

JULY, 2000
GROUND WATER SAMPLING REPORT
FOR
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA

November 30, 2000

Prepared by

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ENVIRONMENTAL
PROTECTION

(650) 494-2505 (phone & fax)

00 DEC -5 PM 4:22

TRANSMITTAL

TO Alameda Co. Health Care Serv-
1131 Harbor Bay Plaza, Suite 250
Alameda CA 94502-6577

DATE 11/30/97
VIA US Mail
FAX NO. _____

ATTENTION San...h...

PROJECT 1970 Seminary, Oakland
Grimit STID 553

JOB NO. E-10-1C-261C

DESCRIPTION

11/30/97 Ground Water Monitoring Rpt

Number of pages, including cover page, if FAX _____

COMMENTS 1st time well MW < -7, -9' ids
Higher/highest HVOCS are in 'deep' wells

*PH as
DTG*

ACTION

- As requested
- For your use
- Please return when finished
- Please review and comment
- Other _____

COPY TO

D. Grimit

BY

D. Hoexter

David F. Hoexter

If enclosures are not as noted, kindly notify us at once

Geology / Engineering Geology / Environmental Studies

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

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November 30, 2000

E-10-1C-261C
HCQuartEnvRpts:Sem.1970/13(7/00)

**Mr. Doyle Grimit
14366 Lark Street
San Leandro, California 94578**

**RE: JULY, 2000
GROUND WATER SAMPLING REPORT
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA**

Dear Mr. Grimit:

Enclosed is our July, 2000 ground water sampling report for the property located at 1970 Seminary Avenue, corner of Harmon, 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 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.

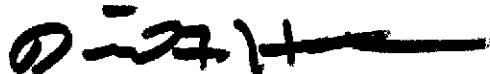
Ground water levels declined from the previous December, 1999 sampling event. Ground water gradient directions, which differ between the "shallow" and "deep" wells, were similar to previous sampling events.

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, 2000. As approved by the Alameda County Health Department LOP and the California Underground Storage Tank Cleanup Fund, we are currently preparing a corrective action work plan to conduct site remediation.

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
Principal Geologist

Copies: Addressee (3)

Alameda County Health Care Services Agency (1)

Attention: Eva Chu, Hazardous Materials Specialist

JULY, 2000
GROUND WATER SAMPLING REPORT

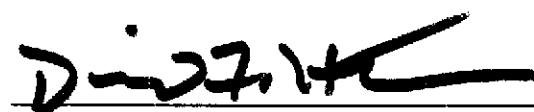
For

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

To

Mr. Doyle Grimit
14366 Lark Street
San Leandro, California 94578

November 30, 2000



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

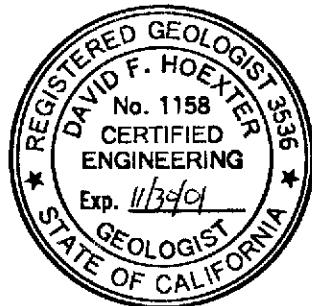


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JULY, 2000
GROUND WATER SAMPLING REPORT
FOR
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY
OAKLAND, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of the July, 2000 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 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 22, 2000 by representatives of Hoexter Consulting, Inc. Due to past, very slow equilibration of ground water levels, the well caps were loosened on July 20, 2000, two days prior to the planned purging and sampling. The wells were then secured with the caps sufficiently loose to allow venting, and left to equilibrate over the following approximately 48 hours. The wells were purged and sampled on the morning of July 22, 2000, following water level measurements.

As noted, the well caps were loosened two days 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 (due to rapid draw-down of the water level, less than the customary four well volumes was withdrawn from one well, MW-9; see individual Groundwater Sampling Field Logs). 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, and following a period of two days for the wells to stabilize, 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 decreased in the five "deeper" wells, and decreased to a lesser extent in the four "shallow" wells, compared to the prior (December, 1999) sampling event. The five "deeper" wells averaged an elevation decrease of 0.33 feet, with four of five wells decreasing in elevation; the four "shallow" wells decreased an average of 0.52 feet, with three of four 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 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 56° W. This gradient direction is similar to previous sampling events. The data for the five "deeper" wells indicate an opposing gradient direction away from Seminary towards the southeast. The apparent gradient varies across the site, but averages 0.19 foot per foot. The approximate gradient direction is South 65° East. 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 four "shallow" wells, to the deeper zone represented by the five "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 thick sheen (floating film) of oil was observed in well MW-1 and lighter sheen was observed in wells MW- 3, 5, and 6. Wells MW-4, 7, and 8 exhibited a sheen during the first volume purge. The purge water from well MW-1 contained globules of "oil", which were observed in earlier 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. 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 MW-4, and for the first time in wells MW- 5, 7, and 9. Various HVOCs were detected in each well. See Table 3 for the presence and concentrations of particular HVOCs.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Contaminant levels remain essentially unchanged from recent sampling events. 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. Hoexter Consulting is currently preparing a CAP, intended to reduce contaminant levels near the source area.

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		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
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

Table continued following page.

Table 1 continued

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
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
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
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

Table continued following page

Table 1 continued

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

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)
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)
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)

Table continued following page

Table 2 continued

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC(7)
MW-3 ("shallow") (continued)							
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)
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)
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)
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)
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)

Table continued following page

Table 2 continued

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC(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)
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	7100 (5) (7)
EB-4 ("grab" gw sample)							
3/8/96	15,000	NA	780	840	1,300	590	7,500 (5) (7)
MCL	NA	35 (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) MTBE concentration is proposed

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
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
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
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
7/22/00	ND<10	38	ND<10	620	ND<10	ND<10	ND<10	19	97

Continued following page

Table 3 continued

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-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
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
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
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
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
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 on following page

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

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
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
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
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

