

March 31, 2005

✓  
RECEIVED APR 07 2005

Mr. Amir Gholami  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Alameda County

APR 08 2005

E. G. G. G. G. G.

Re: Property on 1970 Seminary Ave, Oakland CA

Dear Mr. Gholami:

Enclosed please find a copy of the January 2005 Ground Water Sampling Report dated February 16, 2005, prepared by Hoexter Consulting, Inc.

Please review this report and advise if the levels are acceptable for closure of this site or if any additional action is required. Currently I understand our requirements to be semi annual well sampling, in February and July and compliance with the Geo Tracker system. Please advise if Alameda County requires any further action at this time.

Additionally it would be helpful to know exactly what levels Alameda County wishes to see in order to begin closure of this site. If you could provide this information or suggest where I might be able to find the answers to these questions, I would appreciate it.

I am available via phone, U.S. mail or e-mail. As I stated before, we wish to remain in accordance with the agency and I welcome your direction in this matter and appreciate your prompt response.

Sincerely,



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

encl

cc: David Hoexter, Hoexter Consulting, Inc

RECEIVED APR 07 2005

Alameda County

APR 09 2005

Environmental Services

**JANUARY 2005  
GROUND WATER SAMPLING REPORT  
FOR  
STID 553 - GRIMIT AUTO AND REPAIR  
1970 SEMINARY AVENUE  
OAKLAND, CALIFORNIA**

**E-10-1F-565F**

**February 16, 2005**

**Prepared by**

**HOEXTER CONSULTING, INC.**

734 Torreya Court

Palo Alto, California 94303-4160

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

**Geology / Engineering Geology / Environmental Studies**

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

734 Torrey Court  
Palo Alto, California 94303-4160

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

February 16, 2005

E-10-1F-565F  
HCQuartEnvrRpts:Sem.1970/22(1/05)

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

RE: **JANUARY, 2005  
GROUND WATER SAMPLING REPORT  
STID 553 - GRIMIT AUTO AND REPAIR  
1970 SEMINARY AVENUE  
OAKLAND, CALIFORNIA**

Dear Mr. Gritmit:

Enclosed is our January 2005 ground water sampling report for the property located at 1970 Seminary Avenue, southwest 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.

Overall contaminant levels remain elevated and effectively unchanged from the previous sampling events. Over the life of the wells, concentrations of petroleum hydrocarbon compounds have declined. Concentrations of HVOCs have variably increased and declined.

Primary contaminant sources have been removed. However, residual contaminant concentrations remain elevated, and the lateral extent of contamination has not been delineated. Although the site is attenuating, we recommend consideration of remedial alternatives, e.g. preparation of a Corrective Action Plan (CAP). In addition, water production from all wells, excepting well MW-8, has declined. We recommend that all wells excepting MW-8 be re-developed to increase water flow to the well. This will provide more representative water samples for future analysis.

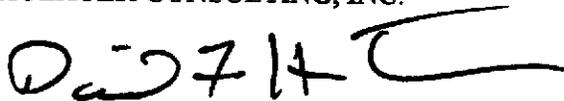
We recommend that copies of the enclosed report be submitted to the Alameda County Health Care Services Agency. The next round of sampling is currently scheduled to be conducted during July 2005. We appreciate the opportunity to provide services to you on this project and trust this report meets your needs at this time.

Mr. Doyle Gruit: E-10-1F-565F; February 16, 2005; Transmittal Letter Page 2

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. Hoexter', with a long horizontal flourish extending to the right.

David F. Hoexter, RG/CEG/REA (Geology registrations expire 11/30/05)  
Principal Geologist

Copies: Addressee (1)

---

JANUARY 2005  
GROUND WATER SAMPLING REPORT

For

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

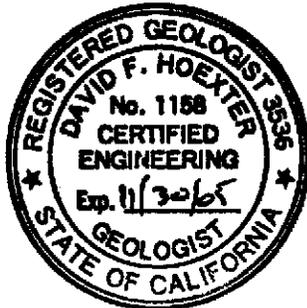
To

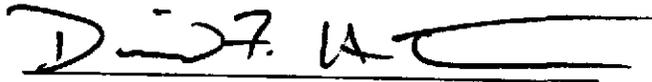
Mr. Doyle Gritmit  
c/o Angel La Marca  
945 S. Lehigh St.  
Anaheim Hills, California 92807



E-10-1F-565F

February 16, 2005





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

# TABLE OF CONTENTS

Page No.

Letter of Transmittal

TITLE PAGE

TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
2.0 FIELD INVESTIGATION.....	1
3.0 ANALYTICAL RESULTS.....	2
3.1 Laboratory Procedures.....	2
3.2 Observations and Analytical Results.....	2
4.0 CONCLUSIONS AND RECOMMENDATIONS.....	3
5.0 LIMITATIONS.....	4

ENCLOSURES

Tables

- 1A - Ground Water Elevation Data
- 1B - Summary of Ground Water Gradient Information
- 2 - Summary of Analytical Test Results - Water: Petroleum Hydrocarbons
- 3 - Summary of Analytical Test Results - Water: HVOCs
- 4 - Summary of Analytical Test Results - Water: PNA, PAH
- 5 - Summary of Analytical Test Results - Water: Additional Chemical Parameters
- 6 - Summary of Analytical Test Results - Water: Fuel Fingerprint with Silica Gel Clean Up

Figures

- 1 - Location Map
- 2 - Site Plan
- 3A - Ground Water Contour and Gradient Direction Map: "Shallow Wells"
- 3B - Ground Water Contour and Gradient Direction Map: "Deeper Wells"

Appendices

- A- Ground Water Sampling Field Logs, Chain of Custody, Analytical Test Results

**JANUARY 2005  
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 January 2005 ground water sampling at 1970 Seminary Avenue, Oakland, California. The project location is shown on the Location Map, Figure 1. The scope of services provided during this investigation consisted primarily of collecting and analyzing ground water samples from each of the nine monitoring wells installed at the site. Ground water samples were analyzed for petroleum hydrocarbons and halogenated volatile organic compounds. Well locations and pertinent site features are shown on Figure 2, Site Plan.

## **2.0 FIELD INVESTIGATION**

The ground water monitoring wells were sampled by representatives of Hoexter Consulting, Inc. Due to past, very slow equilibration of ground water levels, the well caps were loosened two days prior to the planned sampling event. The wells were then secured with the caps sufficiently loose to allow venting, and left to equilibrate until they were sampled. The wells were purged and sampled following water level measurements on January 20, 2005.

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 two 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 following each purge volume removal.

Ground water recharge to most wells was slow, resulting in dewatering of the wells prior to completion of the third or fourth well volume purge. Two wells only, MW-6 and MW-8, were purged the complete four volumes. In addition, well recovery was slow. Each well was sampled the same day, after allowing for as much recovery as possible, although recovery to the guideline level of 80 per cent of pre-purge elevation was not in all cases accomplished. It is possible that the well screens have become partially plugged.

Well MW-9 was sampled twice. An initial sample (Sample B on Tables 2 and 3) was obtained after one bailer volume was removed during the initial purge. A second sample (Sample A on Tables 2 and 3) was obtained following purging in the same manner as the other eight wells.

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 equipment related to the sampling process was thoroughly cleaned with "Alconox" detergent and rinsed with distilled water prior to sampling the well. Monitoring well sampling logs and the chain of custody are attached to this report as a part of Appendix A.

Prior to purging, ground water levels were measured in each well using the top of 2-inch PVC casing (generally the north side) as reference point. The average ground water elevation rose in all wells compared to the prior (July 2004) sampling event. The five "deeper" wells ranged in elevation increase from 3.62 to 7.08 feet, with an average elevation increase of 5.55 feet. The four "shallow" wells ranged in elevation increase from 2.03 to 5.05 feet, with an average increase of 3.88 feet.

Wells were surveyed in July 2004 by a California Licensed Surveyor, Virgil Chavez Land Surveying. The wells were surveyed to California GeoTracker specifications. Well-top elevations, depth to water, and calculated water-surface elevations are presented in Table 1. These data have been used to generate the Ground Water Contour and Gradient Direction Maps, Figures 3A ("shallow wells") and 3B ("deep wells").

Table 1B summarizes the ground water gradient direction and inclination data for the site, including previous measurements. The ground water gradient direction and inclination are essentially consistent with the previous data. The data for the five "deeper" wells indicate a gradient direction away from Seminary Avenue towards the east and southeast. The apparent gradient varies across the site, but averages 0.04 foot per foot near the source area. The approximate gradient direction is S 30° E. The data for the four "shallow" wells indicate an opposing gradient direction, towards Seminary Avenue. The apparent shallow gradient also varies across the site, but averages 0.17 foot per foot in the source area. The approximate gradient direction is N 45° W.

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**

The initial bailer extraction was observed for presence of free-phase product and odor following the depth to water sounding. Free-phase product, commonly present in well MW-1, was not observed. A "moderate" sheen and strong odor were observed in MW-1. Well MW-4 also exhibited visual sheen following the initial purge volume. A sheen is common for this well. All wells with the exception of MW-6 and MW-8 dewatered (i.e. contained less than 3 or 4 feet of standing water) prior to completion of a three- or complete four-volume

purge. Two or three well volumes were thus removed from each of these wells. In most cases, these wells recovered to near or greater than 80 per cent of initial water level prior to being sampled.

The results of the chemical analyses are summarized on Tables 2 through 6 and are attached to this report as a part of Appendix A. Analytical results of all previous testing are also included in the tables. The results in Tables 4 and 5 are of parameters not currently tested for; the results in Table 6 are from a one-time sampling event during February, 2002. The current analytical results indicate that TRPH, TPH-G, and BTEX compounds, as well as HVOCs, are present at elevated levels which are generally on the same order of magnitude as the most recent (July 2004) analyses.

TPH-G and BTEX levels remained effectively unchanged from the previous sampling event, variably increasing and decreasing. There has been, however, an overall generally downward trend in TPH-G and BTEX levels over the life of most (although not all) 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. MTBE was not detected, although detection limits are elevated and it has been previously detected at the site. Oil/grease were detected in well MW-1 and MW-7 only, although detection limits are elevated for the other wells.

Various HVOCs were detected in each well, with the exception of wells MW-3 and MW-9. Reporting limits ranged from 0.5 ppb (6 wells) to 5.0 ppb. HVOC commonly increased in the remaining seven wells

As noted above, all wells were sampled following the maximum feasible purge volume. However, an additional sample was obtained from well MW-9 following the initial bailer purge (approximately 1 liter). This initial grab (non-purge) sample resulted in *lower* detections of petroleum hydrocarbons. Detections for both initial and final samples in MW-9 were non-detect for HVOC.

#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

All nine wells were available for sampling.

Overall ground water contaminant levels remain elevated and effectively unchanged from the previous sampling events. Over the life of the wells, concentrations of petroleum hydrocarbon compounds have declined. Concentrations of HVOCs have variably increased and declined.

Primary contaminant sources have been removed. However, residual ground water contaminant concentrations remain elevated. In addition, the lateral (off-site) extent of contamination has not been delineated. Although attenuating, we recommend consideration of remedial alternatives, e.g. preparation of a Corrective Action Plan (CAP).

Water production from all wells, excepting well MW-8, has declined. We recommend that all wells excepting MW-8 be re-developed to increase water flow to the well. This will provide more representative water samples for future analysis.

Wells have been surveyed to State of California GeoTracker standards. Data will be subsequently uploaded to the GeoTracker web site.

