Subsurface Consultants, Inc.

June 4, 1999
SCI 447.055

Mr. George Hill
305 Sheridan Avenue
Piedmont, California 94611

Mr. Gordon Linden
101 Gleneden Avenue
Oakland, California 94611

Groundwater Monitoring
March 1999 Quarterly Event
Connell Automobile Dealership (St ID# 469)
3093 Broadway
Oakland, California

Dear Messrs. Hill & Linden:

This letter records the results of the March 1999 quarterly groundwater monitoring event, as well as the January, February, March and April 1999 free product recovery events performed by Subsurface Consultants, Inc. (SCI) at the Connell Automobile Dealership in Oakland, California. The facility is situated at the southwest corner of the intersection of Hawthorne Street and Broadway, as shown on the Site Plan, Plate 1.

BACKGROUND

On December 18, 1989, three underground storage tanks (USTs), which previously contained gasoline, diesel, and waste oil, were removed from a sidewalk area located adjacent to the existing Connell facility. A dispenser island located within the existing building was also removed at that time. SCI understands that the pipelines connecting the fuel dispenser island with the USTs remained in-place.

Fourteen wells have been periodically sampled at the site since 1990 to evaluate impacts to groundwater due to previous UST releases. Impacts documented to date include a free floating gasoline plume and a mixed plume containing petroleum and chlorinated hydrocarbons. Since

3736 Mt. Diablo Boulevard • Suite 200 • Lafayette, California 94549-3659 • 925.299.7960 • FAX 925.299.7970
171 – 12th Street • Suite 202 • Oakland, California 94607-4911 • 510.268.0461 • FAX 510.268.0137

1991, free product recovery has been conducted on a monthly basis by hand-bailing product from site wells. In October 1996, an internal combustion engine was installed to remove product from well MW-6 using soil vapor extraction (SVE) technologies. Due to elevated groundwater levels at the site caused by high seasonal rains, the SVE system was taken off-line and removed from the site in March 1998. Product recovery by hand bailing is ongoing.

MONITORING ACTIVITIES

Groundwater monitoring during this event was performed in accordance with the program outlined in the Alameda County Health Care Services Agency (ACHCSA) letter dated January 26, 1998. The program includes periodic sampling of the wells and monthly product level measurements and removal. The March 1999 event was conducted as a quarterly event.

Monthly Free Product Removal

Measurements of separate-phase product thickness and depth-to-water are summarized in Table 1. Free floating product was observed and removed from wells MW-1, MW-6 and MW-14 during this quarter. The quantity of free product removed to date is summarized in Table 2. Data from the January through April 1999 monthly measurements are attached.

Groundwater Monitoring

On March 24, 1999, depth-to-water and free product thicknesses were measured in the site wells. Groundwater and free product elevation data are summarized in Table 2. The groundwater flow direction is generally towards the southeast at gradients varying from 0.01 to 0.1 ft/ft. Groundwater surface contours for this event are presented on Plate 2.

In accordance with the approved monitoring plan, wells MW-1, MW-4, MW-7, MW-8, MW-9, and MW-13 were to be purged and sampled during this quarterly event. Well MW-1, however, was not purged nor sampled due to the presence of free product. On March 25 through 30, 1999, the other wells were purged by removing water with new disposable bailers or a submersible pump. The wells were purged until measurements of pH, temperature, and conductivity had stabilized. After the wells recharged to within 80 percent of their initial level, they were sampled with new disposable bailers. Purge water was placed in 55-gallon drums and remains on-site pending later disposal.

Groundwater samples collected from the wells were submitted for chemical analyses. The samples were retained in pre-cleaned containers supplied by the analytical laboratories and were placed in ice-filled coolers and remained iced until delivery to the laboratory. Chain-of-custody records accompanied the samples.

ANALYTICAL TESTING

Curtis & Tompkins, Ltd., a state-certified chemical testing laboratory performed chemical analyses of samples from the wells. The samples were analyzed for the constituents listed below.

Analysis	Sample Preparation Method	Analysis Method
Total Volatile Hydrocarbons (TVH)	EPA 5030	EPA 8015 Mod.
Total Extractable Hydrocarbons (TEH)	EPA 3520	EPA 8015 Mod.
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	EPA 5030	EPA 8021
Methyl Tertiary Butyl Ether (MtBE)	EPA 5030	EPA 8021
1,2 Dichloroethane (1,2-DCA)	EPA 5030	EPA 8260

Summaries of analytical test results are summarized in Tables 3 and 4. Field sampling forms, analytical test reports, and chain-of-custody documents for this event are attached.

