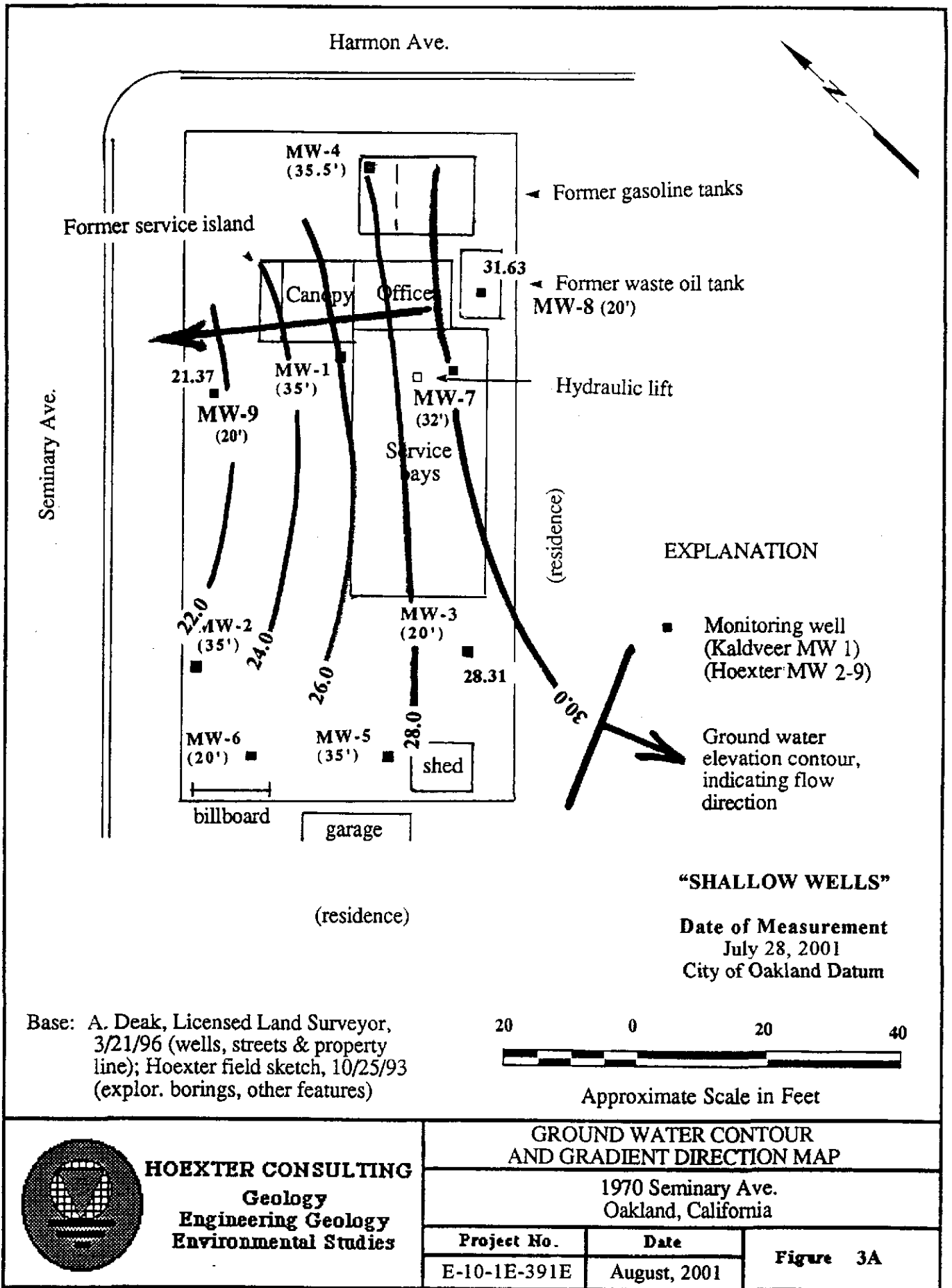


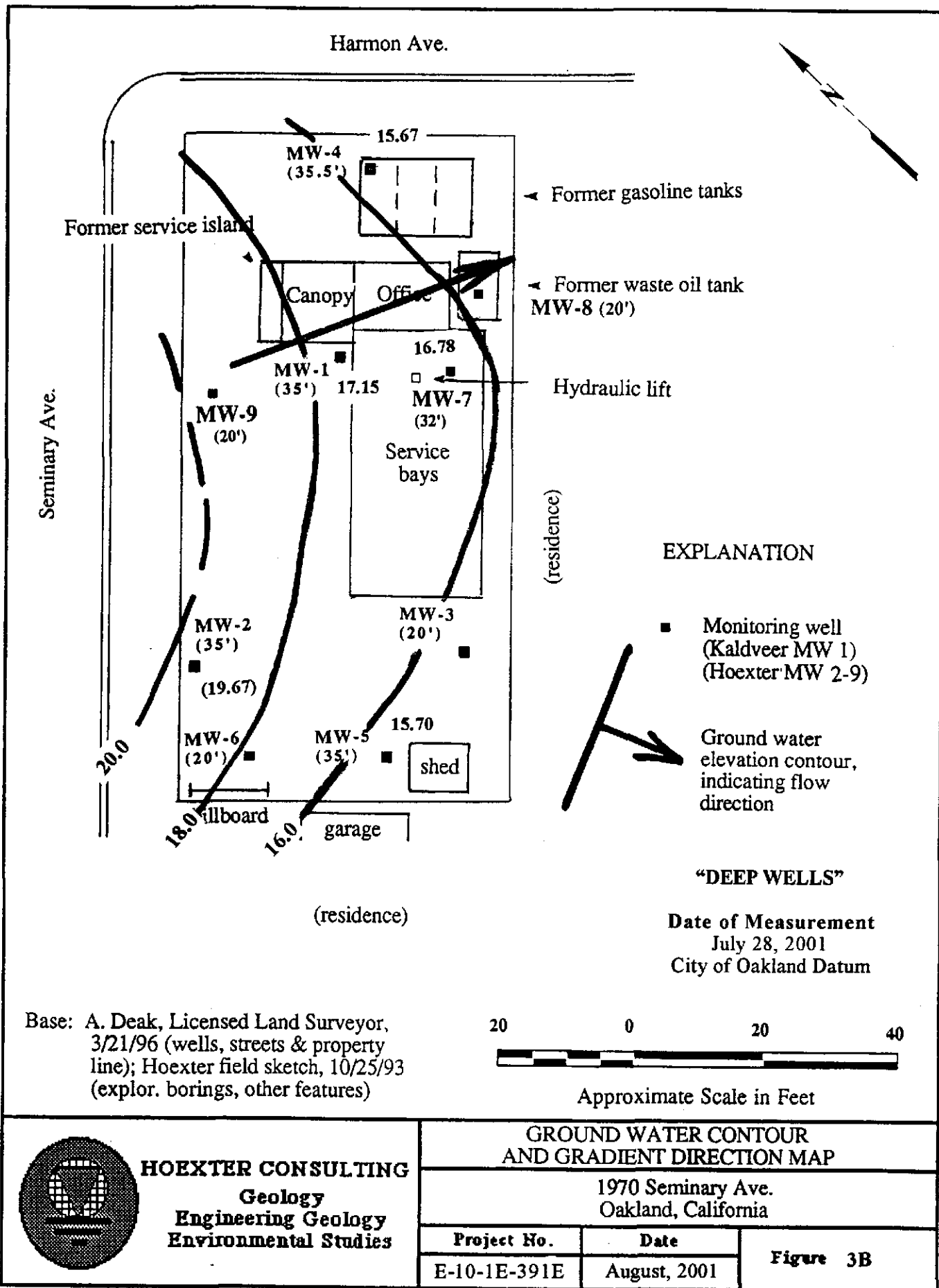
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SITE PLAN

1970 Seminary Ave.
 Oakland, California

Project No.	Date	Figure 2
E-10-1E-391E	August, 2001	





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**GROUND WATER CONTOUR
AND GRADIENT DIRECTION MAP**

1970 Seminary Ave.
Oakland, California

Project No.	Date	Figure 3B
E-10-1E-391E	August, 2001	

APPENDIX A
WATER SAMPLE LOGS
CHAIN OF CUSTODY
ANALYTICAL TEST RESULTS

HOEXTER CONSULTING

Groundwater Sampling Field Log

E-10-1E-391E

Project Name/No.: 1970 Seminary Park CA Lab I.D.: _____
 Client: D. Grant Date: 7/28/01
 Project Manager: DF Hoexter Sample Location/I.D.: MW-1
 Sampler: J. Forsythe, S. Ferguson Start Time: _____
 Casing Diameter: 2 inch 3 inch _____ 4 inch _____ 6 inch _____ Other: _____