## 5.0 LIMITATIONS

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

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

\*\*\*\*\*

**TABLE 1A**  
**GROUND WATER ELEVATION DATA**  
 (All Measurements in Feet)

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)	
<b>MW-1 ("deep")</b>				
8/6/90	37.00	21.5	15.5	
1/28/92		21.0	16.0	
4/27/92		20.95	16.05	
8/10/92		22.20	14.80	
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	
2/3/02	16.03		20.96	
7/23/02	20.45		16.54	
1/20/03	40.02	15.08	21.91	
7/30/03		19.06	17.93	
1/27/04		16.45	20.54	
7/22/04		20.22	19.80 (7)	
1/20/05		13.92	26.10	
<b>MW-2 ("deep")</b>				
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

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
<b>MW-2 ("deep") cont'</b>			
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)
2/3/02		11.40	25.00
7/23/02		13.42	22.98
1/20/03		10.49	25.91
7/30/03		13.47	22.93
1/27/04		11.72	24.68
7/22/04	39.42	13.86	25.56 (7)
1/20/05		10.24	29.18
<b>MW-3 ("shallow")</b>			
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		9.31	27.43
1/15/97		6.23	30.71
6/23/97	36.94	9.65	27.29
10/6/97		10.53	26.41
12/12/98		7.12	29.82
4/24/99		7.17	29.77
12/18/99		8.51	28.43
7/22/00		9.41	27.53
1/29/01		7.23	29.71
7/28/01		8.63	28.31
2/3/02		7.99	28.95
7/23/02		10.17	26.77
1/20/03		6.76	30.18
7/30/03		10.13	26.81
1/27/04		7.65	29.29
7/22/04	39.95	11.29	28.66 (7)
1/20/05		6.24	33.71
<b>MW-4 ("deep")</b>			
3/25-26/96	36.46	14.14	22.32
10/7/96		22.31	14.15
1/15/97		13.78	22.68

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
<b>MW-4 ("deep") cont'</b>			
6/23/97	36.47	20.90	15.57
10/6/97		22.77	13.60
12/12/98		17.16	19.31
4/24/99		14.55	21.92
12/18/99		20.46	16.01
7/22/00		20.67	15.80
1/29/01		18.06	18.41
7/28/01		20.80	15.67
2/3/02		15.53	20.94
7/23/02		20.26	16.21
1/20/03		15.26	21.21
7/30/03		20.23	16.24
1/27/04		17.15	19.32
7/22/04	39.49	21.28	18.21 (7)
1/20/05		14.20	25.29
<b>MW-5 ("deep")</b>			
10/7/96		22.86	13.91
1/15/97		17.33	19.44
6/23/97	36.77	21.91	14.86
10/6/97		24.26	12.51
12/12/98		20.66	16.11
4/24/99		17.19	19.58
12/18/99		22.71	14.06
7/22/00		21.42	15.35
1/29/01		20.79	15.98
7/28/01		21.07	15.70
2/3/02		17.67	19.10
7/23/02		20.16	16.61
1/20/03		17.21	19.56
7/30/03		20.32	16.45
1/27/04		18.34	18.43
7/22/04	39.79	20.90	18.89 (7)
1/20/05		15.89	23.90
<b>MW-6 ("shallow")</b>			
3/25-26/96	36.42	8.52	27.90
10/7/96		12.82	23.60
1/15/97		7.72	28.70
6/23/97	36.42	11.42	25.00
10/6/97		12.67	23.75
12/12/98		9.15	27.27
4/24/99		8.56	27.86
12/18/99		10.53	25.89
7/22/00		11.50	24.92
1/29/01		9.34	27.08

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
<b>MW-6 ("shallow") cont'</b>			
7/28/01		N/A	N/A
2/3/02		9.32	27.10
7/23/02		11.33	25.09
1/20/03		8.49	27.93
7/30/03		11.35	25.07
1/27/04		9.20	27.22
7/22/04	39.44	11.13	28.31 (7)
1/20/05		7.65	31.79
<b>MW-7 ("deep")</b>			
6/23/97	36.83	19.93	16.90
10/6/97		21.43	15.40
12/12/98		16.56	20.27
4/24/99		14.48	22.35
12/18/99		19.40	17.43
7/22/00		19.85	16.98
1/29/01		17.59	19.24
7/28/01		20.05	16.78
2/3/02		15.89	20.94
7/23/02		19.57	17.26
1/20/03		15.36	21.47
7/30/03		19.21	17.62
1/27/04		16.84	19.99
7/22/04	39.84	20.17	19.67 (7)
1/20/05		14.44	25.40
<b>MW-8 ("shallow")</b>			
6/23/97	36.55	5.74	30.81
10/6/97		5.69	30.86
12/12/98		4.01	32.54
4/24/99		4.40	32.15
12/18/99		4.91	31.64
7/22/00		5.47	31.08
1/29/01		3.01	33.54
7/28/01		4.92	31.63
2/3/02		3.82	32.73
7/23/02		5.11	31.44
1/20/03		3.57	32.98
7/30/03		5.23	31.32
1/27/04		4.26	32.29
7/22/04	39.49	5.42	34.07 (7)
1/20/05		3.39	36.10
<b>MW-9 ("shallow")</b>			
6/23/97	36.70	17.04	19.66

Well Number and Date of Measurement	Reference Elevation (2)	Depth To Water	Relative Ground Water Elevation (2)
MW-9 ("shallow") cont'			
10/6/97		19.17	20.53
12/12/98		14.18	22.52
4/24/99		12.33	24.37
12/18/99		16.14	20.56
7/22/00		15.78	20.92
1/29/01		14.65	22.05
7/28/01		15.33	21.37
2/3/02		12.59	24.11
7/23/02		15.27	21.43
1/20/03		12.27	24.43
7/30/03		14.85	21.85
1/27/04		11.72	24.98
7/22/04	39.71	15.17	24.54 (7)
1/20/05		10.16	29.52

**Notes to Table 1A**

- (1) N/A = not applicable.
- (2) Elevations from a survey conducted by Andreas Deak, California Licensed Land Surveyor, March 21, 1996 and June 23, 1997, City of Oakland datum; and by Virgil D. Chavez Land Surveying, California Licensed Land Surveyor, July 22, 2004, NGVD 29 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).
- (7) (Initial elevation to NGVD datum).

**TABLE 1B**  
**SUMMARY OF GROUND WATER GRADIENT INFORMATION**

Date	Shallow Wells		Deep Wells	
	Direction	Inclination	Direction	Inclination
8/6/90	N/A	N/A	N/A	N/A
1/28/92	N/A	N/A	N/A	N/A
4/27/92	N/A	N/A	N/A	N/A
8/10/92	N/A	N/A	N/A	N/A
2/11/94	N/A	N/A	N/A	N/A
2/28/94	N/A	N/A	N/A	N/A
9/9/94	N/A	N/A	N/A	N/A
12/28/94	N/A	N/A	N/A	N/A
4/13/95	N/A	N/A	N/A	N/A
11/1/95	N/A	N/A	N/A	N/A
3/8/96	N/A	N/A	N/A	N/A
3/25-26/96 (2)	N/A	N/A	N/A	0.01
10/7/96 (2)	N/A	N/A	N/A	0.02
1/15/97 (2)	N/A	N/A	N/A	0.13
6/23/97 (3)	N 44 W	0.24	S 33 E	0.07
10/6/97 (3)	N 47 W	0.29	S 68 E	0.11
12/12/98 (3)	N 33 W	0.32	S 55 E	0.05
4/24/99 (3)	N 59 W	0.17	S 47 E	0.07
12/18/99 (3)	N 55 W	0.26	S 44 E	0.07
7/22/00 (3)	N 56 W	0.24	S 44 E	0.19
1/29/01 (3)	N 47 W	0.30	S 65 E	0.20
7/28/01 (3)	N 51 W	0.24	S 65 E	0.05
2/3/02 (3)	N 50 W	0.23	S 65 E	0.05
7/23/02 (3)	N 51 W	0.24	S 65 E	0.11
1/20/03 (3)	N 50 W	0.22	S 85 E	0.19
7/30/03 (3)	N 62 W	0.23	S 50 E	0.10
1/27/04 (3)	N 60 W	0.19	S 66 E	0.10
7/22/04 (3)	N 60 W	0.22	S 77 E	0.08
1/20/05 (3)	N 45 W	0.17	S 67 E	0.04
			S 30 E	