DISCUSSION AND CONCLUSIONS

Groundwater Flow Direction and Gradient

The groundwater flow direction trends across the site from the northwest to southeast. This flow pattern is typical of what has been observed throughout the study. Elevations measured during this event vary approximately 14 feet across the site. A relatively flat area exists in the western portion of the site where the gradient is on the order of 0.01 ft/ft. A steeper gradient (0.1 ft/ft) exists on the eastern portion of the site.

Free Product

Free product is present in three of the site wells (MW-1, MW-6, and MW-14) on a relatively consistent basis. There was also a trace of product observed on the outside of a bailer placed into well MW-4 during this event. To date approximately 370 gallons of free product have been recovered.

Sample Well Test Results

The concentrations of dissolved hydrocarbons in wells MW-4, MW-8, MW-9 and MW-13 are similar to previous measurements. Dissolved hydrocarbons were not detected in well MW-7.

MtBE was detected in wells MW-4 (450 ug/l), MW-8 (4.4 ug/l), and MW-9 (5.7 ug/l) using EPA Method 8021. However, these values may potentially be "false positives" since MtBE was not

identified by the laboratory when samples of the free product were analyzed in 1991. To confirm that these detections are false positives, samples from the wells will be analyzed for MtBE using EPA Method 8260 during the next event. MtBE was not detected in wells MW-7 and MW-13.

ONGOING ACTIVITIES

The ACHCSA recently approved the scope of ongoing groundwater monitoring for the site as proposed in the SCI Work Plan dated April 15, 1999, with the exception that additional analytical testing be conducted to provide further site characterization data. The new plan 1) expands the testing program to include waste oil constituents, 2) increases the frequency of sampling to quarterly for all wells which do not contain free floating product or petroleum sheen, and 3) eliminates the requirement for ongoing sampling of wells MW-2, MW-3, MW-5, MW-10 and MW-11. The modified analysis program includes the tests listed below.

Groundwater Analysis Program

Revised May 1999

Analysis	Sample Preparation Method	Analysis Method
Total Volatile Hydrocarbons (TVH)	EPA 5030	EPA 8015 Mod.
Total Extractable Hydrocarbons (TEH) diesel and motor oil ranges	EPA 3520	EPA 8015 Mod.
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	EPA 5030	EPA 8021
Methyl Tertiary Butyl Ether (MtBE)	EPA 5030	EPA 8021/8260
1,2 Dichloroethane (1,2-DCA)	EPA 5030	EPA 8260
Halogenated Volatile Organic Compounds (HVOC)	EPA 5030	EPA 8010
Semi-volatile Organic Compounds (SVOC)	EPA 3520	EPA 8270
Cadmium, Chromium, Lead, Nickel and Zinc	EPA 6010	ICP

SCI will continue to check for free product and record water level measurements for all wells on a monthly basis. Free product will also be removed by hand bailing.

Mr. George Hill
Mr. Gordon Linden
June 4, 1999
SCI 447.055
Page 5

The next sampling event will be conducted in June 1999. If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.

Jeriann N. Alexander, PE, REA
Civil Engineer 40469 (expires 3/31/03)
Registered Environmental Assessor 03130 (exp. 6/30/00)

JNA: TJM/447.055\qtr399.doc

Attachments: Plate 1 - Site Plan
Plate 2 - Groundwater Elevation Contours

Table 1- Groundwater and Free Product Elevation Data
Table 2 - Free Product Recovery
Table 3 - Summary of Petroleum Hydrocarbon and VOC Concentrations in Groundwater
Table 4 - Summary of Semi-Volatile Organic Compounds and Oil and Grease

Field Forms- January through April 1999
Analytical Test Reports
Chain-of-Custody Documents

cc: Ms. Susan Hugo
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Mr. Charles Headlee
Cal/EPA San Francisco Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Mr. Jonathan Redding, Esq.
Fitzgerald, Abbott & Beardsley, LLP
1221 Broadway, 12th Floor
Oakland, California 94612