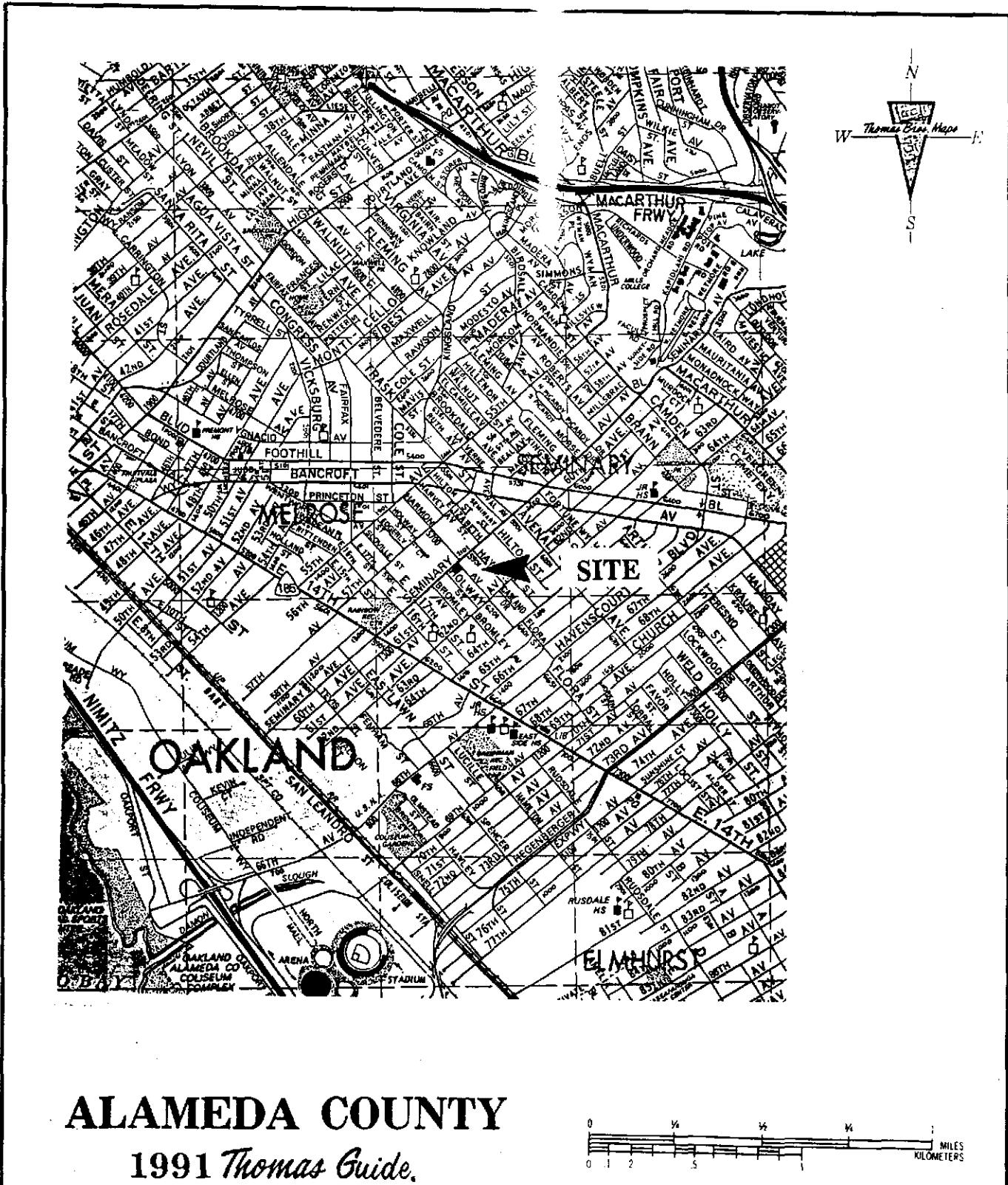
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Table 5 continued

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
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
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
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
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

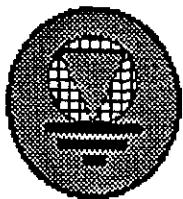
Notes to Table 5

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



ALAMEDA COUNTY

1991 Thomas Guide.



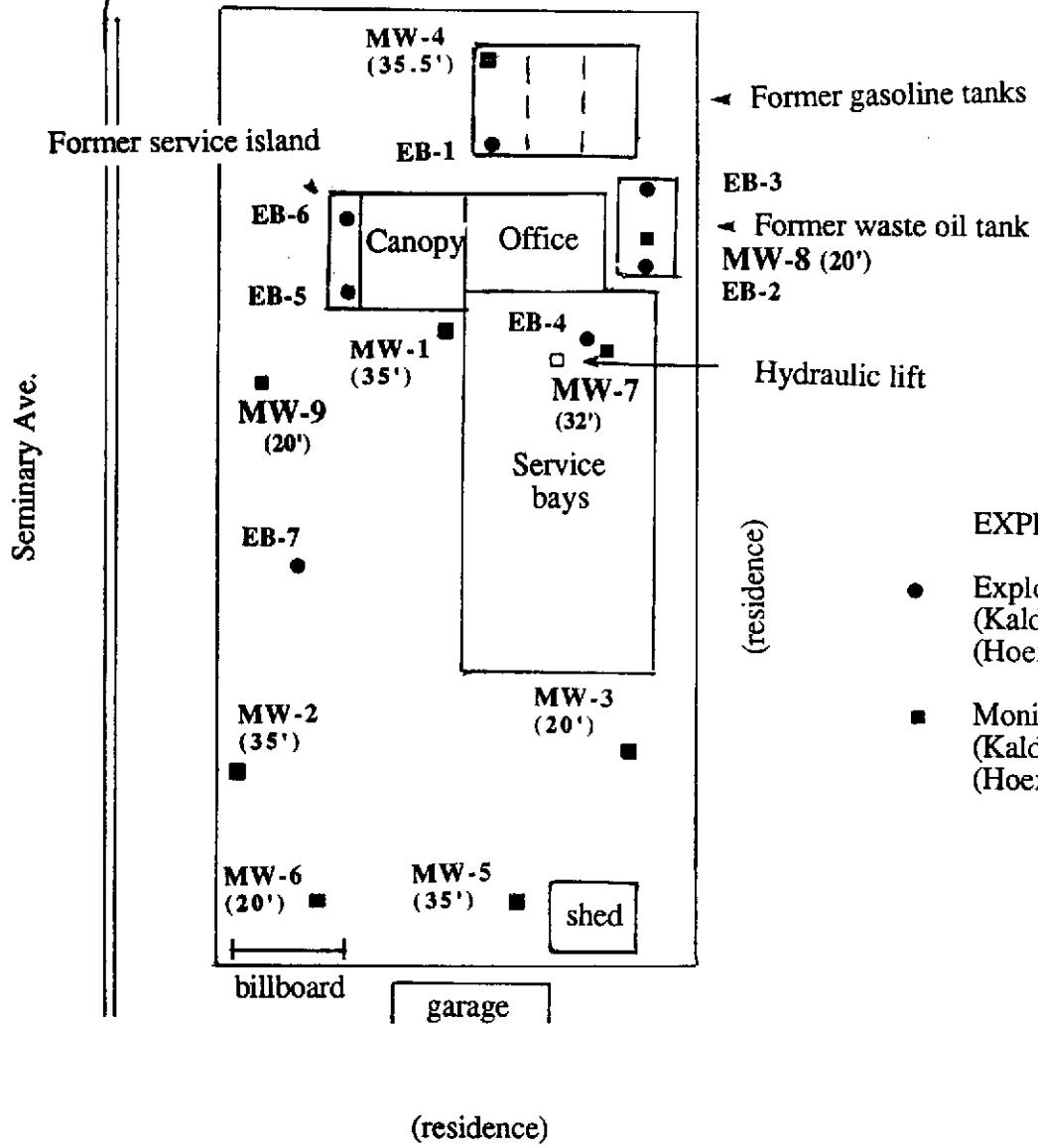
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LOCATION MAP