**Notes to Table 1B**

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

TABLE 2

**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)
<b>MW-1 ("deep")</b>							
8/6/90 (2)	54,000	NA	3,500	3,200	1,900	9,400	7,600
1/28/92	2,000,000	NA	7,400	17,000	28,000	120,000	7,500 (5)
4/27/92 (3)	500,000	NA	3,400	6,400	10,000	45,000	440,000 (6)
4/27/92 (4)	175,000	NA	4,200	4,400	3,200	14,600	N/A
8/10/92	170,000	NA	4,200	4,200	3,300	15,900	120,000 (6)
2/11/94	1,800,000	NA	ND	5,100	5,200	23,900	16,000 (6)
9/9/94	23,000,000	NA	56,000	61,000	9,100	137,000	880,000 (6)
12/28/94	55,000	NA	3,700	5,300	1,400	5,800	83,000 (6)
4/13/95	45,000	NA	2,800	3,400	1,200	5,100	50,000 (5)
11/1/95	44,000	NA	2,600	3,400	1,400	5,900	52,000 (5)
3/25/96	45,000	NA	3,000	4,100	1,600	6,800	46,000 (5) (7)
10/8/96	55,000	490	3,300	4,500	1,700	7,100	11,000 (5) (7)
1/16/97	48,000	310	2,600	3,200	1,300	5,300	110,000 (5) (7)
6/23/97	40,000	ND<100	2,300	3,500	1,500	6,300	190,000 (5) (7)
10/7/97	45,000	ND<680	2,500	3,600	1,700	6,800	150,000 (5) (7)
12/12/98	39,000	ND<1,500	3,000	100	1,400	5,800	67,000 (5) (7)
4/24/99	33,000	ND<200	2,300	3,300	1,100	4,100	140,000 (5) (7)
4/24/99 (8)	41,000	1,100	2,500	3,700	1,500	5,700	N/A
12/18/99	43,000	ND<200	2,600	3,800	1,400	5,800	110,000 (5) (7)
7/22/00	37,000	ND<200	2,200	2,600	1,300	5,200	320,000 (5) (7)
1/29/01	36,000	ND<200	2,100	2,300	1,200	4,500	76,000 (5) (7)
7/28/01	99,000	ND<250	1,500	2,300	1,700	6,600	86,000 (5) (7)
2/3/02	42,000	ND<500	1,200	1,300	1,100	3,900	42,000 (5) (7)
7/23/02	53,000	ND<1000	1,700	2,800	1,500	5,100	170,000 (5) (7)
1/20/03	33,000	ND<2000	2,100	2,500	1,300	4,400	65,000 (5) (7)
7/30/03	24,000	ND<500	1,300	1,500	760	2,700	55,000 (5)
1/27/04	21,000	ND<250	1,600	1,500	1,100	3,200	220,000 (5)
7/22/04	31,000	ND<1000	1,500	1,700	1,200	4,100	780,000 (5) (7)
1/20/05	25,000	ND<270	1,300	1,400	1,000	2,800	72,000 (5) (7)
<b>MW-2 ("deep")</b>							
2/11/94	130	NA	22	1.1	5.2	7.3	ND (6)
9/9/94	1,000	NA	89	ND	ND	6.9	ND (6)
12/28/94	330	NA	100	3.8	5.4	4.7	5100 (6)
4/13/95	1,300	NA	280	6.9	33	23	ND (5)
11/1/95	100	NA	9.9	ND	ND	ND	ND (5)
3/25/96	4,500	NA	470	57	220	280	ND (5) (7)
10/8/96	710	41	1.9	0.54	1.0	1.0	ND (5) (7)
1/16/97	330	12	41	2.4	1.3	9.9	ND (5) (7)
6/23/97	280	10	12	0.69	ND	13	NA (7)
10/7/97	320	ND<35	4.5	ND	ND	ND	NA (7)
12/12/98	290	ND<11	21	0.76	10	19	ND (5) (7)
4/24/99	360	21	36	1.3	9.2	19	ND<5000 (5) (7)
12/18/99	210	ND<200	13	ND	2.9	7.7	ND<5000 (5) (7)
7/22/00	180	ND<5	10	ND	4.5	6.0	ND<5000 (5) (7)
1/29/01	130	ND<5	16	ND	1.9	3.8	ND<5000 (5) (7)
7/28/01	ND<50	ND<5	2.7	ND	0.64	0.69	ND<5000 (5) (7)
2/3/02	140	ND<5	5.5	ND	9.0	12	ND<5000 (5) (7)
7/23/02	780	ND<15	52	2.0	44	6.2	ND<5000 (5) (7)
1/20/03	1,900	ND<50	120	10	120	94	ND<5000 (5) (7)
7/30/03	710	ND<20	43	1.8	24	5.9	ND<5000 (5) (7)
1/27/04	180	ND<5.0	10	ND<0.5	3.2	10	ND<5000 (5) (7)
7/22/04	ND<50	ND<5.0	0.90	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)
1/20/05	96	ND<5.0	1.3	ND<0.5	1.5	1.0	ND<5000 (5) (7)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
<b>MW-3 ("shallow")</b>							
2/11/94	ND	NA	ND	ND	ND	ND	ND (6)
9/9/94	710	NA	10	ND	ND	3.5	ND (6)
12/28/94	2,300	NA	7.8	ND	130	73	ND (6)
4/13/95	1,700	NA	2.9	ND	61	24	ND (5)
11/1/95	1,100	NA	4.4	ND	27	22	ND (5)
3/25/96	2,300	NA	4.0	0.96	120	65	ND (5) (7)
10/8/96	160	ND	ND	0.5	1.2	0.77	ND (5) (7)
1/16/97	1,800	7.1	2.8	0.68	48	66	ND<5000 (5) (7)
6/23/97	ND	ND	ND	ND	ND	ND	NA (7)
10/7/97	ND	ND	ND	ND	ND	ND	NA (7)
12/12/98	1,900	ND	1.8	0.78	78	42	ND (5) (7)
4/24/99	2,100	ND	1.5	0.85	79	43	ND<5000 (5) (7)
12/18/99	330	ND	0.51	ND	ND	ND	ND<5000 (5) (7)
7/22/00	230	ND	0.89	2.4	ND	ND	ND<5000 (5) (7)
1/29/01	450	ND<5	1.1	1.6	11	3.6	ND<5000 (5)
7/28/01	ND<50	ND<5	ND<0.5	ND	ND	ND	ND<5000 (5)
2/3/02	98	ND<5	ND<0.5	ND	ND	ND	ND<5000 (5)
7/23/02	ND<50	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5)
1/20/03	700	ND<5.0	1.6	0.56	41	21	ND<5000 (5)
7/30/03	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5)
1/27/04	85	ND<5.0	ND<0.5	ND<0.5	ND<0.5	0.87	ND<5000 (5)
7/22/04	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5)
1/20/05	440	ND<5.0	0.81	0.67	7.1	2.6	ND<5000 (5)
<b>MW-4 ("deep")</b>							
3/26/96	9,900	NA	4,000	40	71	100	ND (5) (7)
10/8/96	7,800	140	3,900	33	31	40	ND (5) (7)
1/16/97	4,800	84	1,900	21	2.5	27	5,200 (5) (7)
6/23/97	6,200	160	2,800	20	20	23	ND (5) (7)
10/7/97	4,400	85	1,800	14	18	14	ND (5) (7)
12/12/98	3,500	110	1,500	13	39	14	ND (5) (7)
4/24/99	3,100	ND<10	1,700	22	67	21	7,500 (5) (7)
12/18/99	2,600	33	1,000	12	32	10	ND<5000 (5) (7)
7/22/00	2,700	60	940	14	31	12	7,000 (5) (7)
1/29/01	2,500	ND<5	980	11	35	5	ND<5000 (5) (7)
7/28/01	1,100	27	250	6.3	19	4.8	90,000 (5) (7)
2/3/02	2,100	ND<25	890	23	41	20	7,400 (5) (7)
7/23/02	1,200	ND<17	490	11	22	8.8	ND<5000 (5) (7)
1/20/03	1,900	ND<80	740	11	32	12	ND<5000 (5) (7)
7/30/03	1,700	ND<150	440	8.9	18	6.1	ND<5000 (5) (7)
1/27/04	1,100	ND<10	350	10	17	5.0	31,000 (5) (7)
7/22/04	910	ND<100	210	7.9	19	6.5	54,000 (5) (7)
1/20/05	1,900	ND<200	550	36	63	43	ND<5000 (5) (7)
<b>MW-5 ("deep")</b>							
3/26/96	1,200	NA	43	8.2	83	95	ND (5) (7)
10/8/96	6,700	190	260	92	410	370	ND (5) (7)
1/16/97	3,000	90	150	68	190	180	ND (5) (7)
6/23/97	12,000	150	410	170	920	800	NA (7)
10/7/97	10,000	ND<480	310	62	530	500	NA (7)
12/12/98	11,000	ND<660	400	120	740	480	ND (5) (7)
4/24/99	9,300	ND<100	390	290	820	770	ND<5000 (5) (7)
12/18/99	7,000	ND<100	250	52	500	300	ND<5000 (5) (7)
7/22/00	14,000	ND<100	290	140	770	630	12,000 (5) (7)
1/29/01	8,200	ND<5	180	42	420	250	11,000 (5) (7)
7/28/01	9,100	ND<70	190	67	540	430	ND<5000 (5) (7)
2/3/02	11,000	ND<100	250	160	730	540	ND<5000 (5)
7/23/02	6,400	ND<110	160	67	540	390	ND<5000 (5)
1/20/03	7,300	ND<170	190	80	480	310	ND<5000 (5) (7)
7/30/03	8,700	ND<300	170	35	470	300	ND<5000 (5) (7)
1/27/04	7,600	ND<400	220	50	460	290	ND<5000 (5)
7/22/04	10,000	ND<250	200	38	510	400	ND<5000 (5)
1/20/05	8,500	ND<250	130	63	430	280	ND<5000 (5) (7)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
<b>MW-6 ("shallow")</b>							
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
2/3/02	2,500	ND<50	290	18	88	330	ND<5000 (5) (7)
7/23/02	1,100	ND<20	160	6.5	54	35	ND<5000 (5) (7)
1/20/03	3,800	ND<80	370	33	220	300	ND<5000 (5) (7)
7/30/03	2,000	ND<70	250	4.8	50	24	ND<5000 (5) (7)
1/27/04	2,600	ND<400	420	20	170	180	ND<5000 (5) (7)
7/22/04	1,200	ND<45	110	3.2	36	17	ND<5000 (5) (7)
1/20/05	3,100	ND<25	280	21	180	250	ND<5000 (5) (7)
<b>MW-7 (deep)</b>							
6/23/97	8,700	ND<20	950	260	520	380	ND (5) (7)
10/7/97	7,500	ND<310	1,100	86	280	150	ND (5) (7)
12/12/98	5,000	ND<190	640	43	200	55	ND (5) (7)
4/24/99	5,500	ND<10	640	180	290	210	ND<5000 (5) (7)
12/18/99	5,500	ND<10	570	27	91	31	ND<5000 (5) (7)
7/22/00	7,400	ND<80	620	180	240	180	10,000 (5) (7)
1/29/01	4,000	ND<10	410	21	22	21	7,000 (5) (7)
7/28/01	4,200	ND<70	540	120	110	110	ND<5000 (5) (7)
2/3/02	6,300	ND<25	560	110	190	140	ND<5000 (5) (7)
7/23/02	3,400	ND<50	440	6.3	87	61	ND<5000 (5) (7)
1/20/03	4,500	ND<170	380	32	30	36	ND<5000 (5) (7)
7/30/03	5,300	ND<400	460	34	43	52	ND<5000 (5) (7)
1/27/04	3,000	ND<90	350	15	13	18	ND<5000 (5) (7)
7/22/04	3,600	ND<170	440	10	10	25	ND<5000 (5) (7)
1/20/05	3,200	ND<25	320	31	29	34	19,000 (5) (7)
<b>MW-8 ("shallow")</b>							
6/23/97	610	5.9	25	1.4	4.3	2.4	ND (5) (7)
10/7/97	120	ND	6.9	ND	ND	ND	ND (5) (7)
12/12/98	ND	ND	ND	ND	ND	ND	ND (5) (7)
4/24/99	ND	ND	ND	ND	ND	ND	ND<5000 (5) (7)
12/18/99	ND	ND	ND	ND	ND	ND	ND<5000 (5) (7)
7/22/00	ND	ND	ND	ND	ND	ND	ND<5000 (5) (7)
1/29/01	ND	ND<5	0.87	ND	ND	ND	ND<5000 (5) (7)
7/28/01	ND	ND<5	ND	ND	ND	ND	ND<5000 (5) (7)
2/3/02	ND	16	ND	ND	ND	ND	ND<5000 (5) (7)
7/23/02	ND<50	ND<5	0.87	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)
1/20/03	ND<50	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)
7/30/03	ND<50	ND<5	2.0	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)
1/27/04	ND<50	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)
7/22/04	ND<50	ND<5	1.2	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)
1/20/05	ND<50	ND<5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5000 (5) (7)

Well and Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease HVOC (7)
<b>MW-9 ("shallow")</b>							
6/23/97	32,000	250	340	280	1,500	4,300	ND (5) (7)
10/7/97	33,000	ND<690	880	350	1900	4,700	ND (5) (7)
12/12/98	3,400	ND<78	160	14	220	210	ND (5) (7)
4/24/99	3,100	22	130	18	220	190	ND (5) (7)
12/18/99	7,500	100	220	44	440	650	ND<5000 (5) (7)
7/22/00	4,900	ND<10	93	15	240	250	71,000 (5) (7)
1/29/01	3,800	ND<10	160	35	260	310	5,000
7/28/01	5,700	ND<20	43	27	210	420	ND<5000 (5) (7)
2/3/02	7,800	ND<50	98	51	450	640	ND<5000 (5) (7)
7/23/02	2,300	ND<50	29	14	120	96	ND<5000 (5) (7)
1/20/03	5,000	ND<80	76	25	350	340	ND<5000 (5)
7/30/03	570	ND<5	7.2	1.2	14	4.8	ND<5000 (5) (7)
1/27/04	820	ND<20	14	2.6	35	35	ND<5000 (5) (7)
7/22/04	460	ND<25	5.3	1.2	4.0	7.2	ND<5000 (5) (7)
1/20/05a	330	ND<5	6.2	1.5	8.9	12	ND<5000 (5) (7)
1/20/05b (10)	150	ND<5	1.5	0.55	2.6	3.7	N/A
<b>EB-4 ("grab" gw sample)</b>							
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.
- (10) Supplemental sample following initial bailer volume removal.



Well and Date	CA	1,2 DCB	1,2 DCA	cls 1,2 DCE	trans 1,2 DCE	1,2 DCP	PCE	TCE	VCL
MW-3 ("shallow") continued									
1/20/05	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-4 ("deep")									
3/26/96	ND<8	22	ND<8	300	9.2	ND<8	38	150	44
10/8/96	ND<15	22	4.9	320	ND<15	ND<15	52	130	60
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97 (5)	3.6	21	5.3	340	10	ND<3	11	110	83
10/7/97	ND<8	20	ND<8	380	9.9	ND<8	ND<12	56	56
12/12/98 (7)	ND<3.5	18	ND<3.5	150	12	ND<8	ND<4.5	12	57
4/24/99	ND<8.5	20	ND<8.5	390	12	ND<8.5	33	240	43
12/18/99	ND<10.0	27	ND<10.0	390	13	ND<10.0	ND<10.0	39	ND<10.0
7/22/00	ND<10.0	38	ND<10.0	620	ND<10.0	ND<10.0	ND<10.0	19	97
1/29/01	ND<5.0	35	ND<5.0	380	15	ND<5.0	ND<5.0	19	97
7/28/01	ND<7.5	29	ND<5.0	310	18	ND<5.0	ND<5.0	8.4	150
2/3/02 (13)	ND<7.0	22	ND<7.0	310	16	ND<7.0	ND<7.0	20	120
7/23/02	ND<0.5	30	ND<0.5	240	17	ND<0.5	ND<0.5	ND<0.5	230
1/20/03	ND<10.0	28	ND<10.0	200	16	ND<10.0	ND<10.0	69	84
7/30/03	ND<10.0	32	ND<10.0	230	13	ND<10.0	ND<10.0	13	290
1/27/04 (17)	ND<5.0	41	ND<5.0	370	25	ND<5.0	ND<5.0	32	310
7/22/04 (18)	ND<5.0	23	ND<5.0	120	13	ND<5.0	ND<5.0	9.6	280
1/20/05 (19)	ND<5.0	28	ND<5.0	320	23	ND<5.0	ND<5.0	81	130
MW-5 ("deep")									
3/26/96	1.4	ND<0.5	2.1	6.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10
10/8/96	ND<2.5	ND<2.5	4.9	4.4	ND<2.5	ND<2.5	ND<2.5	ND<2.5	9.4
1/16/97	NA	NA	NA	NA	NA	NA	NA	NA	NA
6/23/97 (5)	2.0	2.1	2.0	7.2	0.71	ND<0.5	ND<0.5	ND<0.5	13
10/7/97	1.9	1.4	2.8	3.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10
12/12/98	1.4	2.0	1.1	3.7	ND<1	ND<1	ND<1.5	ND<1	5.8
4/24/99	ND<1	1.9	1.9	4.8	ND<1	ND<1	ND<1	ND<1	6.3
12/18/99	1.6	1.7	1.8	1.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.9
7/22/00	1.8	2.4	1.4	2.6	ND<1.0	ND<1.0	ND<1.0	ND<1.0	5.0
1/29/01	ND<1.0	2.2	2.6	2.2	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.2
7/28/01	1.4	1.3	1.7	1.4	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.6
2/3/02 (13)	1.8	2.0	2.1	3.9	0.95	ND<0.5	ND<0.5	ND<0.5	4.6
7/23/02	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
1/20/03	ND<1.0	1.4	1.4	1.6	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.3
7/30/03	ND<1.0	1.2	1.1	1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.0
1/27/04	ND<1.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
7/22/04	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
1/20/05	1.1	0.84	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<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
1/29/01	ND<0.5	ND<0.5	1.1	11	ND<0.5	ND<0.5	ND<5.0	ND<0.5	0.77
7/28/01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2/3/02	ND<0.5	ND<0.5	1.5	13	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
7/23/02	ND<1.0	ND<1.0	ND<1.0	9.3	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
1/20/03	ND<1.0	ND<1.0	1.8	14	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
7/30/03	ND<1.0	ND<0.5	1.3	7.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.7
1/27/04 (17)	ND<2.5	ND<2.5	ND<2.5	8.4	ND<2.5	ND<2.5	ND<2.5	ND<2.5	3.2
7/22/04	ND<0.5	ND<0.5	1.3	3.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1/20/05	ND<0.5	ND<0.5	0.99	8.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5