HAWTHORNE STREET

SIDEWALK

3093 BROADWAY

WEBSTER STREET

SIDEWALK

BROOK STREET

BROADWAY

SIDEWALK

SIDEWALK

1 2 3 4 5 6 7 8 9 10/CPT13 11 13 14 15

VICINITY MAP

EXPLANATION

- 6 SCI MONITORING WELL
- 8 EXTRACTION WELL
- FENCE
- RETAINING WALL
- FORMER TANK LOCATION

N

APPROXIMATE SCALE IN FEET

0 60 120

SITE PLAN

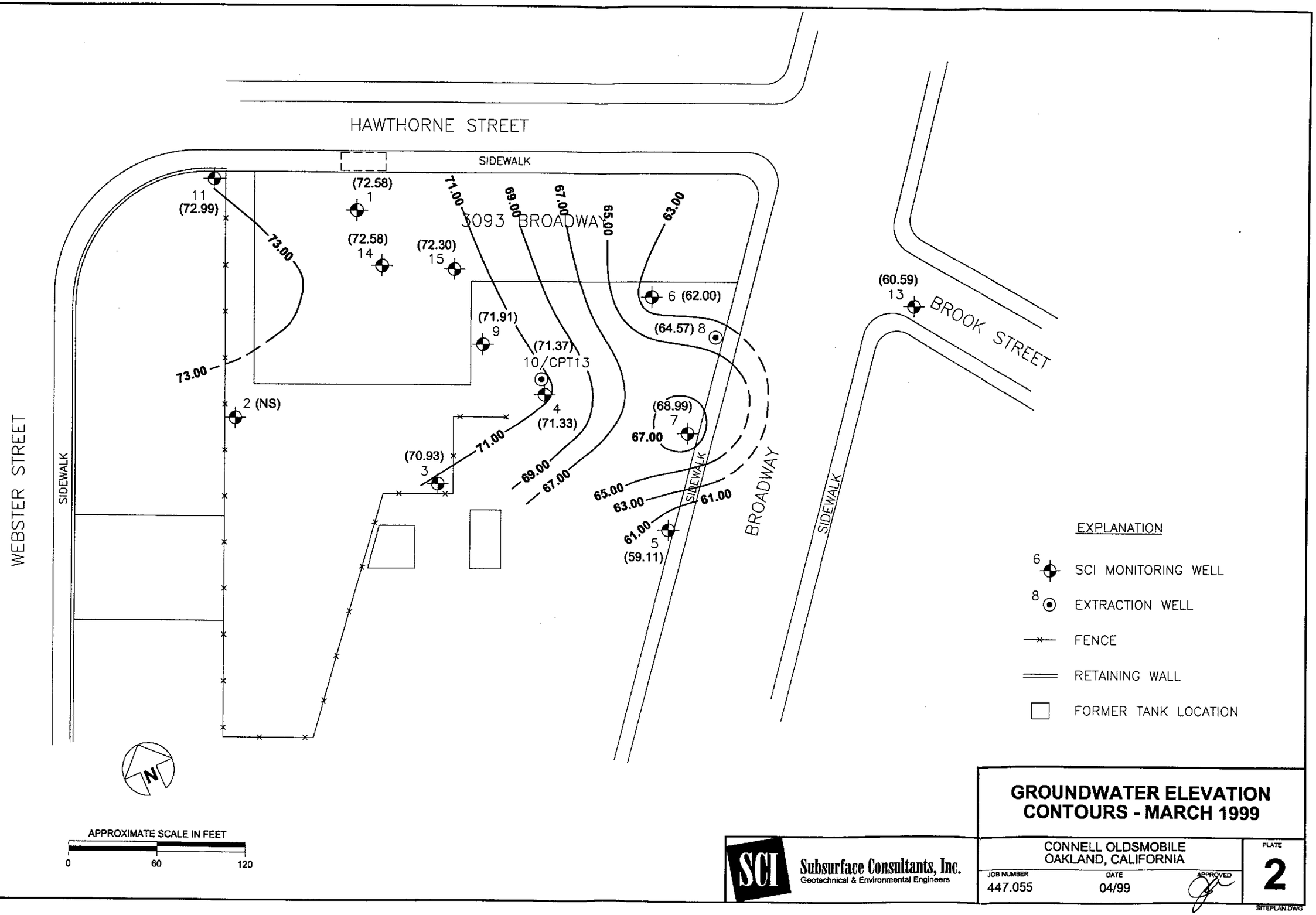
SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