1970 Seminary Ave.
Oakland, California

Project No.	Date	Figure 1
E-10-1C-261C	November, 2000	

Harmon Ave.



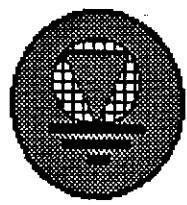
EXPLANATION

- Exploratory boring (Kaldveer EB 1-3) (Hoexter EB 4-7)
- Monitoring well (Kaldveer MW 1) (Hoexter MW 2-9)

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

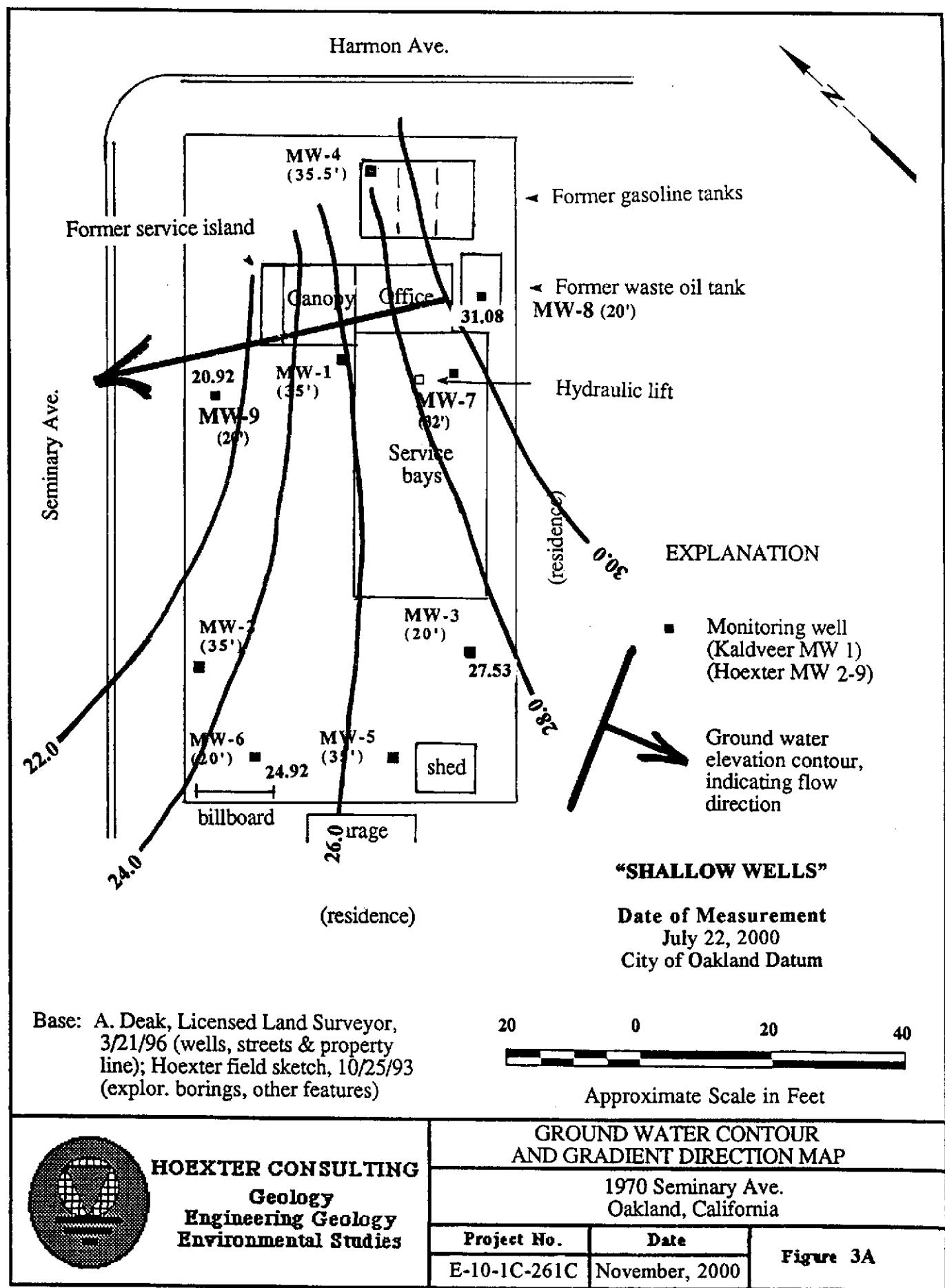


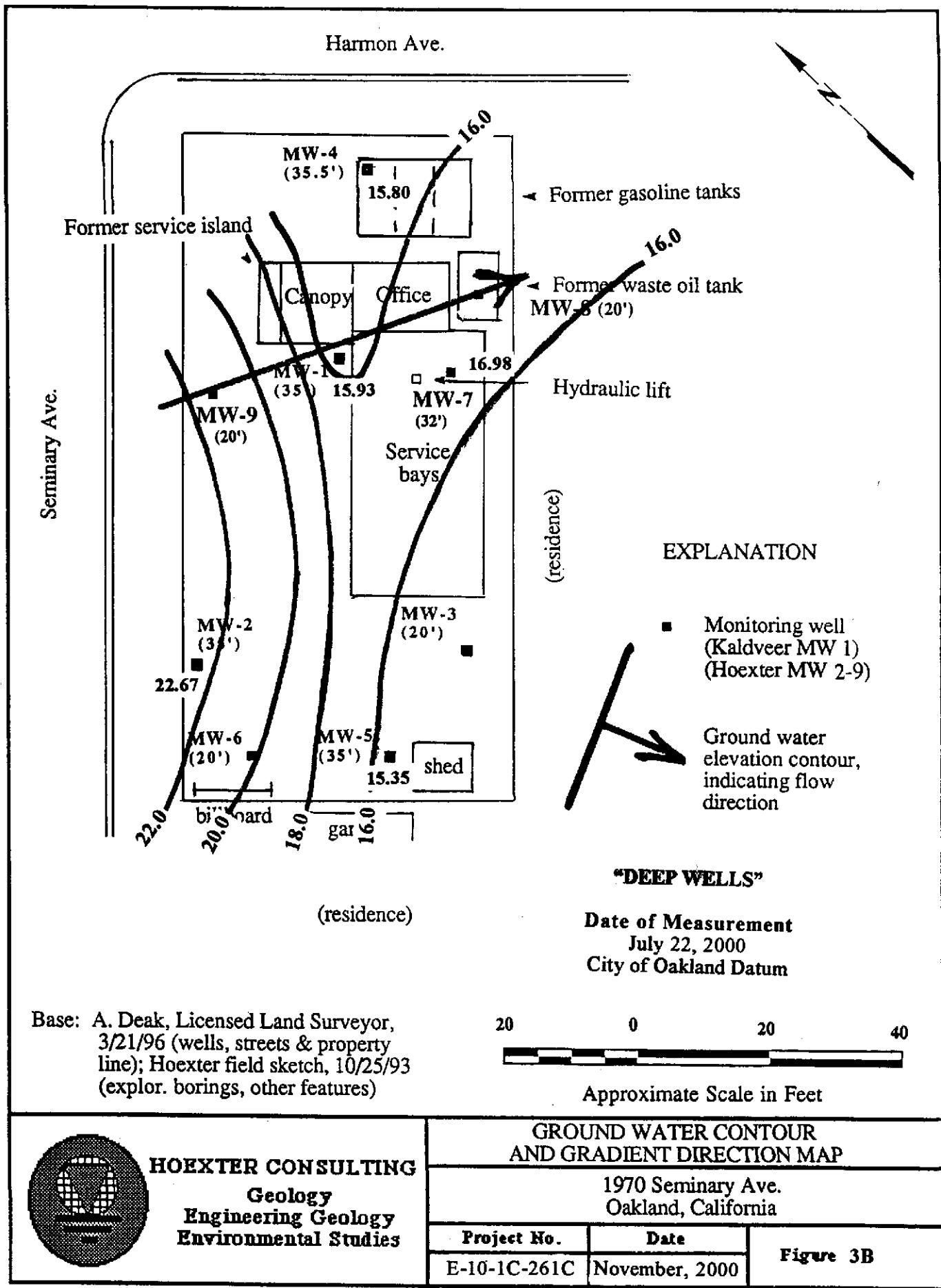
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SITE PLAN

1970 Seminary Ave.
Oakland, California

Project No.	Date	Figure
E-10-1C-261C	November, 2000	2





APPENDIX A

WATER SAMPLE LOGS
CHAIN OF CUSTODY
ANALYTICAL TEST RESULTS

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: 1970 Seminary Ave., Oaklnd CA

Client: D. Grunf

Lab I.D.: _____

Date: 7/22/80

Project Manager: D. F. Hoefer

Sample Location/I.D.: MW-1

Sampler: J. Forsythe, J. Schultz

Start Time: _____

Casing Diameter: 2 inch X 3 inch 4 inch _____

6 inch _____ Other: _____

Depth of Well (feet): 35

Calculated Purged Volume: 8.5

Depth to Water (feet): 2.93

Actual Purged Volume: 9

Sample Depth (feet): _____

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1354	2.25	2.25	6.37	747	65.7		
1400	4.5		6.38	745	66.3		
1408	6.75		6.35	757	66.2	<u>cloudy, light gray</u>	
1416	9.0	↓	6.35	763	66.5		
—	—	—	—	—	—	—	—

Purge Method

- | | | | |
|------------------------------------------------------|--------------------------------------------|--------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> 2" Bladder Pump | <input checked="" type="checkbox"/> Bailer | <input type="checkbox"/> Well Wizard | <input checked="" type="checkbox"/> Dedicated |
| <input type="checkbox"/> Submersible Pump | <input type="checkbox"/> Cenetrifugal Pump | <input type="checkbox"/> Dipper | <input type="checkbox"/> Other |
| <input type="checkbox"/> Pneumatic Displacement Pump | | | |

Sample Method

- | | | | |
|------------------------------------------|--------------------------------------------|--------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> 2" Bladder Pump | <input checked="" type="checkbox"/> Bailer | <input type="checkbox"/> Well Wizard | <input checked="" type="checkbox"/> Dedicated |
| <input type="checkbox"/> Surface Sampler | <input type="checkbox"/> Dipper | <input type="checkbox"/> Fultz Pump | <input type="checkbox"/> Other |

Well Integrity: OK

Remarks: Initial extraction - thick spon, strong odor, subsequently floating oil "globules" in purge water; sampled 15' 40.