Well and Date	CA	1,2 DCB	1,2 DCA	cls 1,2 DCE	trans 1,2 DCE	1,2 DCP	PCE	TCE	VCL
<b>MW-7 ("deep")</b>									
6/23/97	0.93	1.6	ND<0.5	2.4	1.2	ND<0.5	9.8	17	1.5
10/7/97	ND<2	ND<2	ND<2	8.5	2.4	ND<2	38	110	ND<2
12/12/98	ND<2	2.2	ND<2	97	ND<2	ND<2	ND<3.5	ND<2	ND<2
4/24/99	ND<2	2.4	ND<2	31	ND<2	ND<2	9.3	82	ND<2
12/18/99 (9)	ND<3	5.7	ND<3	120	ND<3	ND<3	ND<3	12	ND<3
7/22/00 (10)	ND<5	18	ND<5	170	ND<5	ND<5	ND<5	8	ND<5
1/29/01 (11)	ND<5	18	ND<5	170	ND<5	ND<5	ND<5	8	ND<5
7/28/01 (12)	ND<5	11	ND<5	170	ND<5	ND<5	ND<5	6.9	6.1
2/3/02	ND<5.0	ND<5.0	ND<5.0	94	ND<5.0	ND<5.0	ND<5.0	30	ND<5.0
7/23/02	ND<10.0	12.0	ND<10.0	180	ND<10.0	ND<10.0	ND<10.0	ND<10.0	ND<10.0
1/20/03	ND<2.5	ND<2.5	ND<2.5	50	ND<2.5	ND<2.5	11	ND<2.5	ND<2.5
7/30/03	ND<2.5	ND<2.5	ND<2.5	130	ND<2.5	ND<2.5	ND<2.5	ND<2.5	9.5
1/27/04	ND<5.0	ND<5.0	ND<5.0	130	ND<5.0	ND<5.0	ND<5.0	20	24
7/22/04	ND<5.0	ND<5.0	ND<5.0	120	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
1/20/05	ND<2.5	2.7	ND<2.5	110	ND<2.5	ND<2.5	ND<2.5	20	28
<b>MW-8 ("shallow")</b>									
6/23/97	ND<1	5.4	ND<1	64	ND<1	ND<1	97	100	ND<1
10/7/97	ND<0.5	1.1	ND<0.5	16	ND<0.5	ND<0.5	30	27	ND<0.5
12/12/98	ND<0.5	ND<0.5	ND<0.5	3.4	ND<0.5	ND<0.5	4.8	4.7	ND<0.5
4/24/99	ND<0.5	ND<0.5	ND<0.5	1.9	ND<0.5	ND<0.5	3.4	3.4	ND<0.5
12/18/99	ND<0.5	ND<0.5	ND<0.5	5.3	ND<0.5	ND<0.5	5.9	6.4	ND<0.5
7/22/00	ND<0.5	ND<0.5	ND<0.5	1.7	ND<0.5	ND<0.5	2.4	1.6	ND<0.5
1/29/01	ND<0.5	ND<0.5	ND<0.5	10	ND<0.5	ND<0.5	ND<5.0	8.8	ND<0.5
7/28/01	ND<0.5	ND<0.5	ND<0.5	2.6	ND<0.5	ND<0.5	ND<1.5	2.1	ND<0.5
2/3/02	ND<0.5	ND<0.5	ND<0.5	6.6	ND<0.5	ND<0.5	3.3	4.6	ND<0.5
7/23/02	ND<0.5	ND<0.5	ND<0.5	8.4	ND<0.5	ND<0.5	3.5	5.2	ND<0.5
1/20/03	ND<0.5	ND<0.5	ND<0.5	7.3	ND<0.5	ND<0.5	6	6.7	ND<0.5
7/30/03	ND<0.5	ND<0.5	ND<0.5	25	ND<0.5	ND<0.5	15	20	ND<0.5
1/27/04	ND<0.5	ND<0.5	ND<0.5	4	ND<0.5	ND<0.5	3.1	3.1	ND<0.5
7/22/04	ND<0.5	ND<0.5	ND<0.5	20	ND<0.5	ND<0.5	8.3	13	ND<0.5
1/20/05	ND<0.5	ND<0.5	ND<0.5	6.5	ND<0.5	ND<0.5	5.2	5.1	ND<0.5
<b>MW-9 (shallow")</b>									
6/23/97 (5)	ND<1	2.1	ND<1	7.4	ND<1	ND<1	3.5	1.4	ND<1
10/7/97 (6)	ND<0.5	1.6	2.1	21	ND<0.5	0.7	ND<2	0.53	2.7
12/12/98	ND<0.5	0.7	0.53	1.9	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<0.5
4/24/99	ND<0.5	0.81	0.52	3.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
12/18/99	ND<0.5	1.1	0.67	3.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.63
7/22/00	ND<1	1.4	ND<1	1.6	ND<1	ND<1	ND<1	ND<1	ND<1
1/29/01	ND<0.5	1.2	0.71	ND<0.5	8.2	ND<0.5	ND<5.0	ND<0.5	0.53
7/28/01	ND<0.5	0.87	ND<0.5	0.92	ND<0.5	ND<0.5	ND<5.0	2.5	ND<0.5
2/3/02	ND<0.5	1.2	ND<0.5	2.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
7/23/02	ND<2.5	3.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
1/20/03	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1
7/30/03	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
1/27/04	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
7/22/04	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
1/20/05a (19)	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
1/20/05b (20)	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
<b>EB-4 (grab)</b>									
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 presented 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
1,2 DCA	1,2 Dichloroethane	TCE
cis 1,2 DCE	cis 1,2 Dichloroethene	VCL
trans 1,2 DCE	trans 1,2 Dichloroethene	Tetrachloroethene (perchloroethen trichloroethene vinyl chloride)

(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

(13) 2/3/02 additional detections:

MW-1: 0.73 ppb 2-Chloroethyl Vinyl Ether  
 MW-1: 1.8 ppb 1,3 Dichlorobenzene  
 MW-1: 3.8 ppb 1,4 Dichlorobenzene  
 MW-4: 9.8 ppb 1,4 Dichlorobenzene  
 MW-5: 0.59 ppb 1,4 Dichlorobenzene

(14) 7/23/02 additional detections:

MW-1: 112 ppb 1,3 Dichlorobenzene

(15) 1/20/03 additional detections:

None

(16) 7/30/03 additional detections:

None

(17) 1/27/04 additional detections:

MW-4: 11 ppb 1,3-Dichlorobenzene  
 MW-4: 9.7 ppb 1,4-Dichlorobenzene  
 MW-4: 12 ppb 1,1,2-Trichloroethane  
 MW-6: 13 ppb 1,1,2-Trichloroethane

(18) 7/22/04 additional detections:

MW-4: 6.9 ppb 1,3-Dichlorobenzene  
 MW-4: 6.2 ppb 1,4-Dichlorobenzene

Notes continued following page

---

**Table 3 notes continued**

(19) 1/20/05 additional detections:

MW-1: 60 ppb Chloromethane

MW-4: 5.5 ppb 1,3-Dichlorobenzene

MW-4: 7.4 ppb 1,4-Dichlorobenzene

MW-9: 0.92 ppb Bromodichloromethane

(20) Supplemental sample following initial bailer volume removal.

**TABLE 4**

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

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

**Notes to Table 4**

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

TABLE 5

**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
<b>MW-1 ("deep")</b>				
10/8/96	1.5	ND	ND	ND
1/16/97	1.4	3.6	ND	ND
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A
<b>MW-2 ("deep")</b>				
10/8/96	3.7	ND	3	25
1/16/97	5.4	0.28	3	25
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A
<b>MW-3 ("shallow")</b>				
10/8/96	3.8	ND	ND	5
1/16/97	5.2	ND	ND	5
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A

Well and Date	Dissolved Oxygen	Ferrous Iron	Nitrate	Sulfate
<b>MW-4 ("deep")</b>				
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
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A
<b>MW-5 ("deep")</b>				
10/8/96	2.8	ND	ND	8
1/16/97	3.4	0.38	ND	9
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A
<b>MW-6 ("shallow")</b>				
10/8/96	2.7	ND	ND	6
1/16/97	2.7	0.28	ND	8
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A

Well and Date	Dissolved Oxygen	Ferrous Iron	Nitrate	Sulfate
<b>MW-7 ("deep")</b>				
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A
<b>MW-8 ("shallow")</b>				
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A
<b>MW-9 ("shallow")</b>				
6/23/97	N/A	N/A	N/A	N/A
10/7/97	N/A	N/A	N/A	N/A
12/12/98	N/A	N/A	N/A	N/A
4/24/99	N/A	N/A	N/A	N/A
12/18/99	N/A	N/A	N/A	N/A
7/22/00	N/A	N/A	N/A	N/A
1/29/01	N/A	N/A	N/A	N/A
7/28/01	N/A	N/A	N/A	N/A
2/3/02	N/A	N/A	N/A	N/A
7/23/02	N/A	N/A	N/A	N/A
1/20/03	N/A	N/A	N/A	N/A
7/30/03	N/A	N/A	N/A	N/A
1/27/04	N/A	N/A	N/A	N/A
7/22/04	N/A	N/A	N/A	N/A
1/20/05	N/A	N/A	N/A	N/A

**Notes to Table 5**

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

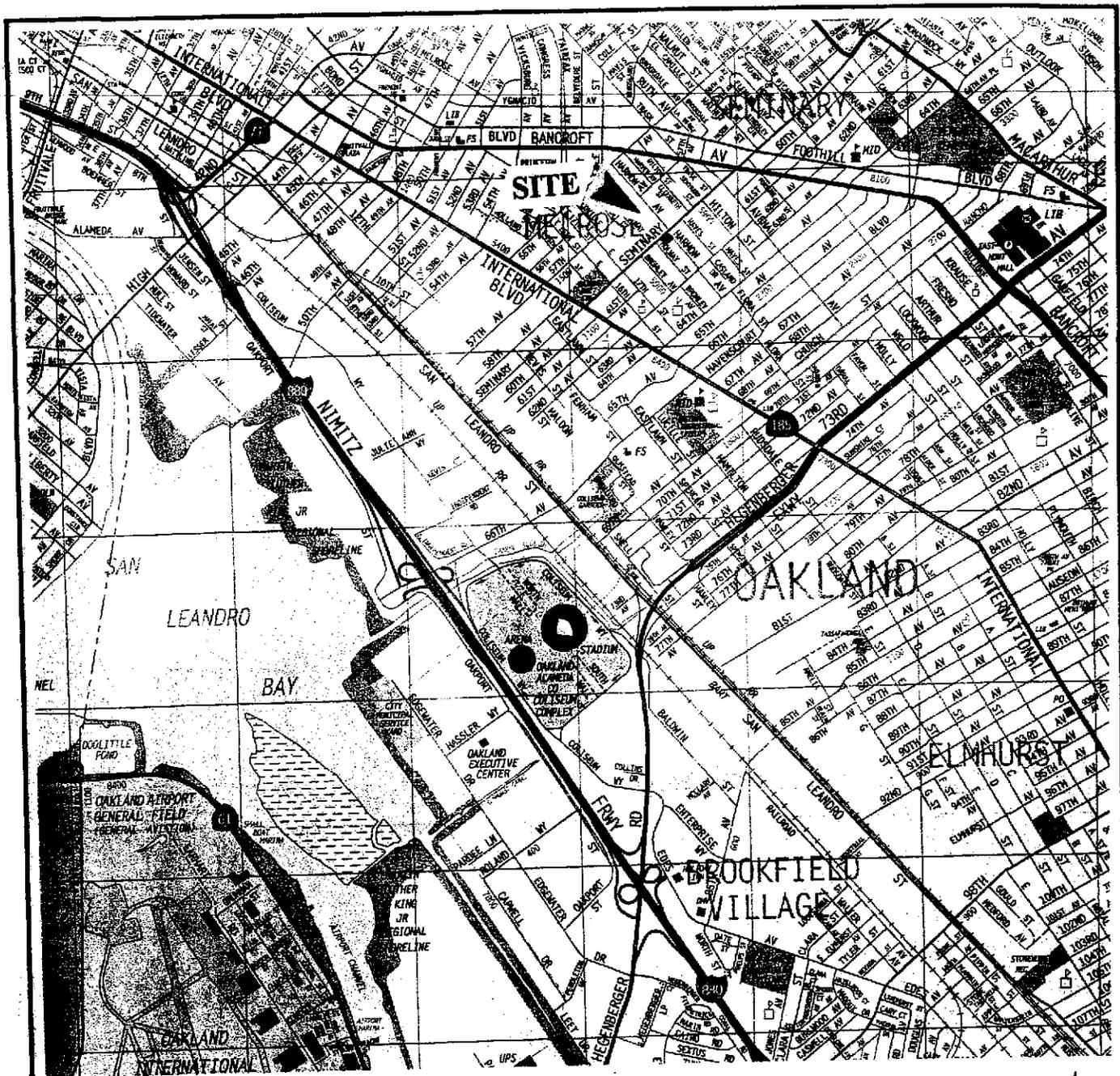
**TABLE 6**

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

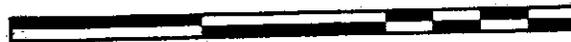
<b>Well and Date</b>	<b>Fuel Fingerprint (2)</b>
<b>MW-1 ("deep")</b>	
2/3/02	Significant hydrocarbon pattern between C6 and C12 that resembles gasoline. Also shows a hydrocarbon pattern between C18 and C30 that resembles oil.
<b>MW-2 ("deep")</b>	
2/3/02	ND < 50 ug/L
<b>MW-3 ("shallow")</b>	
2/3/02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

**Notes to Table 6**

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



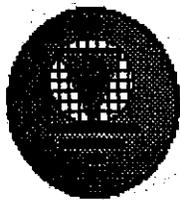
2400 0 2400 4800



Scale in Feet



Source: Thomas Brothers Maps.