Depth of Well (feet): 35
 Depth to Water (feet): 19.84
 Sample Depth (feet): _____

Calculated Purged Volume: 9.6
 Actual Purged Volume: 10.0
2.4 gal / vol

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Degrees F)	Color (visual)	Other
<u>1522</u>	<u>2.5</u>	<u>2.5</u>	<u>6.90</u>	<u>851</u>	<u>67.7</u>		
<u>1534</u>	<u>5.0</u>	↓	<u>6.85</u>	<u>834</u>	<u>67.1</u>	<u>cloudy</u>	<u>moderate</u>
<u>1546</u>	<u>7.5</u>	↓	<u>6.86</u>	<u>681</u>	<u>67.5</u>	↓	<u>strong odor</u>
<u>1600</u>	<u>10.0</u>	↓	<u>6.85</u>	<u>500</u>	<u>69.3</u>	↓	↓

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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: Moderate silt, strong odor (thick silt, floating oil "globules" on initial extraction. Sampled 1755.

Signature: Jack Forsythe / DFH

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	<u>0.1632</u>	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
Fl. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Fl. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

MW-1

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E-10-1E-391E
 Client: D. Grant
 Project Manager: DF Hoexter
 Sampler: J. Forsyth, J. Ferguson
 Casing Diameter: 2 inch 3 inch _____ 4 inch _____ 6 inch _____ Other: _____

Lab I.D.: _____
 Date: 7/28/01
 Sample Location/I.D.: NW-2
 Start Time: _____

Depth of Well (feet): 35
 Depth to Water (feet): 16.73
 Sample Depth (feet): _____

Calculated Purged Volume: 11.9
 Actual Purged Volume: 12
2.98 gal./vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1334	3	3	6.92	765	67.2	clear	
1342	6	↓	6.91	739	66.9	↓	nostron, sl. odor
1350	9	↓	6.96	725	67.3	↓	↓
1401	12	↓	6.94	725	67.4	↓	↓

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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 shown, odor initial extraction; slight subsequent odor - Sampled 16:55.

Signature: Jack Forsyth / DFH

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	<u>0.1652</u>	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

NW-2

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: E-10-1E-391E
 Client: 1970 Seminary, Oakland CA
 Project Manager: D. Grant
 Sampler: J. Forsyth, S. Ferguson
 Casing Diameter: 2 inch 3 inch 4 inch 6 inch Other:

Lab I.D.: _____
 Date: 7/28/01
 Sample Location/I.D.: MW-3
 Start Time: _____

Depth of Well (feet): 20
 Depth to Water (feet): _____
 Sample Depth (feet): _____

Calculated Purged Volume: 7.4
 Actual Purged Volume: 8
1.85 gal./vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Degrees F)	Color (visual)	Other
<u>1244</u>	<u>2</u>	<u>2</u>	<u>6.68</u>	<u>525</u>	<u>67.2</u>	<u>clear</u>	
<u>1254</u>	<u>4</u>	↓	<u>6.84</u>	<u>521</u>	<u>66.0</u>	↓	<u>No stain, odor</u>
<u>1302</u>	<u>6</u>	↓	<u>6.90</u>	<u>575</u>	<u>65.3</u>	↓	↓
<u>1314</u>	<u>8</u>	↓	<u>6.84</u>	<u>526</u>	<u>65.2</u>	↓	↓

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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, stain, odor initial extraction (slight H₂S odor) - Sampled 1637.