CONNELL OLDSMOBILE
OAKLAND, CALIFORNIA

JOB NUMBER	DATE	APPROVED
447.055	04/99	

PLATE 1

SITEPLAN.DWG



GROUNDWATER ELEVATION CONTOURS - MARCH 1999

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

CONNELL OLDSMOBILE
OAKLAND, CALIFORNIA

JOB NUMBER	DATE	APPROVED
447.055	04/99	

PLATE 2

SITEPLAN.DWG

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-1	94.48	10/3/90	26.40	68.08	NM	--
		3/5/91	27.46	67.02	NM	--
		3/18/91	26.88	67.60	NM	--
		4/12/91	25.49	68.99	NM	--
		12/23/91	26.86	67.62	1.15	68.77
		12/26/91	26.08	68.40	0.22	68.63
		1/13/92	26.53	67.95	0.66	68.61
		2/28/92	27.75	66.73	0.42	67.15
		5/18/92	24.75	69.73	NM	--
		6/29/92	25.09	69.39	0.04	69.43
		7/29/92	25.46	69.02	0.15	69.17
		8/28/92	25.56	68.92	0.29	69.21
		10/28/92	26.44	68.04	0.52	68.56
		11/24/92	26.63	67.85	NM	--
		12/22/92	26.37	68.11	NM	--
		4/5/93	23.77	70.71	0	--
		7/20/93	24.51	69.97	0.6	70.57
		11/9/93	26.06	68.42	1.17	69.59
		8/30/95	21.73	72.75	0.23	72.98
		9/15/95	21.88	72.61	0.15	72.75
		10/2/95	22.42	72.06	0.42	72.48
		11/3/95	23.10	72.74	0.76	73.50
		11/30/95	23.38	72.54	0.7	73.24
		1/3/96	23.30	72.62	0.78	73.40
		2/2/96	22.96	72.28	0.84	73.12
		3/1/96	21.69	72.79	0.14	72.65
		4/4/96	21.11	73.67	0	--
		5/2/96	20.96	73.83	0	--
		6/5/96	20.98	73.81	0.04	73.85
		7/9/96	21.64	72.84	0.2	73.04
		8/8/96	22.43	72.05	0.33	72.38
		9/10/96	23.25	71.23	0.6	71.83
		10/1/96	23.58	70.90	0.6	71.50
		11/4/96	24.29	70.19	0.78	70.97
		12/2/96	24.63	69.85	0.88	70.73
		1/3/97	24.08	70.40	0.81	71.21
		2/6/97	22.46	72.02	0.3	72.32
		3/5/97	23.00	71.48	0	--
		4/1/97	22.29	72.19	0.2	72.39
		5/8/97	22.79	71.69	0.33	72.02
		6/6/97	24.33	70.15	1.69	71.84
		7/8/97	24.00	70.48	0.96	71.44
		8/7/97	24.58	69.90	1.29	71.19