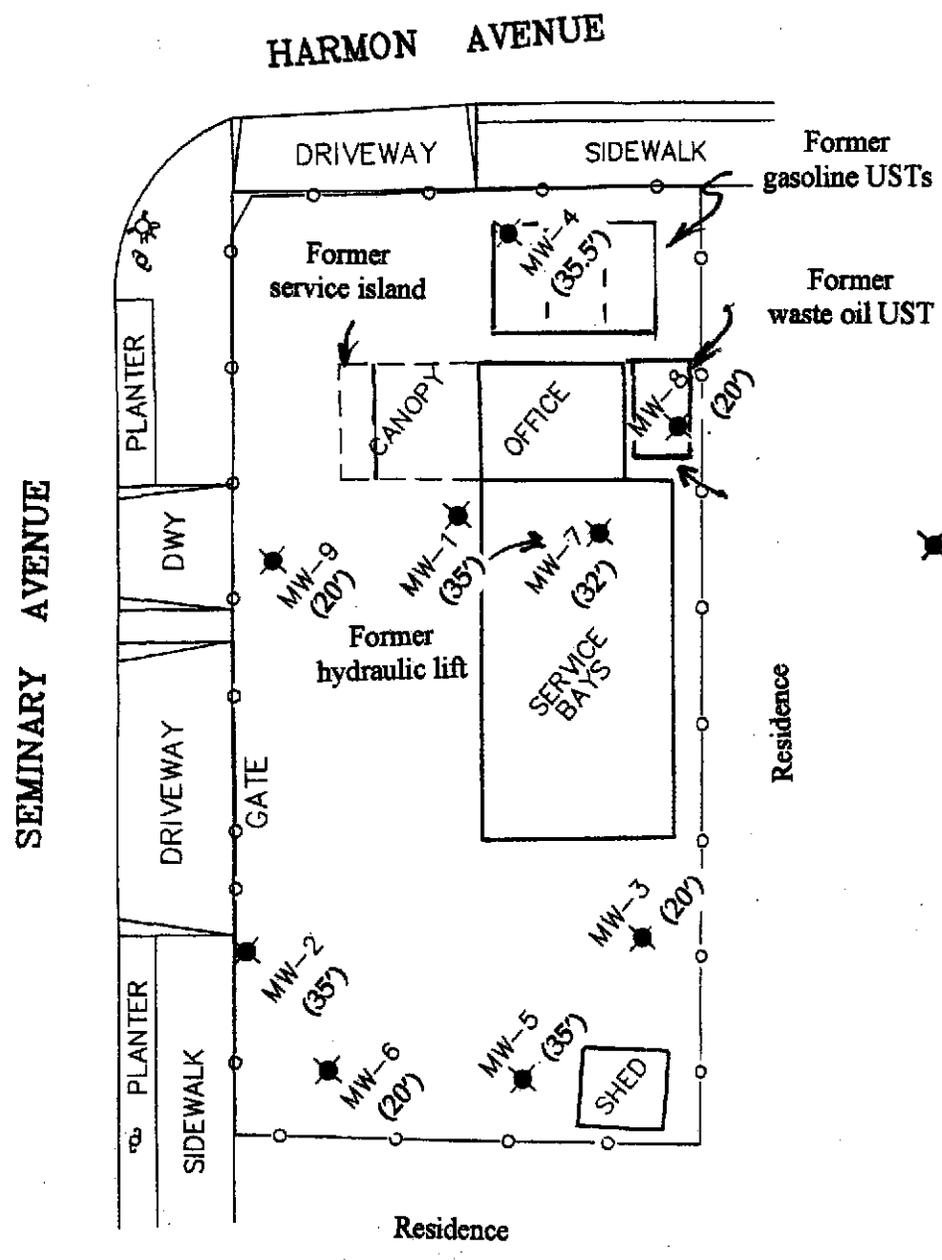
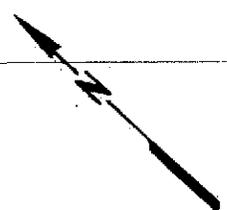
**HOEXTER CONSULTING**  
**Geology**  
**Engineering Geology**  
**Environmental Studies**

**LOCATION MAP**

1970 Seminary Ave.  
 Oakland, California

Project No.	Date
E-10-1F-565F	February 2005

**Figure 1**



**EXPLANATION**

✱ Monitoring well, indicating completion depth.



Scale in Feet

**LEGEND**

⊕ - EXISTING JOINT UTILITY POLE

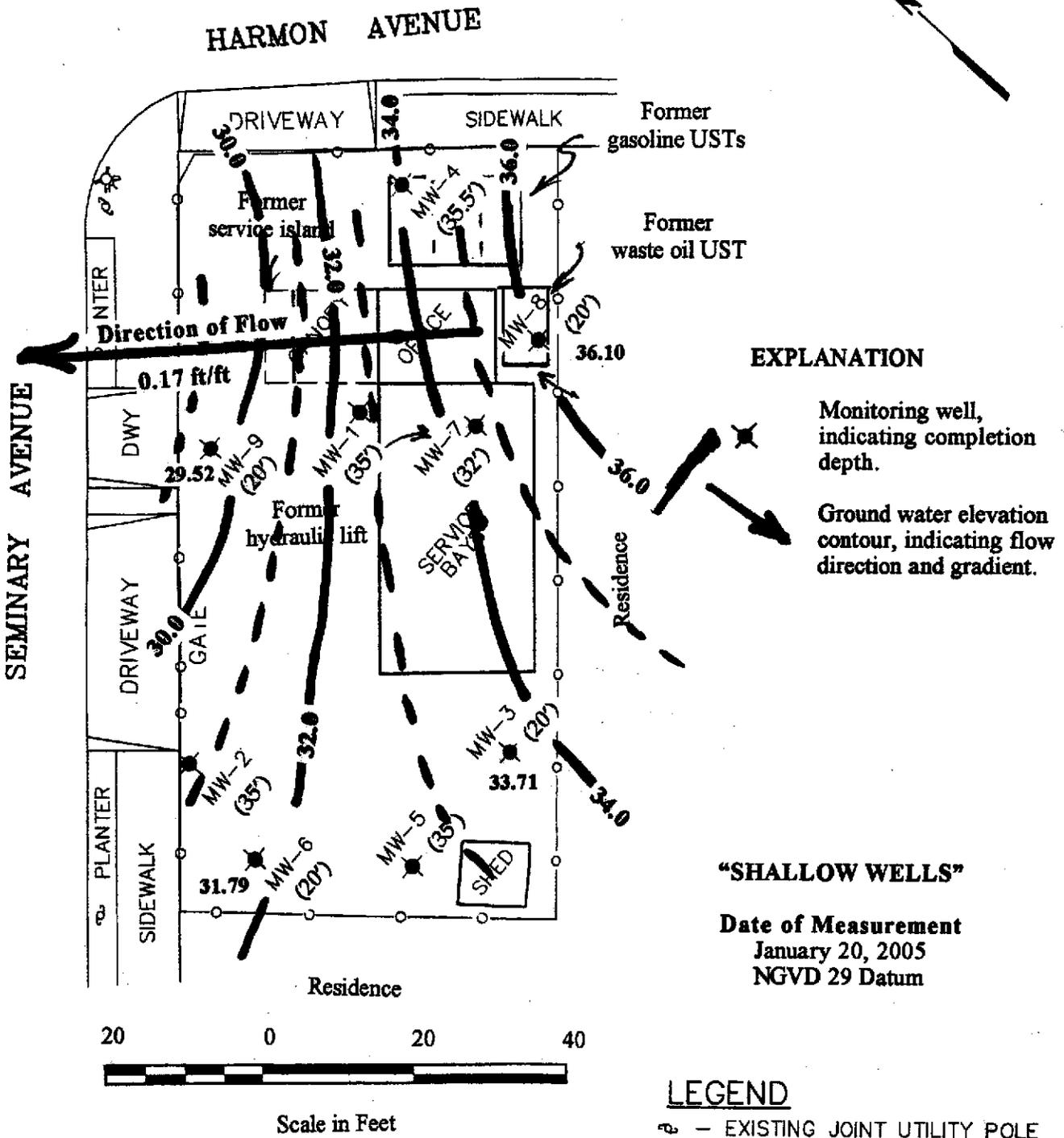
✱ - EXISTING FIRE HYDRANT

Base: Virgil Chavez Land Surveying, July 2004

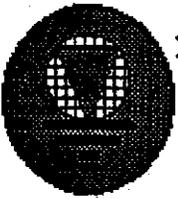


**HOEXTER CONSULTING**  
**Geology**  
**Engineering Geology**  
**Environmental Studies**

SITE PLAN		
1970 Seminary Ave. Oakland, California		
Project No.	Date	Figure 2
E-10-1F-565F	February 2005	



Base: Virgil Chavez Land Surveying, July 2004

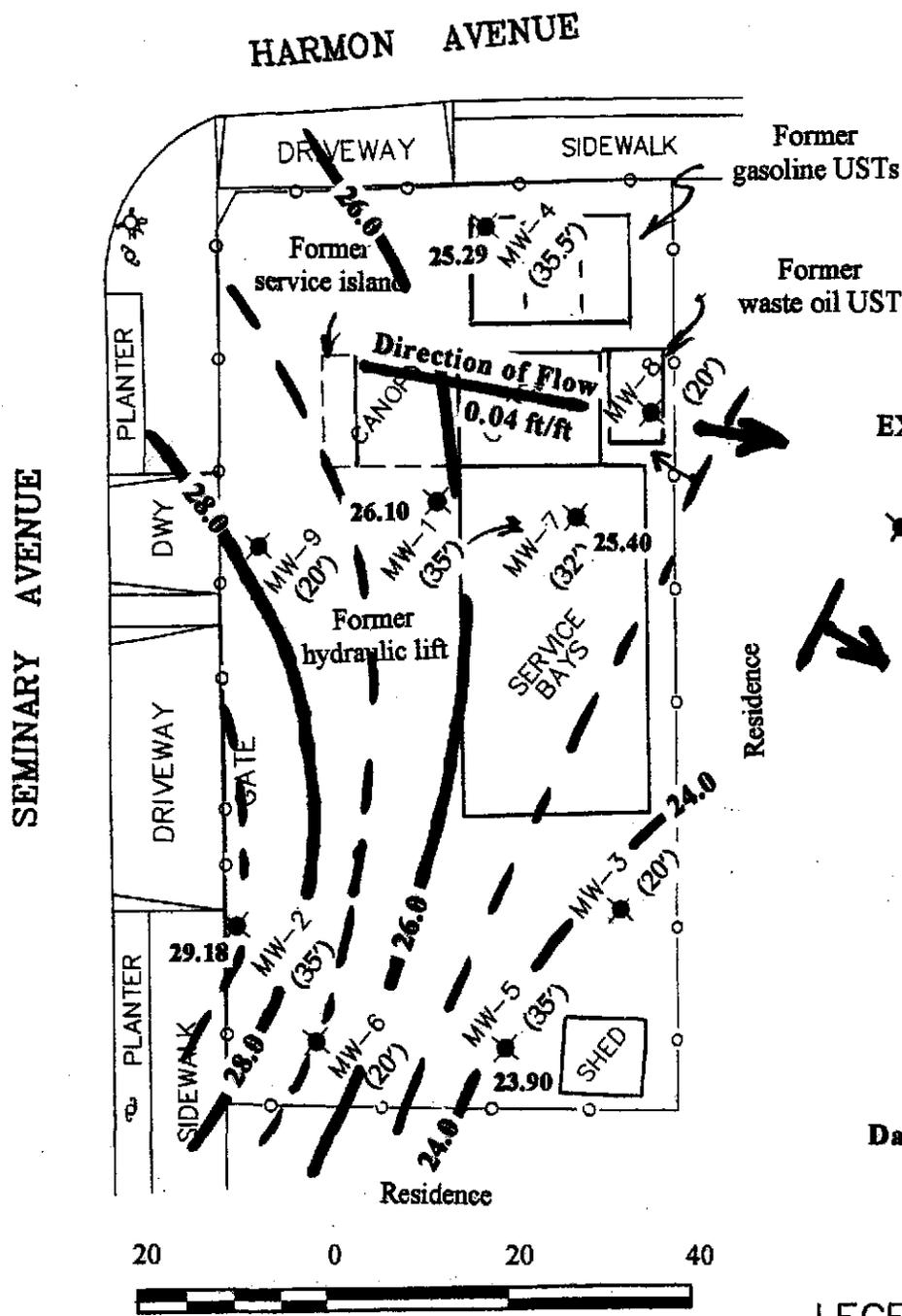


**HOEXTER CONSULTING**  
**Geology**  
**Engineering Geology**  
**Environmental Studies**

**GROUND WATER CONTOUR AND GRADIENT DIRECTION MAP**

1970 Seminary Ave.  
 Oakland, California

<b>Project No.</b>	<b>Date</b>	<b>Figure 3A</b>
E-10-1F-565F	February 2005	



**EXPLANATION**

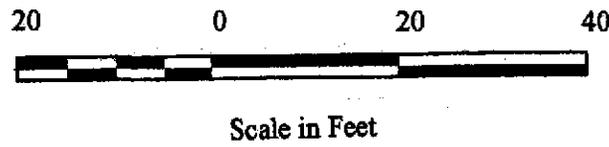
-  Monitoring well, indicating completion depth.
-  Ground water elevation contour, indicating flow direction and gradient.