Signature: D. F. Hoefer (J. Forsythe)

Volumes Per Unit Length Selected Well Casing Diameters

Volume Per Unit Length

Well Casing I.D. (inches)	Cubic			
	Gal/ft	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
Liters	Meters	0.30048
Meters	Centimeters	2.5400
Inches		

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: 1970 Seminary Ave, Oaklnd CA
 Client: D. Grumit
 Project Manager: D. F. Hoberg
 Sampler: J. Forsyth J. Schultz
 Casing Diameter: 2 inch 3 inch 4 inch 6 inch Other: _____

Depth of Well (feet): 35
 Depth to Water (feet): 13.73
 Sample Depth (feet): _____

Lab I.D.: _____
 Date: 7/22/00
 Sample Location/I.D.: MW-2
 Start Time: _____

Calculated Purged Volume: 13.9
 Actual Purged Volume 14

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1214	35	3.5	6.40	719	66.5	clear	
1227	7	+	6.44	666	66.6		
1239	10.5	+	6.46	634	65.6		
1252	14	+	6.46	642	65.2	✓	✓

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, shear, odor. Sample collected 1510 -

Signature: D. F. Hoberg (J. Forsyth)

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing ID. (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 Ave., Oakland CA

Client: D. Grinnell

Lab I.D.:

Project Manager: D. F. Hertzog

Date: 7/22/86

Sampler: J. Forsythe, J. Schultz

Sample Location/I.D.: MW-3

Casing Diameter: 2 inch 3 inch 4 inch

Start Time:

6 inch Other: _____

Depth of Well (feet): 20

Calculated Purged Volume: 6.9

Depth to Water (feet): 9.41

Actual Purged Volume 7

Sample Depth (feet): _____

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1131	1.75	61.75	6.31	458	67.0		
1135	3.5	+	6.31	462	67.4	clearly	
1139	5.25	+	6.33	469	67.3	↓	
1144	7.0	↓	6.36	471	67.4	↓	

Purge Method

- | | | | |
|------------------------------------------------------|---------------------------------------------|--------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> 2" Bladder Pump | <input checked="" type="checkbox"/> Bailer | <input type="checkbox"/> Well Wizard | <input checked="" type="checkbox"/> Dedicated |
| <input type="checkbox"/> Submersible Pump | <input type="checkbox"/> Cenentrifugal Pump | <input type="checkbox"/> Dipper | <input type="checkbox"/> Other |
| <input type="checkbox"/> Pneumatic Displacement Pump | | | |

Sample Method

- | | | | |
|-----------------------------------------------------|--------------------------------------------|--------------------------------------|-----------------------------------------------|
| <input checked="" type="checkbox"/> 2" Bladder Pump | <input checked="" type="checkbox"/> Bailer | <input type="checkbox"/> Well Wizard | <input checked="" type="checkbox"/> Dedicated |
| <input type="checkbox"/> Surface Sampler | <input type="checkbox"/> Dipper | <input type="checkbox"/> Fultz Pump | <input type="checkbox"/> Other |

Well Integrity: OK

Remarks: Initial extraction; slight shear, moderate odor.
Sample collected 14:53

Signature: D. J. W. (J. Forsythe)

Volumes Per Unit Length Selected Well Casing Diameters

Volume Per Unit Length

Well Casing ID. (inches)	Cubic			
	Gal/ft	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
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

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: 1970 Seminary Ave., Oaklnd A
 Client: D. Grinett
 Project Manager: D. F. Hoexter
 Sampler: J. Forsythe, J. Schulte
 Casing Diameter: 2 inch 3 inch 4 inch
6 inch Other: _____

Depth of Well (feet): 35.5
 Depth to Water (feet): 20.67
 Sample Depth (feet): _____

Lab I.D.: _____
 Date: 7/22/00
 Sample Location/I.D.: MW-4
 Start Time: _____
 6 inch Other: _____

Calculated Purged Volume: 9.7
 Actual Purged Volume 10

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
<u>1245</u>	<u>2.5</u>	<u>2.5</u>	<u>6.37</u>	<u>715</u>	<u>65.3</u>	<u>Light brown</u>	_____
<u>1257</u>	<u>5</u>	<u>+</u>	<u>6.36</u>	<u>705</u>	<u>64.8</u>	_____	_____
<u>1305</u>	<u>7.5</u>	<u>+</u>	<u>6.38</u>	<u>706</u>	<u>65.3</u>	_____	_____
<u>1315</u>	<u>10</u>	<u>V</u>	<u>6.35</u>	<u>708</u>	<u>65.4</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

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: Initial extraction - no product, color, shear; shear + color
on subsequent purge volumes. Sampled 1517.

Signature: D.F. W. (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
Pt. 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 Ave, Oakland CA

Client: D. Grinett

Lab I.D.:

Date: 7/22/00

Project Manager: D. F. Hockenberry

Sample Location/I.D.: MW-5

Sampler: J. Forsythe, J. Schultz

Start Time:

Casing Diameter: 2 inch 3 inch 4 inch

6 inch Other: _____

Depth of Well (feet): 35

Calculated Purged Volume: 8.9

Depth to Water (feet): 21.42

Actual Purged Volume: 9

Sample Depth (feet): _____

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1114	2.25	2.25	6.30	636	66.6		
1121	4.5	1	6.36	721	66.6	Cloudy	
1129	6.75	1	6.35	724	66.0		
1136	9	1	6.40	743	67.0		

Purge Method

- 2" Bladder Pump Bailer Well Wizard Dedicated
- Submersible Pump Cenentrifugal 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 - moderate shear, odor. Sept 20 1991

Signature: D. F. Hockenberry (J. Forsythe)

Volumes Per Unit Length Selected Well Casing Diameters

Volume Per Unit Length

Well Casing I.D. (inches)	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 Ave, Oakland CA

Client: D. Grinert

Project Manager: D. F. Hoexter

Sampler: J. Forsythe, J. Schultz

Casing Diameter: 2 inch 3 inch 4 inch

Lab I.D.:

Date: 7/22/00

Sample Location/I.D.: MW - 6

Start Time:

6 inch Other:

Depth of Well (feet): 20

Calculated Purged Volume: 5.5

Depth to Water (feet): 11.5

Actual Purged Volume 6

Sample Depth (feet):

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1145	1.5	1.5	6.34	761	69.7		
1155	3		6.35	747	68.5		
1204	4.5		6.33	752	70.0	Lgt brown	
1211	6	✓	6.33	740	66.8	✓	

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: light spon, no odor. Sample Collected 1456.