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-1 (cont.)	94.48	9/10/97	24.93	69.55	1.21	70.76
		10/1/97	24.89	69.59	0.86	70.45
		11/4/97	25.06	69.42	0.77	70.19
		12/4/97	24.76	69.52	0.54	70.06
		1/8/98	23.66	70.82	0	--
		2/5/98	22.64	71.84	0	--
		3/6/98	20.80	73.68	0	--
		4/2/98	20.31	74.17	0	--
		4/29/98	19.95	74.53	0	--
		6/3/98	20.41	74.07	0	--
		7/9/98	20.97	73.51	0.07	73.58
		8/4/98	21.40	73.08	trace	--
		8/26/98	21.85	72.63	0.10	72.73
		11/2/98	22.92	71.56	0.39	71.95
		12/4/98	23.29	71.19	0.29	71.48
		1/5/99	23.51	70.97	0.42	71.39
		2/8/99	23.08	71.40	0.05	71.45
		3/29/99	21.90	72.58	0.01	72.59
		4/30/99	21.52	72.96	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-2	94.81	3/5/91	27.86	66.95	0	--
		3/18/91	27.46	67.35	0	--
		4/12/91	26.98	67.83	0	--
		5/18/92	26.50	68.31	0	--
		6/29/92	26.80	68.01	0	--
		7/29/92	27.08	67.73	0	--
		8/28/92	27.33	67.48	0	--
		10/28/92	27.65	67.16	0	--
		11/24/92	27.91	66.90	0	--
		12/22/92	27.74	67.07	NM	--
		4/5/93	25.95	68.86	0	--
		7/20/93	25.59	69.22	0	--
		11/9/93	26.72	68.09	0	--
		8/30/95	25.75	69.06	0	--
		10/2/95	25.10	69.71	0	--
		11/3/95	25.73	69.02	0	--
		11/30/95	25.34	69.41	0	--
		1/3/96	25.32	69.43	0	--
		2/2/96	25.10	69.65	0	--
		3/1/96	24.05	70.76	0	--
		4/4/96	23.41	71.49	0	--
		5/2/96	23.37	71.53	0	--
		6/5/96	23.75	71.11	0	--
		7/9/96	23.79	71.02	0	--
		8/8/96	24.27	70.54	0	--
		9/10/96	24.87	69.94	0	--
		10/1/96	25.12	69.69	0	--
		11/4/96	25.54	69.27	0	--
		12/2/96	25.74	69.07	0	--
		1/3/97	25.51	69.30	0	--
		2/6/97	24.68	70.13	0	--
		3/5/97	24.14	70.67	0	--
		4/1/97	24.18	70.63	0	--
		5/8/97	24.58	70.23	0	--
		6/6/97	25.20	69.61	0	--
		7/8/97	25.38	69.43	0	--
		8/7/97	25.52	69.29	0	--
		9/10/97	25.77	69.04	0	--
		10/1/97	26.01	68.80	0	--
		11/4/97	26.23	68.58	0	--
		12/4/97	26.31	68.50	0	--
		1/8/98	25.94	68.87	0	--
		2/5/98	25.10	69.71	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-2 (cont.)	94.81	3/6/98	22.23	72.58	0	--
		4/2/98	22.35	72.46	0	--
		4/29/98	22.18	72.63	0	--
		6/3/98	22.69	72.12	0	--
		7/9/98	22.98	71.83	0	--
		8/4/98	23.32	71.49	0	--
		8/26/98	23.72	71.09	0	--
		11/2/98	24.70	70.11	0	--
		12/4/98	24.94	69.87	0	--
		1/5/99		well not accessible		
		2/8/99	25.00	69.81	0	--
		3/24/99		well not accessible		
		4/30/99	23.08	71.73	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-3	90.08	3/6/91	23.17	66.91	NM	--
		3/18/91	22.76	67.32	NM	--
		4/12/91	22.51	67.57	NM	--
		5/12/92	23.17	66.91	NM	--
		6/29/92	22.90	67.18	NM	--
		7/29/92	22.17	67.91	NM	--
		8/28/92	22.28	67.80	NM	--
		10/28/92	22.67	67.41	0	--
		11/24/92	23.01	67.07	0	--
		12/22/92	22.91	67.17	NM	--
		4/5/93	22.11	67.97	0	--
		7/20/93	23.93	66.15	0	--
		11/9/93	23.14	66.94	0	--
		8/29/95	20.61	69.47	0	--
		10/2/95	21.18	68.90	0	--
		11/3/95	20.74	69.60	0	--
		11/30/95	20.68	69.66	0	--
		1/3/96	20.58	69.76	0	--
		2/2/96	20.43	69.91	0	--
		3/1/96	20.24	69.84	0	--
		4/4/96	18.50	71.58	0	--
		5/2/96	18.43	71.65	0	--
		6/5/96	18.51	71.57	0	--
		7/9/96	18.97	71.11	0	--
		8/8/96	19.51	70.57	0	--
		9/10/96	19.86	70.22	0	--
		10/1/96	20.04	70.04	0	--
		11/4/96	20.25	69.83	0	--
		12/2/96	20.40	69.68	0	--
		1/3/97	20.33	69.75	0	--
		2/6/97	19.98	70.10	0	--
		3/5/97	19.80	70.28	0	--
		4/1/97	19.76	70.32	0	--
		5/8/97	19.77	70.31	0	--
		6/6/97	20.18	69.90	0	--
		7/8/97	20.24	69.84	0	--
		8/7/97	20.38	69.70	0	--
		9/10/97	20.55	69.53	0	--
		10/1/97	20.73	69.35	0	--
		11/4/97	20.87	69.21	0	--
		12/4/97	20.89	69.19	0	--
		1/8/98	20.70	69.38	0	--
		2/5/98	20.37	69.71	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-3 (cont.)	90.08	3/6/98	19.68	70.40	0	--
		4/2/98	18.76	71.32	0	--
		4/29/98	17.92	72.16	0	--
		6/3/98	17.78	72.30	0	--
		7/9/98	18.31	71.77	0	--
		8/4/98	18.67	71.41	0	--
		8/26/98	18.91	71.17	0	--
		11/2/98	19.60	70.48	0	--
		12/4/98	19.91	70.17	0	--
		1/5/99	20.01	70.07	0	--
		2/8/99	20.05	70.03	0	--
		3/29/99	19.15	70.93	0	--
		4/30/99	18.12	71.96	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-4	88.84	3/5/91	23.79	65.05	NM	--
		3/18/91	22.30	66.54	NM	--
		4/12/91	21.85	66.99	NM	--
		12/23/91	22.63	66.22	0.98	67.19
		12/26/91	22.52	66.32	0.96	67.28
		1/10/92	22.74	66.10	0.99	67.09
		2/28/92	22.00	66.84	0.67	67.51
		3/11/92	21.71	67.13	0.55	67.68
		3/13/92	21.56	67.28	0.49	67.77
		3/17/92	25.46	63.38	0.44	63.82
		3/18/92	21.38	67.47	0.44	67.90
		3/19/92	21.33	67.51	0.48	67.99
		3/23/92	21.29	67.55	0.42	67.97
		3/24/92	21.31	67.53	0.38	67.90
		3/25/92	21.17	67.67	0.36	68.04
		3/26/92	21.08	67.76	0.35	68.11
		3/27/92	20.92	67.92	0.26	68.18
		3/31/92	21.15	67.69	0.44	68.13
		4/1/92	20.90	67.94	0.24	68.18
		4/2/92	20.90	67.94	0.17	68.11
		4/10/92	20.91	67.93	0.33	68.26
		4/13/92	21.04	67.80	0.42	68.22
		4/20/92	20.74	68.10	0.19	68.29
		5/4/92	20.83	68.01	0.33	68.34
		5/18/92	21.33	67.51	0.23	67.74
		5/26/92	20.83	68.01	0.17	68.18
		6/1/92	20.85	67.99	0.19	68.17
		6/29/92	21.38	67.46	0.53	67.99
		7/29/92	21.69	67.15	0.56	67.71
		8/28/92	21.35	67.49	0.63	68.12
		10/28/92	22.48	66.36	0.84	67.20
		11/24/92	22.60	66.24	NM	--
		12/22/92	22.47	66.37	NM	--
		4/3/93	20.11	68.73	0.51	69.24
		7/20/93	20.48	68.36	0.52	68.88
		11/9/93	21.71	67.13	0.63	67.76
		8/30/95	19.90	68.94	2.2	71.14
		9/15/95	18.76	70.08	0.57	70.65
		10/2/95	19.17	69.67	0.65	70.32
		11/3/95	19.45	69.39	0.44	69.83
		11/30/95	19.50	69.44	0.32	69.76
		1/3/96	19.31	69.53	0.2	69.73
		2/2/96	18.91	69.93	0.2	70.13