**"DEEP WELLS"**

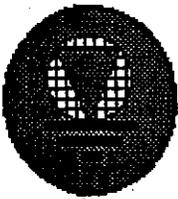
**Date of Measurement**  
January 20, 2005  
NGVD 29 Datum

**LEGEND**

-  - EXISTING JOINT UTILITY POLE
-  - EXISTING FIRE HYDRANT



Base: Virgil Chavez Land Surveying, July 2004



**HOEXTER CONSULTING**  
Geology  
Engineering Geology  
Environmental Studies

**GROUND WATER CONTOUR AND GRADIENT DIRECTION MAP**

1970 Seminary Ave.  
Oakland, California

<b>Project No.</b>	<b>Date</b>	<b>Figure 3B</b>
E-10-1F-565F	February 2005	

---

**APPENDIX A**

**WATER SAMPLE LOGS  
CHAIN OF CUSTODY  
ANALYTICAL TEST RESULTS**

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-1

Project: Gruit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gruit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW-1
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**              3 inch              4 inch              6 inch              Other

Depth of Well (feet): 35	Calculated Purge Volume (gal): 13.8
Depth to Water (feet): 13.92	Actual Purged Volume (gal): 7.0
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1418	3.5	3.5	6.35	1139	61.7	Cloudy	Moderate sheen, strong odor
1431	7.0	3.5	6.29	1048	61.8		
	10.5						
	14.0						

### Purge Method

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

### Sample Method

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

Well Integrity: OK; thick sheen and strong petroleum odor in initial bailer extraction.

Remarks: DTW = 21.56' following 2 volume purge; do to strong petroleum presence, depth to water not re-measured; JF sampled 3 VOA and 1 amber liter at 1637.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters – Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	Into	Multiply
	Gal/ft.	Ft/ft	L/M	L/Ft			
1.5	0.0918	0.0123	1.140	0.3475	Feet Water	Cubic inch	6.4335
2.0	0.1632	0.0218	2.027	0.6178	Lbs/Sq inch	Ft of Water	2.3070
3.0	0.3672	0.0491	4.560	1.390	Cubic Feet	Gallons	7.4803
4.0	0.6528	0.0873	8.107	2.4710	Gallons	Liters	3.7850
6.0	1.4690	0.1963	18.240	5.560	Feet	Meters	0.3048
					Inches	Centimeters	2.5400

Sample Location/I.D.: MW-1

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-2

Project: Gritmit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gritmit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW- 2
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**            3 inch            4 inch            6 inch            Other

Depth of Well (feet): 35	Calculated Purge Volume (gal): 16.2
Depth to Water (feet): 10.24	Actual Purged Volume (gal): 8
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1138	4	4	6.21	911	62.5	Clear	No sheen, no odor
1150	8	4	6.31	874	63.5		
	12						
	16						

### Purge Method

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

### Sample Method

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

Well Integrity: OK; Initial bailer extraction clear, no sheen, no odor.

Remarks: Well drawdown to 23.42' following second purge volume. Recovered to 21.27' at 1513. DFH sampled 3 VOA and 1 amber liter at 1555.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	Into	Multiply
	Gal/ft.	Ft/ft	L/M	L/Ft	Ft of Water	Feet or inch	0.433
1.5	0.0918	0.0123	1.140	0.3475	Lbs/Cu inch	Ft of Water	2.3076
2.0	0.1632	0.0218	2.027	0.6178	Cubic Feet	Gallons	7.480
3.0	0.3672	0.0491	4.560	1.390	Gallons	Liters	3.785
4.0	0.6528	0.0873	8.107	2.4710	Feet	Meters	0.3048
6.0	1.4690	0.1963	18.240	5.560	Inches	Centimeters	2.540

Sample Location/I.D.: MW- 2

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-3

Project: Gritit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gritit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW- 3
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**              3 inch              4 inch              6 inch              Other

Depth of Well (feet): 20	Calculated Purge Volume (gal): 9
Depth to Water (feet): 6.24	Actual Purged Volume (gal): 5.5
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1220	2.25	2.25	6.16	701	61.9	Clear, Slightly turbid	No product, sheen, odor
1229	4.50	2.25	6.20	712	64.1		
1235	5.50	1.0	6.38	699	61.6		
	9.0						

### Purge Method

2" Bladder Pump	Baller	Well Wizard	Dedicated
Submersible Pump	Centrifugal Pump	Dipper	Other
Pneumatic Displ. Pump			

### Sample Method

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

Well Integrity: OK; no product or sheen, no odor

Remarks: Depth to water 14.89' at 1229 following second purge volume; 16.22' following third well volume purge. Well recovered to 12.54' at 1503. DFH sampled 3 VOA and 1 amber liter at 1557.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing L.D. (inches)	Cubic				To Convert	Into	Multiplies
	Gal/ft.	Ft/ft	L/M	L/Ft	By	By	By
1.5	0.0918	0.0123	1.140	0.3475	ft of Water	1.48 inch	6.4933
2.0	0.1632	0.0218	2.027	0.6178	1.48 inch	ft of Water	2.3070
3.0	0.3672	0.0491	4.560	1.390	Cubic Feet	Gallons	7.4800
4.0	0.6528	0.0873	8.107	2.4710	Gallons	Liters	3.7850
6.0	1.4690	0.1963	18.240	5.560	Feet	Meters	0.3048
					Inches	Centimeters	2.5400

Sample Location/I.D.: MW- 3

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-4

Project: Gritit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gritit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW- 4
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**              3 inch              4 inch              6 inch              Other

Depth of Well (feet): 35.5	Calculated Purge Volume (gal): 13.9
Depth to Water (feet): 14.20	Actual Purged Volume (gal): 10.5
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1320	3.5	3.5	6.34	844	62.9	Cloudy, sl. sheen & odor	
1332	7	3.5	6.41	825	62.4	Cloudy	
1350	10.5	3.5	6.40	815	61.7	Cloudy	
	14						

### Purge Method

2" Bladder Pump	Baller	Well Wizard	Dedicated
Submersible Pump	Centrifugal Pump	Dipper	Other
Pneumatic Displ. Pump			

### Sample Method

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

Well Integrity: OK; clear, slight sheen, slight odor initial purge.

Remarks: Depth to water 22.47' following second well purge and 28.15' following third well volume purge. Well recovered to 20.88' at 1522. DFH sampled 3VOA, 1 amber liter at 1625.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	Into	Multiply
	Gal/ft.	Ft/ft	L/M	L/Ft			
1.5	0.0918	0.0123	1.140	0.3475	Ft of Water	Liter/inch	0.4335
2.0	0.1632	0.0218	2.027	0.6178	Liter/Sq. inch	Ft of Water	2.3070
3.0	0.3672	0.0491	4.560	1.390	Gallon/Foot	Gallon	7.2900
4.0	0.6528	0.0873	8.107	2.4710	Gallons	Liter	3.7850
6.0	1.4690	0.1963	18.240	5.560	Feet	Meters	0.3048
					inches	Centimeters	2.540

Sample Location/I.D.: MW- 4

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-5

Project: Gritit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gritit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW - 5
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**              3 inch              4 inch              6 inch              Other

Depth of Well (feet): 35	Calculated Purge Volume (gal): 12.5
Depth to Water (feet): 15.89	Actual Purged Volume (gal): 9.25
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1409	3	3	6.18	734	59.9	Slightly cloudy	Possible sheen following initial purge vol.
1419	6.25	3.25	6.17	748	61.5		
1434	9.25	3	6.38	879	62.4		
	12.5	3.25					

### Purge Method

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

### Sample Method

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

Well Integrity: OK; initial bailer clear, no sheen, no odor.

Remarks: Depth to water 21.99' following second well volume purge and 26.02 following third purge volume. Well recovered to 23.25' at 1508. JF sampled 3 VOA and 1 amber liter @ 1611.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	Into	Multiplied
	1.5	Gal/ft	Ft/ft	L/M	L/Ft	Ft of Water	Lbs per inch
2.0	0.0918	0.0123	1.140	0.3475	Lbs/Sq inch	Ft of Water	2.3070
3.0	0.1632	0.0218	2.027	0.6178	Cubic Feet	Gallons	7.4800
4.0	0.3672	0.0491	4.560	1.390	Gallons	Liters	3.7850
6.0	0.6528	0.0873	8.107	2.4710	Feet	Meters	0.3048
	1.4690	0.1963	18.240	5.560	Inches	Centimeters	2.5400

Sample Location/I.D.: MW- 5

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-6

Project: Gruit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gruit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW- 6
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**          3 inch          4 inch          6 inch          Other

Depth of Well (feet): 20	Calculated Purge Volume (gal): 8
Depth to Water (feet): 7.65	Actual Purged Volume (gal): 8
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1220	2	2	6.30	909	63.8	Clear	No prod, sheen or odor
1225	4	2	6.39	907	61.8		
1236	6	2	6.37	908	62.0		
1344	8	2	6.29	920	61.5		

### Purge Method

2" Bladder Pump	Baller	Well Wizard	Dedicated
Submersible Pump	Centrifugal Pump	Dipper	Other
Pneumatic Displ. Pump			

### Sample Method

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

Well Integrity: OK; no product, odor or sheen on initial bailing.

Remarks: Depth to water 10.53' at 1236 following third well volume purge and 10.49' at 1344 following fourth volume purge. Well recovered to 8.56' at 1510. DFH sampled 3 VOA and 1 amber liter at 1610.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	into	Multiply
	Gal/ft.	Ft/ft	L/M	L/Ft	Ft of Water	Down inch	0.4335
1.5	0.0918	0.0123	1.140	0.3475	Lbs/Sq. inch	Ft of Water	2.3070
2.0	<b>0.1632</b>	0.0218	2.027	<b>0.6178</b>	Cubic Feet	Gallons	7.4800
3.0	0.3672	0.0491	4.560	1.390	Gallons	Liters	3.785
4.0	0.6528	0.0873	8.107	2.4710	Feet	Meters	0.3048
6.0	1.4690	0.1963	18.240	5.560	Inches	Centimeters	2.5400

Sample Location/I.D.: MW- 6

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-7

Project: Gruit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gruit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW-7
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**              3 inch              4 inch              6 inch              Other

Depth of Well (feet): 32	Calculated Purge Volume (gal): 11.4
Depth to Water (feet): 14.44	Actual Purged Volume (gal): 9
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (u6.21nits)	E.C. (unhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1304	3	3	6.21	961	60.2	Clear	No sheen, no initial odor, slight subsequent H2S odor
1314	6	3	6.20	959	61.6		
1326	9	3	6.35	862	61.5		
	12						

### Purge Method

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

### Sample Method

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

Well Integrity: OK; initial bailer clear, no sheen, no odor.

Remarks: Depth to water 21.17' at 1314, following second well volume purge and 23.92 at 1326 following third volume purge. Well recovered to 17.15' at 1517. JF sampled 3 VOA and 1 amber liter at 1625.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	Into	Multiply
	Gal./ft.	Ft/ft	L/M	L/Ft			
1.5	0.0918	0.0123	1.140	0.3475	Ft of Water	Lbs per inch	0.4335
2.0	0.1632	0.0218	2.027	0.6178	Lbs per inch	Ft of Water	2.3079
3.0	0.3672	0.0491	4.560	1.390	Cubic Feet	Gallons	7.4805
4.0	0.6528	0.0873	8.107	2.4710	Gallons	Liters	3.7854
6.0	1.4690	0.1963	18.240	5.560	Feet	Meters	0.3048
					Inches	Centimeters	2.5400

Sample Location/I.D.: MW-7

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-8

Project: Gritmit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gritmit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW- 8
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**              3 inch              4 inch              6 inch              Other

Depth of Well (feet): 20	Calculated Purge Volume (gal): 10.8
Depth to Water (feet): 3.39	Actual Purged Volume (gal): 11
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1530	2.75	2.75	6.55	179	56.9	Clear	No sheen or odor
1535	5.5	2.75	6.55	169	57.0	Cloudy/tan	Slight sheen
1540	8.25	2.75	6.48	166	56.6		
1545	11	2.75	6.52	165	56.4		

### Purge Method

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

### Sample Method

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

Well Integrity: OK; initial bailer clear, no product or sheen, no odor.