Signature: Jack Forsyth / D-FH

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	<u>0.1632</u>	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
Fl. 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	0.3048
Inches	Centimeters	2.5400

MW-3

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E-10-1E-391E
 Client: D. Grunt
 Project Manager: DF Hoexter
 Sampler: J. Forsythe, S. Ferguson
 Casing Diameter: 2 inch 3 inch _____ 4 inch _____ 6 inch _____ Other: _____

Lab I.D.: _____
 Date: 7/28/01
 Sample Location/I.D.: HW-4
 Start Time: _____

Depth of Well (feet): 35.5
 Depth to Water (feet): 20.80
 Sample Depth (feet): _____

Calculated Purged Volume: 9.6
 Actual Purged Volume: 10.0
2.4 gal/wal

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1531	2.5	2.5	6.95	790	66.7	Lgt. gray/dusty/No odor	
1543	5.0	↓	6.90	684	67.3	Lgt. steam	"
1557	7.5	↓	6.91	605	67.8	↓	sl. odor
1611	10.0	↓	6.91	552	67.2	↓	

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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: Initial extraction no product, steam, odor. Sampled 1738

Signature: Jack Forsythe / DFH

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/Pl
1.5	0.0918	0.0123	1.140	0.3475
2.0	<u>0.1632</u>	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

HW-4

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/No.: E-10-1E-391E
 Client: 1970 Seminary, Petaluma CA
 Project Manager: D. Grunt
 Sampler: J. Forsyth, S. Ferguson
 Casing Diameter: 2 inch 3 inch _____ 4 inch _____ 6 inch _____ Other: _____

Lab I.D.: _____
 Date: 7/28/01
 Sample Location/I.D.: MW-5
 Start Time: _____

Depth of Well (feet): 35
 Depth to Water (feet): 21.07
 Sample Depth (feet): _____
 Calculated Purged Volume: 9.1
 Actual Purged Volume: 10.0
 2.3 gal./vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Degrees F)	Color (visual)	Other
<u>1242</u>	<u>2.5</u>	<u>2.5</u>	<u>6.69</u>	<u>724</u>	<u>66.3</u>	<u>cloudy</u>	<u>sl. shoen, odor</u>
<u>1252</u>	<u>5.0</u>	<u>↓</u>	<u>6.80</u>	<u>853</u>	<u>65.1</u>	<u>Lst. gray</u>	<u>↓</u>
<u>1301</u>	<u>7.5</u>	<u>↓</u>	<u>6.94</u>	<u>861</u>	<u>64.9</u>	<u>↓</u>	<u>↓</u>
<u>1312</u>	<u>10.0</u>	<u>↓</u>	<u>7.00</u>	<u>849</u>	<u>65.1</u>	<u>↓</u>	<u>↓</u>

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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 shoen, product, odor initial extraction.
Sampled 1646

Signature: Jack Forsyth / D-FH

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	<u>0.1632</u>	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	FL of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.3048
Inches	Centimeters	2.5400

MW-5

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E-10-1E-391E
 Client: D. Grant Lab I.D.: _____
 Project Manager: DF Hoexter Date: 7/28/01
 Sampler: J. Forsyth, J. Ferguson Sample Location/I.D.: MW-6
 Casing Diameter: 2 inch 3 inch _____ 4 inch _____ 6 inch _____ Other: _____

Depth of Well (feet): 20
 Depth to Water (feet): _____
 Sample Depth (feet): _____
 Calculated Purged Volume: _____
 Actual Purged Volume: _____

Field Measurements

Time	Volume Cum (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal Pump Dipper Other
 Pneumatic Displacement Pump

Sample Method

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

Well Integrity: Unknown
 Remarks: Well not sampled - covered by soil stockpile

Signature: Jack Forsyth / DFH

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	<u>0.1632</u>	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	0.3048
Inches	Centimeters	2.5400

MW-6

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/No: E-10-1E-391E
 Client: D. Grunt
 Project Manager: DF Hoberg
 Sampler: J. Forsythe, S. Ferguson
 Casing Diameter: 2 inch 3 inch _____ 4 inch _____ 6 inch _____ Other: _____

Lab I.D.: _____
 Date: 7/28/01
 Sample Location/I.D.: RW-7
 Start Time: _____

Depth of Well (feet): 32
 Depth to Water (feet): 20.05
 Sample Depth (feet): _____

Calculated Purged Volume: 8.0
 Actual Purged Volume: 8.0
2.0 gal / vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Degrees F)	Color (visual)	Other
1434	2	2	6.85	832	66.4	clear	
1441	4	↓	6.92	779	66.2	↓	No hemisph. odor
1450	6	↓	7.01	742	65.2	↓	↓
1457	8	↓	7.00	733	65.6	↓	↓