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-4 (cont.)	88.84	3/1/96	18.25	70.59	0.19	70.78
		4/4/96	17.53	71.31	0.18	71.49
		5/2/96	17.50	71.34	0.25	71.59
		6/5/96	17.67	71.17	0.39	71.56
		7/9/96	18.29	70.55	0.5	71.05
		8/8/96	18.84	70.00	0	--
		9/10/96	19.31	69.53	0.34	69.87
		10/1/96	19.51	69.33	0.29	69.62
		11/4/96	20.13	68.71	0.35	69.06
		12/2/96	20.23	68.61	0.33	68.94
		1/3/97	19.33	69.51	0.1	69.61
		2/6/97	18.13	70.72	0.01	70.73
		3/5/97	18.17	70.67	0.06	70.73
		4/1/97	18.38	70.46	0.05	70.51
		5/8/97	18.63	70.21	0.03	70.24
		6/6/97	18.78	70.06	0.19	70.25
		7/8/97	19.21	69.63	0.02	69.65
		8/7/97	19.50	69.34	0.07	69.41
		9/10/97	19.86	68.98	0.04	69.02
		10/1/97	20.09	68.75	0.37	69.12
		11/4/97	20.19	68.65	0.19	68.84
		12/4/97	20.05	68.79	0	--
		1/8/98	19.53	69.31	0	--
		2/5/98	18.28	70.56	0	--
		3/6/98	16.42	72.42	0	--
		4/2/98	16.54	72.30	0	--
		4/29/98	16.11	72.73	0	--
		6/3/98	16.55	72.29	0	--
		7/9/98	17.13	71.71	0	--
		8/4/98	17.54	71.30	0	--
		8/26/98	18.02	70.82	0	--
		11/2/98	19.03	69.81	0	--
		12/4/98	19.21	69.63	0	--
		1/5/99	19.33	69.51	0	--
		2/8/99	18.88	69.96	0	--
		3/29/99	17.51	71.33	0	--
		4/30/99	17.28	71.56	trace	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-5	84.84	3/18/91	26.31	58.53	NM	--
		3/12/91	26.41	58.43	NM	--
		5/18/92	26.75	58.09	NM	--
		6/29/92	26.73	58.11	NM	--
		7/29/92	26.66	58.18	NM	--
		8/28/92	26.90	57.94	NM	--
		10/28/92	26.39	58.45	0	--
		11/24/92	26.83	58.01	0	--
		12/22/92	27.33	57.51	NM	--
		4/3/93	26.62	58.22	0	--
		7/20/93	26.60	58.24	0	--
		11/9/93	27.24	57.60	0	--
		8/30/95	27.46	57.38	0	--
		10/2/95	26.85	57.99	0	--
		11/3/95	26.67	58.87	0	--
		11/30/95	27.05	58.49	0	--
		1/3/96	26.60	59.04	0	--
		2/2/96	26.70	59.14	0	--
		3/1/96	26.00	58.84	0	--
		4/4/96	26.20	58.64	0	--
		5/2/96	26.02	58.82	0	--
		6/5/96	25.91	58.93	0	--
		7/9/96	26.20	58.64	0	--
		8/8/96	26.38	58.46	0	--
		9/10/96	26.42	58.42	0	--
		10/1/96	26.52	58.32	0	--
		11/4/96	26.69	58.15	0	--
		12/2/96	26.70	58.14	0	--
		1/3/97	25.84	59.00	0	--
		2/6/97	26.26	58.58	0	--
		3/5/97	26.20	58.64	0	--
		4/1/97	26.98	57.86	0	--
		5/8/97	26.76	58.08	0	--
		6/6/97	26.33	58.51	0	--
		7/8/97	26.84	58.00	0	--
		8/7/97	26.89	57.95	0	--
		9/10/97	26.76	58.08	0	--
		10/1/97	26.97	57.87	0	--
		11/4/97	27.04	57.80	0	--
		12/4/97	26.34	58.50	0	--
		1/8/98	26.05	58.79	0	--
		2/5/98	25.31	59.53	0	--
		3/6/98	25.60	59.24	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-5 (cont.)	84.84	4/2/98	25.80	59.04	0	--
		4/29/98	25.35	59.49	0	--
		6/3/98	25.28	59.56	0	--
		7/9/98	25.49	59.35	0	--
		8/4/98	25.77	59.07	0	--
		8/26/98	25.63	59.21	0	--
		11/2/98	26.29	58.55	0	--
		12/4/98	26.05	58.79	0	--
		1/5/99	25.69	59.15	0	--
		2/8/99	26.00	58.84	0	--
		3/29/99	25.73	59.11	0	--
		4/30/99	25.80	59.04	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-6	85.62	3/18/91	25.82	59.80	NM	--
		4/12/91	27.23	58.39	NM	--
		12/23/91	28.40	57.22	3.21	60.43
		12/26/91	27.25	58.37	1.67	60.04
		1/10/92	27.23	58.39	0.9	59.29
		2/4/92	27.71	57.91	2.04	59.95
		2/28/92	27.92	57.70	3	60.70
		3/10/92	27.16	58.46	2.06	60.52
		3/12/92	25.96	59.66	0.52	60.18
		3/13/92	25.70	59.92	0.21	60.13
		3/23/92	26.34	59.28	1.09	60.37
		3/30/92	25.73	59.89	0.35	60.25
		4/10/92	25.29	60.33	0.05	60.38
		4/13/92	25.52	60.10	0.21	60.31
		4/20/92	25.38	60.25	0.1	60.35
		5/4/92	25.40	60.22	NM	--
		5/18/92	25.50	60.12	0.17	60.29
		5/26/92	25.46	60.16	0.13	60.29
		6/1/92	25.46	60.16	0.09	60.26
		6/29/92	25.59	60.03	0.14	60.17
		7/29/92	26.90	58.72	1.71	60.43
		8/28/92	25.09	60.53	2.62	63.15
		10/28/92	25.02	60.60	3.94	64.54
		11/24/92	28.87	56.75	NM	--
		4/3/93	26.96	58.66	2.86	61.52
		7/20/93	26.17	59.45	2.6	62.05
		11/9/93	27.51	58.11	3.06	61.17
		8/30/95	28.00	57.62	7.96	65.58
		9/15/95	28.24	57.38	6.14	63.52
		10/2/95	28.39	57.23	6.13	63.36
		11/3/95	26.91	58.71	3.44	62.15
		11/30/95	27.58	58.04	4.41	62.45
		1/3/96	27.58	58.04	4.37	62.41
		2/2/96	27.96	57.68	5.15	62.83
		3/1/96	27.96	57.68	5.41	63.09
		4/4/96	27.69	57.93	5.69	63.62
		5/2/96	26.83	58.79	4.66	63.45
		6/5/96	27.15	58.47	5.17	63.64
		7/9/96	27.08	58.54	4.86	63.40
		8/8/96	26.71	58.91	4.05	62.96
		9/10/96	26.83	58.79	3.82	62.61
		10/1/96	26.96	58.66	3.77	62.43
		11/4/96	NM	NM	NM	NM