Remarks: Well recovered to 3.41' at 1600. DFH sampled 3 VOA and 1 amber liter at 1636.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	Into	Multiply
	Gal/ft.	Ft/ft	L/M	L/Ft			
1.5	0.0918	0.0123	1.140	0.3475	Ft of Water	Lbs/cu ft	8.3333
2.0	<b>0.1632</b>	0.0218	2.027	0.6178	Lbs/cu ft	Ft of Water	2.3090
3.0	0.3672	0.0491	4.560	1.390	Cubic Feet	Gallons	7.4800
4.0	0.6528	0.0873	8.107	2.4710	Gallons	Liters	3.7850
6.0	1.4690	0.1963	18.240	5.560	Feet	Meters	0.3048
					Inches	Centimeters	2.5400

Sample Location/I.D.: MW- 8

# HOEXTER CONSULTING INC. Groundwater Sampling Field Log MW-9

Project: Gritit, 1970 Seminary Ave, Oakland, CA.	Project No.: E-10-1E-391E; E-10-1F-565F
Client: D. Gritit c/o A. LaMarca	Date: January 20, 2005
Project Manager: D. F. Hoexter	Sample Location/I.D.: MW- 9
Sampler: J. Forsythe, D. Hoexter	Lab ID.:

Casing Diameter:      **2 inch**          3 inch          4 inch          6 inch          Other

Depth of Well (feet): 20	Calculated Purge Volume (gal): 6.4
Depth to Water (feet): 10.16	Actual Purged Volume (gal): 3.5
Sample Depth (feet):	Start Time:

### Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature (Deg. F)	Color (Visual)	Other
1135	0.5	0.5	6.03	839	59.3	Clear	No product, sheen, or odor
1141	1.75	1.25	6.26	918	62.7	Tan, sl turbid	
1146	3.5	1.75	6.22	944	63.2		
	5.0						
	6.5						

### Purge Method

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

### Sample Method

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

Well Integrity: OK. No odor product or sheen on initial bailer extraction.

Remarks: Depth to water 16.97' at 1146 following cessation of purging; 15.78' at 1515, approx. 3-1/2 hours following purge cessation. DFH sampled 1 VOA and 0 amber liter at 1130 (minimal purge) and 3 VOA and 1 amber liter at 1651 following limited recovery from purging.

Signature: \_\_\_\_\_

Volumes Per Unit Length Selected Well Casing Diameters - Volumes Per Unit Length					Conversion Factors		
Well Casing I.D. (inches)	Cubic				To Convert	Into	Multiply
	Gal/ft.	Ft/ft	L/M	L/Ft			
1.5	0.0918	0.0123	1.140	0.3475	Ft of Water	Downy Inch	0.4335
2.0	0.1632	0.0218	2.027	0.6178	1.4434 inch	Ft of Water	2.3070
3.0	0.3672	0.0491	4.560	1.390	Cubic Feet	Gallons	7.4800
4.0	0.6528	0.0873	8.107	2.4710	Gallons	Liters	3.7850
6.0	1.4690	0.1963	18.240	5.560	Feet	Meters	0.3048
					Inches	Centimeters	2.5400

Sample Location/I.D.: MW- 9



**McC Campbell Analytical, Inc.**

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

Hoexter Consulting Eng. Geology 734 Torrey Court Palo Alto, CA 94303-4160	Client Project ID: #E-10-1F-565F; Gruit 1970 Seminary Ave. Oakland	Date Sampled: 01/20/05
	Client Contact: David Hoexter	Date Received: 01/24/05
	Client P.O.:	Date Reported: 01/31/05
		Date Completed: 01/31/05

**WorkOrder: 0501307**

January 31, 2005

Dear David:

Enclosed are:

- 1). the results of 9 analyzed samples from your #E-10-1F-565F; Gruit 1970 Seminary Ave. Oakland 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. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager







# McC Campbell Analytical, Inc.

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

Hoexter Consulting Eng. Geology  734 Torreya Court  Palo Alto, CA 94303-4160	Client Project ID: #E-10-1F-565F; Gruit	Date Sampled: 01/20/05
	1970 Seminary Ave. Oakland	Date Received: 01/24/05
	Client Contact: David Hoexter	Date Extracted: 01/25/05-01/27/05
	Client P.O.:	Date Analyzed: 01/25/05-01/27/05

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0501307

Lab ID	0501307-001C	0501307-002C	0501307-003C	0501307-004C	Reporting Limit for DF = 1	
Client ID	MW-1	MW-2	MW-3	MW-4	S	W
Matrix	W	W	W	W		
DF	10	1	1	10		
Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Bromoform	ND<5.0	ND	ND	ND<5.0	NA	0.5
Bromomethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Carbon Tetrachloride	ND<5.0	ND	ND	ND<5.0	NA	0.5
Chlorobenzene	ND<5.0	ND	ND	ND<5.0	NA	0.5
Chloroethane	81	ND	ND	ND<5.0	NA	0.5
2-Chloroethyl Vinyl Ether	ND<10	ND	ND	ND<10	NA	1.0
Chloroform	ND<5.0	ND	ND	ND<5.0	NA	0.5
Chloromethane	60	ND	ND	ND<5.0	NA	0.5
Dibromochloromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,2-Dichlorobenzene	ND<5.0	ND	ND	28	NA	0.5
1,3-Dichlorobenzene	ND<5.0	ND	ND	5.5	NA	0.5
1,4-Dichlorobenzene	ND<5.0	ND	ND	7.4	NA	0.5
Dichlorodifluoromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1-Dichloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<5.0	8.7	ND	ND<5.0	NA	0.5
1,1-Dichloroethene	ND<5.0	ND	ND	ND<5.0	NA	0.5
cis-1,2-Dichloroethene	27	7.8	ND	320	NA	0.5
trans-1,2-Dichloroethene	ND<5.0	ND	ND	23	NA	0.5
1,2-Dichloropropane	ND<5.0	0.69	ND	ND<5.0	NA	0.5
cis-1,3-Dichloropropene	ND<5.0	ND	ND	ND<5.0	NA	0.5
trans-1,3-Dichloropropene	ND<5.0	ND	ND	ND<5.0	NA	0.5
Methylene chloride	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1,2,2-Tetrachloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Tetrachloroethene	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1,1-Trichloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1,2-Trichloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Trichloroethene	ND<5.0	12	ND	81	NA	0.5
Trichlorofluoromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Vinyl Chloride	32	ND	ND	130	NA	0.5

#### Surrogate Recoveries (%)

%SS1:	104	95	98	96
%SS2:	100	104	100	105
%SS3:	96	89	95	89
Comments	h			

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

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

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

 Angela Rydelius, Lab Manager



# McC Campbell Analytical, Inc.

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

Hoexter Consulting Eng. Geology  734 Torrey Court  Palo Alto, CA 94303-4160	Client Project ID: #E-10-1F-565F; Gruit	Date Sampled: 01/20/05
	1970 Seminary Ave. Oakland	Date Received: 01/24/05
	Client Contact: David Hoexter	Date Extracted: 01/25/05-01/27/05
	Client P.O.:	Date Analyzed: 01/25/05-01/27/05

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0501307

Lab ID	0501307-005C	0501307-006C	0501307-007C	0501307-008C	Reporting Limit for DF=1	
Client ID	MW-5	MW-6	MW-7	MW-8	S	W
Matrix	W	W	W	W		
DF	1	1	5	1		
Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND	ND	ND<2.5	ND	NA	0.5
Bromoform	ND	ND	ND<2.5	ND	NA	0.5
Bromomethane	ND	ND	ND<2.5	ND	NA	0.5
Carbon Tetrachloride	ND	ND	ND<2.5	ND	NA	0.5
Chlorobenzene	ND	ND	ND<2.5	ND	NA	0.5
Chloroethane	1.1	ND	ND<2.5	ND	NA	0.5
2-Chloroethyl Vinyl Ether	ND	ND	ND<5.0	ND	NA	1.0
Chloroform	ND	ND	ND<2.5	ND	NA	0.5
Chloromethane	ND	ND	ND<2.5	ND	NA	0.5
Dibromochloromethane	ND	ND	ND<2.5	ND	NA	0.5
1,2-Dichlorobenzene	0.84	ND	2.7	ND	NA	0.5
1,3-Dichlorobenzene	ND	ND	ND<2.5	ND	NA	0.5
1,4-Dichlorobenzene	ND	ND	ND<2.5	ND	NA	0.5
Dichlorodifluoromethane	ND	ND	ND<2.5	ND	NA	0.5
1,1-Dichloroethane	ND	ND	ND<2.5	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	0.99	ND<2.5	ND	NA	0.5
1,1-Dichloroethene	ND	ND	ND<2.5	ND	NA	0.5
cis-1,2-Dichloroethene	ND	8.7	110	6.5	NA	0.5
trans-1,2-Dichloroethene	ND	ND	ND<2.5	ND	NA	0.5
1,2-Dichloropropane	ND	ND	ND<2.5	ND	NA	0.5
cis-1,3-Dichloropropene	ND	ND	ND<2.5	ND	NA	0.5
trans-1,3-Dichloropropene	ND	ND	ND<2.5	ND	NA	0.5
Methylene chloride	ND	ND	ND<2.5	ND	NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND	ND<2.5	ND	NA	0.5
Tetrachloroethene	ND	ND	ND<2.5	5.2	NA	0.5
1,1,1-Trichloroethane	ND	ND	ND<2.5	ND	NA	0.5
1,1,2-Trichloroethane	ND	ND	ND<2.5	ND	NA	0.5
Trichloroethene	ND	ND	20	5.1	NA	0.5
Trichlorofluoromethane	ND	ND	ND<2.5	ND	NA	0.5
Vinyl Chloride	ND	ND	28	ND	NA	0.5

#### Surrogate Recoveries (%)

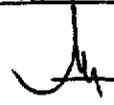
%SS1:	101	99	96	95
%SS2:	102	103	104	106
%SS3:	96	99	97	92
Comments			h	

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

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

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

 Angela Rydelius, Lab Manager



# McC Campbell Analytical, Inc.

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

Hoexter Consulting Eng. Geology  734 Torrey Court  Palo Alto, CA 94303-4160	Client Project ID: #E-10-1F-565F; Gruit	Date Sampled: 01/20/05
	1970 Seminary Ave. Oakland	Date Received: 01/24/05
	Client Contact: David Hoexter	Date Extracted: 01/25/05-01/27/05
	Client P.O.:	Date Analyzed: 01/25/05-01/27/05

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0501307

Lab ID	0501307-009C	Client ID	MW-9	Matrix	W	Reporting Limit for DF = 1	
						S	W
DF	1					µg/kg	µg/L
Compound	Concentration					µg/kg	µg/L
Bromodichloromethane	0.92					NA	0.5
Bromoform	ND					NA	0.5
Bromomethane	ND					NA	0.5
Carbon Tetrachloride	ND					NA	0.5
Chlorobenzene	ND					NA	0.5
Chloroethane	ND					NA	1.0
2-Chloroethyl Vinyl Ether	ND					NA	0.5
Chloroform	ND					NA	0.5
Chloromethane	ND					NA	0.5
Dibromochloromethane	ND					NA	0.5
1,2-Dichlorobenzene	ND					NA	0.5
1,3-Dichlorobenzene	ND					NA	0.5
1,4-Dichlorobenzene	ND					NA	0.5
Dichlorodifluoromethane	ND					NA	0.5
1,1-Dichloroethane	ND					NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND					NA	0.5
1,1-Dichloroethene	ND					NA	0.5
cis-1,2-Dichloroethene	ND					NA	0.5
trans-1,2-Dichloroethene	ND					NA	0.5
1,2-Dichloropropane	ND					NA	0.5
cis-1,3-Dichloropropene	ND					NA	0.5
trans-1,3-Dichloropropene	ND					NA	0.5
Methylene chloride	ND					NA	0.5
1,1,2,2-Tetrachloroethane	ND					NA	0.5
Tetrachloroethene	ND					NA	0.5
1,1,1-Trichloroethane	ND					NA	0.5
1,1,2-Trichloroethane	ND					NA	0.5
Trichloroethene	ND					NA	0.5
Trichlorofluoromethane	ND					NA	0.5
Vinyl Chloride	ND					NA	0.5