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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, steam, odor initial extraction. Sampled 1722

Signature: Jack Forsythe / DFH

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	<u>0.1632</u>	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	0.3048
Inches	Centimeters	2.5400

RW-7

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E-10-1E-391E
 Client: D. Grunt Lab I.D.: _____
 Project Manager: DF Hoexter Date: 7/28/01
 Sampler: J. Forsyth, J. Ferguson Sample Location/I.D.: MW-8
 Casing Diameter: 2 inch 3 inch _____ 4 inch _____ 6 inch _____ Other: _____
 Start Time: _____

Depth of Well (feet): 20
 Depth to Water (feet): 4.92
 Sample Depth (feet): _____

Calculated Purged Volume: 10.0
 Actual Purged Volume 10.0
2.5 gal/vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1435	2.5	2.5	7.05	448	68.1	lt grey	None
1446	5.0	↓	7.01	397	67.7	"	↓
1455	7.5	↓	7.09	340	67.2	cloudy/lt grey	↓
1504	10.0	↓	7.07	370	67.3		

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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 seen, odor initial extraction
sampled 1732

Signature: Jack Forsyth / DFH

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	<u>0.1632</u>	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
Fl. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Fl. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.3048
Inches	Centimeters	2.5400

MW-8

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E-10-1E-391E
 Client: 1970 Seminary, Oakland CA
 Project Manager: D. Grant
 Sampler: J. Forsythe, J. Ferguson
 Casing Diameter: 2 inch 3 inch 4 inch 6 inch Other:

Lab I.D.: _____
 Date: 7/28/01
 Sample Location/I.D.: MW-9
 Start Time: _____
 Other: _____

Depth of Well (feet): 20
 Depth to Water (feet): 15.33
 Sample Depth (feet): _____

Calculated Purged Volume: 3.2
 Actual Purged Volume: 4

0.8 gal) vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Degrees F)	Color (visual)	Other
<u>1334</u>	<u>1</u>	<u>1</u>	<u>6.93</u>	<u>943</u>	<u>66.0</u>	<u>Light gray/cloudy</u>	<u>H₂S odor</u>
<u>1347</u>	<u>2</u>	<u>1</u>	<u>6.98</u>	<u>922</u>	<u>67.5</u>	<u>↓</u>	
<u>1357</u>	<u>3</u>	<u>1</u>	<u>7.00</u>	<u>892</u>	<u>67.3</u>	<u>green-gray</u>	<u>↓</u>
<u>1405</u>	<u>4</u>	<u>1</u>	<u>7.11</u>	<u>996</u>	<u>68.41</u>	<u>↓</u>	

Purge Method

2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Centrifugal 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 shear, moderate H₂S odor initial extraction; Sampled 1704

Signature: Jack Forsythe / DJH

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	<u>0.1632</u>	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	0.3048
Inches	Centimeters	2.5400

MW-9



McCAMPBELL ANALYTICAL INC.

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

Hoexter Consulting Engineering Geology 734 Torrey Court Palo Alto, CA 94303	Client Project ID: #E-10-1E-391E; 1970 Seminary Ave	Date Sampled: 07/28/01
		Date Received: 07/30/01
	Client Contact: David Hoexter	Date Extracted: 07/30/01
	Client P.O:	Date Analyzed: 07/30/01

08/06/01

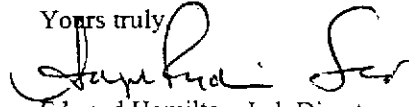
Dear David:

Enclosed are:

- 1). the results of 8 samples from your #E-10-1E-391E; 1970 Seminary Ave 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



Edward Hamilton, Lab Director



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Hoexter Consulting Engineering Geology 734 Torrey Court Palo Alto, CA 94303	Client Project ID: #E-10-1E-391E; 1970 Seminary Ave	Date Sampled: 07/28/01
	Client Contact: David Hoexter	Date Received: 07/30/01
	Client P.O:	Date Extracted: 07/30-08/02/01
		Date Analyzed: 07/30-08/02/01