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-6*	86.94	12/2/96	NM	NM	NM	NM
(cont.)		1/3/97	NM	NM	NM	NM
		2/6/97	25.08	61.86	0.2	62.06
		3/5/97	24.20	62.74	0	--
		4/1/97	24.04	62.90	0	--
		5/8/97	26.54	60.40	1.88	62.28
		6/6/97	25.33	61.61	0.21	61.82
		7/8/97	25.30	61.64	0.07	61.71
		8/7/97	25.52	61.42	0	--
		9/10/97	25.76	61.18	0	--
		10/1/97	25.12	61.82	0	--
		11/4/97	26.16	60.78	0.18	60.96
		12/4/97	26.08	60.86	0.16	61.02
		1/8/98	25.79	61.15	0.1	61.25
		2/5/98	25.31	61.63	0.89	62.52
		3/6/98	24.63	62.31	0.46	62.77
MW-6†	85.82	4/2/98	24.45	62.49	0.59	63.08
		4/29/98	22.96	62.86	0.55	63.41
		6/3/98	22.81	63.01	0.41	63.42
		7/9/98	23.04	62.78	0.35	63.13
		8/4/98	23.29	62.53	0.35	62.88
		8/26/98	23.50	62.32	0.31	62.63
		11/2/98	24.24	61.58	0.43	62.01
		12/4/98	24.35	61.47	0.32	61.79
		1/5/99	24.51	61.31	0.4	61.71
		2/8/99	24.00	61.82	0.03	61.85
		3/29/99	23.82	62.00	0.19	62.19
		4/30/99	23.60	62.22	1.13	63.35