Signature: D. F. W. (J. Forsythe)

Volumes Per Unit Length Selected Well Casing Diameters

Volume Per Unit Length

Well Casing I.D. (inches)	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
Liters	Meters	0.30048
Feet	Centimeters	2.5400
Inches		

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: 1970 Seminary Ave, Oakwood CA
 Client: D. Grumit

Lab I.D.: _____

Date: 7/22/00

Project Manager: D. F. Hoberg

Sample Location/I.D.: MW - 7

Sampler: J. Forsyth, J. Schultz

Start Time: _____

Casing Diameter: 2 inch 3 inch 4 inch

6 inch Other: _____

Depth of Well (feet): 32

Calculated Purged Volume: 7.9

Depth to Water (feet): 19.85

Actual Purged Volume: 7

Sample Depth (feet): _____

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1333	2	2	6.29	685	64.2	clear	
1342	4	+	6.35	668	64.9		
1352	8	+	6.38	635	65.2		
1404	6	✓	6.46	629	65.5	✓	
—	—	—	—	—	—	—	—

Purge Method

- 2" Bladder Pump Bailer Well Wizard Dedicated
 Submersible Pump Cenentrifugal 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, light spon and odor on initial extraction
Sample collected 1525.

Signature: D. F. Hoberg (J. Forsyth)

Volumes Per Unit Length Selected Well Casing Diameters

Volume Per Unit Length

Well Casing ID. (inches)	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 Ave, Oakland CA

Client: D. Grimit

Project Manager: D. F. Hoexter

Sampler: J. Forsythe, J. Schultz

Casing Diameter: 2 inch 3 inch 4 inch

Lab I.D.:

Date: 7/22/00

Sample Location/I.D.: MW-8

Start Time:

6 inch Other:

Depth of Well (feet): 26

Calculated Purged Volume: 9.5

Depth to Water (feet): 5.47

Actual Purged Volume 10

Sample Depth (feet):

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
1310	2.5	2.5	6.67	257	65.3		
1317	5		6.62	255	65.9		
1323	7.5		6.66	242	65.8	<u>Cloudy/tan</u>	
1329	10	V	6.64	251	65.7		
—	—	—	—	—	—	—	—

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 shear or odor. Sample collected 1528

Signature: ① - J. W. (J. Forsythe)

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing ID. (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 Ave., Oakwood A
 Client: D. Grumet
 Project Manager: D. F. Hober
 Sampler: J. Forsythe, J. Schulte
 Casing Diameter: 2 inch 3 inch 4 inch 6 inch Other: _____

Lab I.D.: _____
 Date: 7/22/00
 Sample Location/I.D.: MW - 9
 Start Time: _____

Depth of Well (feet): 20
 Depth to Water (feet): 15.78
 Sample Depth (feet): _____

Calculated Purged Volume: 2.7
 Actual Purged Volume 2.25

Field Measurements

Time	Cum (gal.)	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
<u>1218</u>	<u>0.75</u>	<u>0.75</u>	<u>6.43</u>	<u>796</u>	<u>66.2</u>		
<u>1225</u>	<u>1.5</u>	<u>1</u>	<u>6.48</u>	<u>795</u>	<u>66.4</u>	<u>Lgt. brown</u>	
<u>1237</u>	<u>2.25</u>	<u>↓</u>	<u>6.51</u>	<u>820</u>	<u>66.6</u>		
<u><</u>	<u>(well nearly evacuated -</u>	<u>no purge</u>	<u>4th volume)</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: Initial extraction - odor. Sample collected 1515.

Signature: ① - J.F.W. (J. Forsythe)

Conversion Factors

Volumes Per Unit Length Selected Well Casing Diameters	Volume Per Unit Length	To Convert	Into	Multiply
Well Casing ID. (inches)	Cubic Gal/ft 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
		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 Engineering Geology 734 Torreya Court Palo Alto, CA 94303	Client Project ID: #E-10-1C-261C; 1970 Seminary Ave.	Date Sampled: 07/22/00
		Date Received: 07/24/00
	Client Contact: David Hoexter	Date Extracted: 07/24/00
	Client P.O:	Date Analyzed: 07/24/00

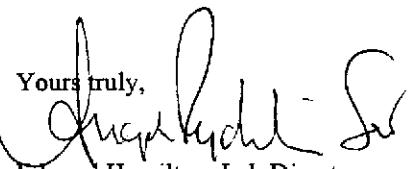
07/31/00

Dear David:

Enclosed are:

- 1). the results of 9 samples from your #E-10-1C-261C; 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



McCAMPBELL ANALYTICAL INC.

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

* cluttered chromatogram; sample peak coelutes with surrogate peak

^aThe following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.



McCAMPBELL ANALYTICAL INC.

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

Hoexter Consulting Engineering Geology 734 Torreya Court Palo Alto, CA 94303	Client Project ID: #E-10-1C-261C; 1970 Seminary Ave.	Date Sampled: 07/22/00
		Date Received: 07/24/00
	Client Contact: David Hoexter	Date Extracted: 07/24/00
	Client P.O:	Date Analyzed: 07/25-07/27/00

Petroleum Oil & Grease (with Silica Gel Clean-up) *

EPA methods 413.1, 9070 or 9071; Standard Methods 5520 D/E&F or 503 D&E for solids and 5520 B&F or 503 A&E for liquids

Lab ID	Client ID	Matrix	Oil & Grease*
43558	MW-1	W	320,h
43559	MW-2	W	ND
43560	MW-3	W	ND
43561	MW-4	W	7.0,h
43562	MW-5	W	12
43563	MW-6	W	ND
43564	MW-7	W	10
43565	MW-8	W	ND
43566	MW-9	W	71
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		5 mg/L
	S		50 mg/kg

* water samples are reported in mg/L, wipe samples in mg/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in mg/L

h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5vol. % sediment.