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	73705	73706	73707	73708
Client ID	MW-1	MW-2	MW-3	MW-4
Matrix	W	W	W	W
Compound	Concentration			
Bromodichloromethane	ND	ND	ND	ND<7.5
Bromoform ^(b)	ND	ND	ND	ND<7.5
Bromomethane	ND	ND	ND	ND<7.5
Carbon Tetrachloride ^(c)	ND	ND	ND	ND<7.5
Chlorobenzene	ND	ND	ND	17
Chloroethane	7.4	ND	ND	ND<7.5
2-Chloroethyl Vinyl Ether ^(d)	0.60	ND	ND	ND<7.5
Chloroform ^(e)	ND	ND	ND	ND<7.5
Chloromethane	ND	ND	ND	ND<7.5
Dibromochloromethane	ND	ND	ND	ND<7.5
1,2-Dichlorobenzene	9.0	ND	ND	29
1,3-Dichlorobenzene	1.2	ND	ND	ND<7.5
1,4-Dichlorobenzene	3.0	ND	ND	26
Dichlorodifluoromethane	ND	ND	ND	ND<7.5
1,1-Dichloroethane	ND	ND	ND	ND<7.5
1,2-Dichloroethane	0.97	9.7	ND	ND<7.5
1,1-Dichloroethene	ND	ND	ND	ND<7.5
cis 1,2-Dichloroethene	14	7.8	ND	310
trans 1,2-Dichloroethene	6.4	ND	ND	18
1,2-Dichloropropane	ND	0.95	ND	ND<7.5
cis 1,3-Dichloropropene	ND	ND	ND	ND<7.5
trans 1,3-Dichloropropene	ND	ND	ND	ND<7.5
Methylene Chloride ^(f)	ND	ND	ND	ND<15
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND<7.5
Tetrachloroethene	ND	ND	ND	ND<7.5
1,1,1-Trichloroethane	ND	ND	ND	ND<7.5
1,1,2-Trichloroethane	ND	ND	ND	ND<7.5
Trichloroethene	ND	12	ND	8.4
Trichlorofluoromethane	ND	ND	ND	ND<7.5
Vinyl Chloride ^(g)	15	ND	ND	150
% Recovery Surrogate	93	96	96	96
Comments	h			h

* water and vapor samples and all TCLP & SPL extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe
 Reporting limit unless otherwise stated: water/TCLP/SPL extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

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



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Hoexter Consulting Engineering Geology 734 Torreya Court Palo Alto, CA 94303	Client Project ID: #E-10-1E-391E; 1970 Seminary Ave	Date Sampled: 07/28/01
	Client Contact: David Hoexter	Date Received: 07/30/01
	Client P.O:	Date Extracted: 07/30-08/02/01
		Date Analyzed: 07/30-08/02/01

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	73709	73710	73711	73712
Client ID	MW-5	MW-7	MW-8	MW-9
Matrix	W	W	W	W
Compound	Concentration			
Bromodichloromethane	ND	ND<5.0	ND	ND
Bromoform ^(b)	ND	ND<5.0	ND	ND
Bromomethane	ND	ND<5.0	ND	ND
Carbon Tetrachloride ^(c)	ND	ND<5.0	ND	ND
Chlorobenzene	ND	ND<5.0	ND	ND
Chloroethane	1.4	ND<5.0	ND	ND
2-Chloroethyl Vinyl Ether ^(d)	ND	ND<5.0	ND	ND
Chloroform ^(e)	ND	ND<5.0	ND	ND
Chloromethane	ND	ND<5.0	ND	ND
Dibromochloromethane	ND	ND<5.0	ND	ND
1,2-Dichlorobenzene	1.3	11	ND	0.87
1,3-Dichlorobenzene	ND	ND<5.0	ND	ND
1,4-Dichlorobenzene	ND	5.9	ND	ND
Dichlorodifluoromethane	ND	ND<5.0	ND	ND
1,1-Dichloroethane	ND	ND<5.0	ND	ND
1,2-Dichloroethane	1.7	ND<5.0	ND	ND
1,1-Dichloroethene	ND	ND<5.0	ND	ND
cis 1,2-Dichloroethene	1.4	170	2.6	0.92
trans 1,2-Dichloroethene	ND	ND<5.0	ND	ND
1,2-Dichloropropane	ND	ND<5.0	ND	ND
cis 1,3-Dichloropropene	ND	ND<5.0	ND	ND
trans 1,3-Dichloropropene	ND	ND<5.0	ND	ND
Methylene Chloride ^(f)	ND	ND<5.0	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND<5.0	ND	ND
Tetrachloroethene	ND	ND<5.0	ND<1.5	ND
1,1,1-Trichloroethane	ND	ND<5.0	ND	ND
1,1,2-Trichloroethane	ND	ND<5.0	ND	ND
Trichloroethene	ND	6.9	2.1	2.5
Trichlorofluoromethane	ND	ND<5.0	ND	ND
Vinyl Chloride ^(g)	2.6	6.1	ND	ND
% Recovery Surrogate	110	99	98	108
Comments				