### Surrogate Recoveries (%)

%SS1:	98				
%SS2:	103				
%SS3:	94				

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

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

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



**McC Campbell Analytical, Inc.**

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

### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501307

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 14778			Spiked Sample ID: 0501307-008B			
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) £	ND	60	96.1	96.5	0.435	93.3	97.2	4.10	70 - 130	70 - 130
MTBE	ND	10	83.5	82.6	1.02	95.9	94.1	1.81	70 - 130	70 - 130
Benzene	ND	10	108	107	0.763	105	103	1.92	70 - 130	70 - 130
Toluene	ND	10	108	110	1.66	105	103	1.87	70 - 130	70 - 130
Ethylbenzene	ND	10	111	110	0.824	106	105	1.15	70 - 130	70 - 130
Xylenes	ND	30	110	110	0	110	107	3.08	70 - 130	70 - 130
%SS:	112	10	105	109	3.92	105	102	2.08	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

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

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

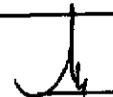
\* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

 QA/QC Officer



**McC Campbell Analytical, Inc.**

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

### QC SUMMARY REPORT FOR SM5520B/F

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501307

EPA Method: SM5520B/F		Extraction: PRHEM-SGT_W			BatchID: 14740		Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
POG	N/A	100	N/A	N/A	N/A	92	91	1.09	N/A	70 - 130
<p>All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE</p>										

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

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

\* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

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

DHS Certification No. 1644

QA/QC Officer



### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501307

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Chlorobenzene	ND	10	107	105	2.15	109	106	1.98	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	109	106	2.43	114	113	0.528	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	116	113	2.89	112	118	4.84	70 - 130	70 - 130
Trichloroethene	ND	10	104	101	2.62	106	104	1.91	70 - 130	70 - 130
%SS1:	105	10	103	102	0.451	103	103	0	70 - 130	70 - 130
%SS2:	96	10	95	95	0	94	94	0	70 - 130	70 - 130
%SS3:	103	10	103	103	0	104	104	0	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 % Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).  
 \* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.  
 Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.

*[Signature]* QA/QC Officer



HCEP 0501307

ICEP  GOOD CONDITION   
 HEAD SPACE ABSENT  APPROPRIATE CONTAINERS   
 DECHLORINATED IN LAB  PRESERVED IN LAB   
 PRESERVATION VOAS O&G METALS OTHER

CHAIN-OF-CUSTODY RECORD

1/2

Project Number				Project Name/Location				Number of Containers	Analytical Tests				Sample Containers Preserved	Remarks
Sampler's Name (Printed)									VFA	GIBTEX	MIBCL	SONO HVOC		
Boring/Well Number	Date	Time	Soil	Water	Sample Location or Depth	Type of Containers								
(+) MW-1	1/22/05	1637				VFA	3	✓	✓			✓		
						Amber	1				✓			
(+) -2		1555				VFA	3	✓	✓			✓		
						Amber	1				✓			
(+) -3		1557				VFA	3	✓	✓			✓		
						Amber	1				✓			
(+) -4		1625				VFA	3	✓	✓			✓		
						Amber	1				✓			
(+) -5		1611				VFA	3	✓	✓			✓		
						Amber	1				✓			
(+) -6		1610				VFA	3	✓	✓			✓		
						Amber	1				✓			
(+) -7		1625				VFA	3	✓	✓			✓		
						Amber	1				✓			

Relinquished by: (Signature) <i>D. Hoexter</i>	Date/Time 1/24/05 4:00	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 1/24/05 6:00	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Ship To: McCoy's Aerial  
Pacheco CA

Attention: \_\_\_\_\_  
Phone No: \_\_\_\_\_

Requested Turnaround Time: Normal

Remarks: LOF

Contact: David F. Hoexter

ICEP  GOOD CONDITION   
 HEAD SPACE ABSENT  APPROPRIATE CONTAINERS   
 DECHLORINATED IN LAB  PRESERVED IN LAB   
 PRESERVATION VOAS O&G METALS OTHER

**Hoexter Consulting Inc.**  
 Engineering and Environmental Geology  
 734 Torrey Court • Palo Alto, CA 94303  
 Phone: 650.494.2505 Fax: 650.494.2515  
 Email: david@hoexterconsulting.com

CHAIN-OF-CUSTODY RECORD

212

Project Number			Project Name/Location				Number of Containers	Analytical Tests					Sample Containers Preserved	Remarks
Sampler's Name (Printed)			Soil	Water	Sample Location or Depth	Type of Containers		THX 9/BTEX/14/BCE	8210 HWC	514 5520 B/Foil				
E-10-1F-565F			Grimit 1970 Seminary Ave Oakland CA											
Dr. Hoexter, J Forsyth														
Boring/Well Number	Date	Time												
(H) M4-8	1/24/01	1636				VQA	3	✓	✓			✓	1	
						Amber	1						2	
(F) M4-9		1651				VQA	3	✓	✓			✓	3	
						Amber	1						4	
													5	
													6	
													7	
													8	
													9	
													10	
													11	
													12	
													13	
													14	
													15	

Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 1/24/01	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 1/24/01	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Ship To: Mc Campbell Analyst  
Peachwood CA

Attention: \_\_\_\_\_

Phone No: \_\_\_\_\_

Requested Turnaround: Normal Contact: David F. Hoexter

Time: \_\_\_\_\_

Remarks: EDF

**Hoexter Consulting Inc.**  
Engineering and Environmental Geology  
734 Torrey Court • Palo Alto, CA 94303  
Phone: 650.494.2505 Fax: 650.494.2515  
Email: david@hoexterconsulting.com

Hoexter Consulting Eng. Geology  734 Torrey Court  Palo Alto, CA 94303-4160	Client Project ID: #E-10-1F-565F;Grimit 1970 Seminary Ave. Oakland	Date Sampled: 01/20/05
	Client Contact: David Hoexter	Date Received: 01/24/05
	Client P.O.:	Date Reported: 01/31/05
		Date Completed: 01/31/05

**WorkOrder: 0501308**  
 January 31, 2005

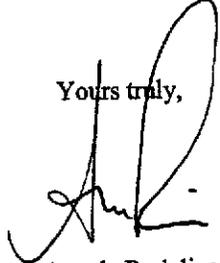
Dear David:

Enclosed are:

- 1). the results of 1 analyzed sample from your #E-10-1F-565F;Grimit 1970 Seminary Ave. Oakland project,
- 2). a QC report for the above sample
- 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. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,



Angela Rydelius, Lab Manager





# McC Campbell Analytical, Inc.

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

Hoexter Consulting Eng. Geology  734 Torrey Court  Palo Alto, CA 94303-4160	Client Project ID: #E-10-1F-565F;Grimit	Date Sampled: 01/20/05
	1970 Seminary Ave. Oakland	Date Received: 01/24/05
	Client Contact: David Hoexter	Date Extracted: 01/27/05
	Client P.O.:	Date Analyzed: 01/27/05

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0501308

Lab ID	0501308-001B	Client ID	"MW-9 Grab"	Reporting Limit for DF =1	
				S	W
Matrix	W	DF	1	Concentration	
Compound				µg/kg	µg/L
Bromodichloromethane	ND			NA	0.5
Bromoform	ND			NA	0.5
Bromomethane	ND			NA	0.5
Carbon Tetrachloride	ND			NA	0.5
Chlorobenzene	ND			NA	0.5
Chloroethane	ND			NA	1.0
2-Chloroethyl Vinyl Ether	ND			NA	0.5
Chloroform	ND			NA	0.5
Chloromethane	ND			NA	0.5
Dibromochloromethane	ND			NA	0.5
1,2-Dichlorobenzene	ND			NA	0.5
1,3-Dichlorobenzene	ND			NA	0.5
1,4-Dichlorobenzene	ND			NA	0.5
Dichlorodifluoromethane	ND			NA	0.5
1,1-Dichloroethane	ND			NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND			NA	0.5
1,1-Dichloroethene	ND			NA	0.5
cis-1,2-Dichloroethene	ND			NA	0.5
trans-1,2-Dichloroethene	ND			NA	0.5
1,2-Dichloropropane	ND			NA	0.5
cis-1,3-Dichloropropene	ND			NA	0.5
trans-1,3-Dichloropropene	ND			NA	0.5
Methylene chloride	ND			NA	0.5
1,1,2,2-Tetrachloroethane	ND			NA	0.5
Tetrachloroethene	ND			NA	0.5
1,1,1-Trichloroethane	ND			NA	0.5
1,1,2-Trichloroethane	ND			NA	0.5
Trichloroethene	ND			NA	0.5
Trichlorofluoromethane	ND			NA	0.5
Vinyl Chloride	ND			NA	0.5

#### Surrogate Recoveries (%)

%SS1:	111		
%SS2:	98		
%SS3:	101		

#### Comments

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

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

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



### QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501308

EPA Method: SW8021B/8015Cm		Extraction: SW5030B		BatchID: 14778			Spiked Sample ID: 0501307-008B			
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) <sup>E</sup>	ND	60	96.1	96.5	0.435	93.3	97.2	4.10	70 - 130	70 - 130
MTBE	ND	10	83.5	82.6	1.02	95.9	94.1	1.81	70 - 130	70 - 130
Benzene	ND	10	108	107	0.763	105	103	1.92	70 - 130	70 - 130
Toluene	ND	10	108	110	1.66	105	103	1.87	70 - 130	70 - 130
Ethylbenzene	ND	10	111	110	0.824	106	105	1.15	70 - 130	70 - 130
Xylenes	ND	30	110	110	0	110	107	3.08	70 - 130	70 - 130
%SS:	112	10	105	109	3.92	105	102	2.08	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

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

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

\* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

<sup>E</sup> TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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

QA/QC Officer



**McC Campbell Analytical, Inc.**

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

### QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501308

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Chlorobenzene	ND	10	107	105	2.15	109	106	1.98	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	109	106	2.43	114	113	0.528	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	116	113	2.89	112	118	4.84	70 - 130	70 - 130
Trichloroethene	ND	10	104	101	2.62	106	104	1.91	70 - 130	70 - 130
%SS1:	105	10	103	102	0.451	103	103	0	70 - 130	70 - 130
%SS2:	96	10	95	95	0	94	94	0	70 - 130	70 - 130
%SS3:	103	10	103	103	0	104	104	0	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

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

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

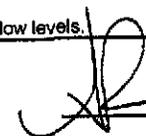
\* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

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

Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

 QA/QC Officer

**McC Campbell Analytical, Inc.**



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

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 0501308

ClientID: HCEP

Report to:

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

TEL: (650) 494-2505  
 FAX: (650) 494-2515  
 ProjectNo: #E-10-1F-565F;Grimit 1970 Seminary Av  
 PO:

Bill to:

Accounts Payable  
 Hoexter Consulting Eng. Geology  
 734 Torreya Court  
 Palo Alto, CA 94303-4160

Requested TAT:

5 days

Date Received: 01/24/2005

Date Printed: 01/24/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
0501308-001	"MW-9 Grab"	Water	01/20/2005	<input type="checkbox"/>	B	A														

Test Legend:

1	8010BMS_W	2	G-MBTX_W	3		4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

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

REP  
0501308

ICE/c  GOOD CONDITION  
 HEAD SPACE ABSENT  APPROPRIATE CONTAINERS  
 DECHLORINATED IN LAB \_\_\_\_\_ PRESERVED IN LAB \_\_\_\_\_  
 PRESERVATION  VOAS  O&G  METALS  OTHER

CHAIN-OF-CUSTODY RECORD

Project Number		Project Name/Location					Number of Containers	Analytical Tests					Sample Containers Preserved	Remarks
E-10-1F-565F		- Gruit 1970 Seminary Ave. Oakland CA.						TPH	GIB	MTBE	SW	HW		
Boring/Well Number	Date	Time	Soil	Water	Sample Location or Depth	Type of Containers								
(A) MW-9	1/24/05	1129		x	Initial pour	VJA	x	x					x	1
grab														2
														3
														4
														5
														6
														7
														8
														9
														10
														11
														12
														13
														14
														15

Relinquished by: (Signature) <i>D. Hoexter</i>	Date/Time 1/24/05 4:00	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 1/24/05 6:15	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Ship To: McC Campbell Anal. Podreco CA

Attention: \_\_\_\_\_

Phone No: \_\_\_\_\_

Requested Turnaround Time: Normal

Remarks: \_\_\_\_\_

Contact: David F. Hoexter

ICE/c  GOOD CONDITION  
 HEAD SPACE ABSENT  APPROPRIATE CONTAINERS  
 DECHLORINATED IN LAB \_\_\_\_\_ PRESERVED IN LAB \_\_\_\_\_  
 PRESERVATION  VOAS  O&G  METALS  OTHER

**Hoexter Consulting Inc.**  
 Engineering and Environmental Geology  
 734 Torreya Court • Palo Alto, CA 94303  
 Phone: 650.494.2505 Fax: 650.494.2515  
 Email: david@hoexterconsulting.com