DHS Certification No. 1644

 Edward Hamilton, Lab Director



McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
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<http://www.mccampbell.com> E-mail: main@mccampbell.com

Hoexter Consulting Engineering Geology 734 Torreya Court Palo Alto, CA 94303	Client Project ID: #E-10-1C-261C; 1970 Seminary Ave.	Date Sampled: 07/22/00
		Date Received: 07/24/00
	Client Contact: David Hoexter	Date Extracted: 07/25-07/28/00
	Client P.O:	Date Analyzed: 07/25-07/28/00

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	43558	43559	43560	43561
Client ID	MW-1	MW-2	MW-3	MW-4
Matrix	W	W	W	W
Compound	Concentration			
Bromodichloromethane	ND<2.5	ND	ND	ND<10
Bromoform ^(b)	ND<2.5	ND	ND	ND<10
Bromomethane	ND<2.5	ND	ND	ND<10
Carbon Tetrachloride ^(c)	ND<2.5	ND	ND	ND<10
Chlorobenzene	ND<2.5	ND	ND	ND<10
Chloroethane	ND<2.5	ND	ND	ND<10
2-Chloroethyl Vinyl Ether ^(d)	ND<2.5	ND	ND	ND<10
Chloroform ^(e)	ND<2.5	ND	ND	ND<10
Chloromethane	ND<2.5	ND	ND	ND<10
Dibromochloromethane	ND<2.5	ND	ND	ND<10
1,2-Dichlorobenzene	16	ND	ND	38
1,3-Dichlorobenzene	ND<2.5	ND	ND	ND<10
1,4-Dichlorobenzene	5.8	ND	ND	ND<10
Dichlorodifluoromethane	ND<2.5	ND	ND	ND<10
1,1-Dichloroethane	ND<2.5	ND	ND	ND<10
1,2-Dichloroethane	ND<2.5	17	0.52	ND<10
1,1-Dichloroethene	ND<2.5	ND	ND	ND<10
cis 1,2-Dichloroethene	15	10	ND	620
trans 1,2-Dichloroethene	ND<2.5	ND	ND	ND<10
1,2-Dichloropropane	ND<2.5	1.2	ND	ND<10
cis 1,3-Dichloropropene	ND<2.5	ND	ND	ND<10
trans 1,3-Dichloropropene	ND<2.5	ND	ND	ND<10
Methylene Chloride ^(f)	ND<2.5	ND<2	ND<2	ND<10
1,1,2,2-Tetrachloroethane	ND<2.5	ND	ND	ND<10
Tetrachloroethene	ND<5	ND<1	ND<1	ND<10
1,1,1-Trichloroethane	ND<2.5	ND	ND	ND<10
1,1,2-Trichloroethane	ND<2.5	ND	ND	ND<10
Trichloroethene	ND<2.5	12	ND	19
Trichlorofluoromethane	ND<2.5	ND	ND	ND<10
Vinyl Chloride ^(g)	8.2	ND	ND	97
% Recovery Surrogate	110	93	93	91
Comments	h			h

* 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.

DHS Certification No. 1644

Edward Hamilton, Lab Director



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 Telephone : 925-798-1620 Fax : 925-798-1622
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Hoexter Consulting Engineering Geology 734 Torreya Court Palo Alto, CA 94303	Client Project ID: #E-10-1C-261C; 1970 Seminary Ave.	Date Sampled: 07/22/00
		Date Received: 07/24/00
	Client Contact: David Hoexter	Date Extracted: 07/25-07/28/00
	Client P.O:	Date Analyzed: 07/25-07/28/00

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	43562	43563	43564	43565
Client ID	MW-5	MW-6	MW-7	MW-8
Matrix	W	W	W	W
Compound	Concentration			
Bromodichloromethane	ND<1	ND	ND<5	ND
Bromoform ^(b)	ND<1	ND	ND<5	ND
Bromomethane	ND<1	ND	ND<5	ND
Carbon Tetrachloride ^(c)	ND<1	ND	ND<5	ND
Chlorobenzene	ND<1	ND	ND<5	ND
Chloroethane	1.8	ND	ND<5	ND
2-Chloroethyl Vinyl Ether ^(d)	ND<1	ND	ND<5	ND
Chloroform ^(e)	ND<1	ND	ND<5	ND
Chloromethane	ND<1	ND	ND<5	ND
Dibromochloromethane	ND<1	ND	ND<5	ND
1,2-Dichlorobenzene	2.4	ND	18	ND
1,3-Dichlorobenzene	ND<1	ND	ND<5	ND
1,4-Dichlorobenzene	ND<1	ND	6.1	ND
Dichlorodifluoromethane	ND<1	ND	ND<5	ND
1,1-Dichloroethane	ND<1	ND	ND<5	ND
1,2-Dichloroethane	1.4	1.2	ND<5	ND
1,1-Dichloroethene	ND<1	ND	ND<5	ND
cis 1,2-Dichloroethene	2.6	9.3	170	1.7
trans 1,2-Dichloroethene	ND<1	ND	ND<5	ND
1,2-Dichloropropane	ND<1	ND	ND<5	ND
cis 1,3-Dichloropropene	ND<1	ND	ND<5	ND
trans 1,3-Dichloropropene	ND<1	ND	ND<5	ND
Methylene Chloride ^(f)	ND<1	ND<2	ND<5	ND<2
1,1,2,2-Tetrachloroethane	ND<1	ND	ND<5	ND
Tetrachloroethene	ND<1	ND<1	ND<5	2.4
1,1,1-Trichloroethane	ND<1	ND	ND<5	ND
1,1,2-Trichloroethane	ND<1	ND	ND<5	ND
Trichloroethene	ND<1	ND	8.0	1.6
Trichlorofluoromethane	ND<1	ND	ND<5	ND
Vinyl Chloride ^(g)	5.0	0.97	ND<5	ND
% Recovery Surrogate	102	94	97	91
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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Hoexter Consulting Engineering Geology 734 Torreya Court Palo Alto, CA 94303	Client Project ID: #E-10-1C-261C; 1970 Seminary Ave.	Date Sampled: 07/22/00
		Date Received: 07/24/00
	Client Contact: David Hoexter	Date Extracted: 07/25-07/28/00
	Client P.O:	Date Analyzed: 07/25-07/28/00