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe
 Reporting limit unless otherwise stated: water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

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



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QC REPORT

EPA 8015m + 8020

Date: 08/02/01

Matrix: Water

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
<u>SampleID:</u> 72601		<u>Extraction:</u> EPA 5030			<u>Instrument:</u> GC-7		
Surrogate1	ND	102.0	101.0	100.00	102	101	1.0
Xylenes	ND	27.3	26.5	30.00	91	88	3.0
Ethylbenzene	ND	9.0	8.7	10.00	90	87	3.4
Toluene	ND	9.4	9.1	10.00	94	91	3.2
Benzene	ND	9.5	9.3	10.00	95	93	2.1
MTBE	ND	10.4	9.4	10.00	104	94	10.1
TPH (gas)	ND	92.3	90.9	100.00	92	91	1.5
<u>SampleID:</u> 80101		<u>Extraction:</u> TTLC			<u>Instrument:</u> MB-1		
Oil & Grease	ND	20.2	20.2	23.70	85	85	0.0

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation



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QC REPORT

EPA 8010/8020/EDB

Date: 08/02/01-08/03/01

Extraction: N/A

Matrix: Water

Compound	Concentration: ug/L			%Recovery		RPD	
	Sample	MS	MSD	MS	MSD		
SampleID: 80801				Instrument:	GC-1		
Surrogate1	ND	101.0	99.0	100.00	101	99	2.0
Chlorobenzene	ND	10.7	9.8	10.00	107	98	8.8
Trichloroethane	ND	11.2	11.2	10.00	112	112	0.0
1,1-DCE	ND	10.6	11.3	10.00	106	113	6.4

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

27034 ZHC45

ICE/°

GOOD CONDITION CHAIN-OF-CUSTODY RECORD

PRESERVATION

VOAS/LOG/METALS/OTHER

1 of 2

Project Number		Project Name					Number/Type of Containers	Analytical Tests					Remarks
E-10-1E-391E		1970 Seminary Ave - Oakland CA						TPH-G/BTEX/MTBE	DO/D HVC	SM 3570B/F OIL	Preserved	Met	
Sampler's Name (printed)													
J. Forrythe, S. Ferguson													
Boring Number	Date	Time	Soil	Water	Sample Location or Depth	Sample Number							
+ MW-1	7/29/01	17:55				2 VOA	X	X				X	73705
✓ 2		16:55				1 L 2 VOA	X	X	X			X	73706
(A) 3		16:57				1 L 2 VOA	X	X	X			X	73707
+ 4		17:38				1 L 2 VOA	X	X	X			X	73708
+ 5		16:46				1 L 2 VOA	X	X	X			X	73709
6						1 L 2 VOA	X	X	X			X	73710
+ 7		17:22				1 L 2 VOA	X	X	X			X	No sample
						1 L			X				

Relinquished by: (Signature) <i>J. Forrythe</i>	Date/Time 7/29/01 2:10	Received by: (Signature) <i>D. Hooper</i>
Relinquished by: (Signature) <i>D. Hooper</i>	Date/Time 7/30/01 09:30	Received by: (Signature) <i>S. B. Smith</i>
Relinquished by: (Signature) <i>S. B. Smith</i>	Date/Time 7-30 2:00pm	Received for Laboratory by: (Signature) <i>Mania Venoy</i>

Ship To: Mc Campbell Anal -
Pacheco CA

Attention: _____
Phone No: _____

Requested Turnaround Time: Normal Contact: David Hooper

Phone 650-494-2505
Fax 650-494-2515

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