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	43566			
Client ID	MW-9			
Matrix	W			
Compound	Concentration			
Bromodichloromethane	ND<1			
Bromoform ^(b)	ND<1			
Bromomethane	ND<1			
Carbon Tetrachloride ^(c)	ND<1			
Chlorobenzene	ND<1			
Chloroethane	ND<1			
2-Chloroethyl Vinyl Ether ^(d)	ND<1			
Chloroform ^(e)	ND<1			
Chloromethane	ND<1			
Dibromochloromethane	ND<1			
1,2-Dichlorobenzene	1.4			
1,3-Dichlorobenzene	ND<1			
1,4-Dichlorobenzene	ND<1			
Dichlorodifluoromethane	ND<1			
1,1-Dichloroethane	ND<1			
1,2-Dichloroethane	ND<1			
1,1-Dichloroethene	ND<1			
cis 1,2-Dichloroethene	1.6			
trans 1,2-Dichloroethene	ND<1			
1,2-Dichloropropane	ND<1			
cis 1,3-Dichloropropene	ND<1			
trans 1,3-Dichloropropene	ND<1			
Methylene Chloride ^(f)	ND<1			
1,1,2,2-Tetrachloroethane	ND<1			
Tetrachloroethene	ND<1			
1,1,1-Trichloroethane	ND<1			
1,1,2-Trichloroethane	ND<1			
Trichloroethene	ND<1			
Trichlorofluoromethane	ND<1			
Vinyl Chloride ^(g)	ND<1			
% Recovery Surrogate	96			
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

Date: 07/23/00-07/24/00 Matrix: Water

Extraction: N/A

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	

SampleID: 40793

Instrument: GC-3

Surrogate1	0.000	97.0	95.0	100.00	97	95	2.1
Xylenes	0.000	280.0	269.0	300.00	93	90	4.0
Ethyl Benzene	0.000	94.0	90.0	100.00	94	90	4.3
Toluene	0.000	96.0	92.0	100.00	96	92	4.3
Benzene	0.000	99.0	95.0	100.00	99	95	4.1
MTBE	0.000	106.0	107.0	100.00	106	107	0.9
GAS	0.000	837.1	808.1	1000.00	84	81	3.5

SampleID: 72600

Instrument: GC-11 A

Surrogate1	0.000	110.0	107.0	100.00	110	107	2.8
TPH (diesel)	0.000	308.0	312.0	300.00	103	104	1.3

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

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

RPD means Relative Percent Deviation



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QC REPORT

Date: 07/25/00 Matrix: Water

Extraction: N/A

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	

SampleID: 72500

Instrument: GC-7

Surrogate1	0.000	88.0	88.0	100.00	88	88	0.0
Xylenes	0.000	269.0	268.0	300.00	90	89	0.4
Ethyl Benzene	0.000	87.0	87.0	100.00	87	87	0.0
Toluene	0.000	87.0	80.0	100.00	87	80	8.4
Benzene	0.000	85.0	82.0	100.00	85	82	3.6
MTBE	0.000	95.0	95.0	100.00	95	95	0.0
GAS	0.000	1025.9	993.3	1000.00	103	99	3.2

SampleID: 72500

Instrument: MB-1

Oil & Grease	0.000	23.0	20.4	20.00	115	102	12.0
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SampleID: 72500

Instrument: GC-2 A

Surrogate1	0.000	98.0	97.0	100.00	98	97	1.0
TPH (diesel)	0.000	296.0	275.0	300.00	99	92	7.4

SampleID: 72500

Instrument: IR-1

Surrogate1	0.000	80.8	83.2	100.00	81	83	2.9
TRPH	0.000	26.9	28.2	23.70	114	119	4.7

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

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2100$$

RPD means Relative Percent Deviation



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QC REPORT

EPA 8010/8020/EDB

Date: 07/25/00-07/26/00 Matrix: Water

Extraction: N/A

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	

SampleID: 72600

Instrument: GC-1

Surrogate1	0.000	97.0	99.0	100.00	97	99	2.0
Chlorobenzene	0.000	93.0	88.0	100.00	93	88	5.5
Trichloraethane	0.000	96.0	86.0	100.00	96	86	11.0
1,1-DCE	0.000	111.0	101.0	100.00	111	101	9.4

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

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

RPD means Relative Percent Deviation

2118B ZHC 29

CHAIN-OF-CUSTODY RECORD

Pg 1 of 2

Project Number		Project Name		Number/Type of Containers	Analytical Tests							
E-10-1C-261C		1970 Seminary Ave, Octavia CA			TPH-G/BEC/HBE HVC-SO ₂ SM-552c51F Perox-142							
Sampler's Name (printed)												
Boring Number	Date	Time	Soil	Water	Sample Location or Depth	Sample Number	2 WA	X	X		43558	
+ HU-1	7/24/00	15:40								X	43559	
		"							X		43560	
+ -2		15:10								X	43561	
		"							X		43562	
(+) -3		14:55						X	X		43563	
		"							X		43564	
+ -4		15:17						X	X			
		"							X			
+ -5		15:41						X	X			
		"							X			
(+) -6		14:56						X	X			
		"							X			
+ -7		15:25						X	X			
		"							X			

Relinquished by: (Signature)

*J. Fong*Date/Time
7/23/00 20:30

Received by: (Signature)

D. J. D. L.

Ship To:

McCaybed Ave.

Relinquished by: (Signature)

*D. J. D. L.*Date/Time
7/24/00 08:00

Received by: (Signature)

J. M. G. Schell

Relinquished by: (Signature)

*J. M. G. Schell*Date/Time
7/24/00 2:21

Received for Laboratory by:

(Signature)
S. Valdez

Attention:

Phone No:

Requested Turnaround Time:

Normal

Date/Time
7/24/00 4:45

Contact:

S. Valdez 7/24 MAI
David DEXTER

Phone 650-494-2505

Remarks:

IDEA
GOOD CONDITION

SEAL COMPLIMENTARY

PRESERVATION APPROPRIATE
NO VS O&G METALS OTHER TESTIMONY Hoexter Consulting
Engineering Geology
734 Torreya Court
Palo Alto, CA 94303

21188

CHAIN-OF-CUSTODY RECORD

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Relinquished by: (Signature)

Date / Time

Received by: (Signature)

Bilingualized by: (Signature)

Date/Time

Received by: (Signature)

Distinguished by: (Signature)

/Date/Time

Received for Laboratory by:
(Signature)

Ship
To:

McCampbell Anal.

Pecto - CA

Attention:

Phone No: 1-800-555-1234

Phone 650-494-7505

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Requested
Turnarounds
etc.

Remarks.

ICEAD _____
GOOD CONDITION _____
HEADSPACE VACUUM _____

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APPROPRIATE
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