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-7	85.41	3/18/91	21.63	63.78	NM	--
		4/12/91	22.13	63.28	NM	--
		5/18/92	21.67	63.74	NM	--
		6/29/92	20.75	64.66	NM	--
		7/29/92	21.07	64.34	NM	--
		8/28/92	21.35	64.06	NM	--
		10/28/92	21.81	63.60	0	--
		11/24/92	21.52	63.89	0	--
		12/22/92	obstructed	--	NM	--
		4/3/93	20.08	65.33	0	--
		7/20/93	19.59	65.82	0	--
		11/9/93	20.65	64.76	0	--
		8/30/95	18.78	66.63	0	--
		10/2/95	18.73	66.68	0	--
		11/3/95	19.23	66.18	0	--
		11/30/95	19.47	65.94	0	--
		1/3/96	18.52	66.89	0	--
		2/2/96	17.83	67.58	0	--
		3/1/96	17.61	67.80	0	--
		4/4/96	17.28	68.13	0	--
		5/2/96	17.15	68.26	0	--
		6/5/96	17.47	67.94	0	--
		7/9/96	18.06	67.35	0	--
		8/8/96	18.48	66.93	0	--
		9/10/96	18.79	66.62	0	--
		10/1/96	18.90	66.51	0	--
		11/4/96	18.69	66.72	0	--
		12/2/96	18.47	66.94	0	--
		1/3/97	17.98	67.43	0	--
		2/6/97	17.44	67.97	0	--
		3/5/97	16.73	68.68	0	--
		4/1/97	17.32	68.09	0	--
		5/8/97	17.72	67.69	0	--
		6/6/97	17.75	67.66	0	--
		7/8/97	17.94	67.47	0	--
		8/7/97	18.49	66.92	0	--
		9/10/97	18.48	66.93	0	--
		10/1/97	18.42	66.99	0	--
		11/4/97	18.86	66.55	0	--
		12/4/97	18.16	67.25	0	--
		1/8/98	17.87	67.54	0	--
		2/5/98	17.56	67.85	0	--
		3/6/98	16.84	68.57	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-7	85.41	4/2/98	16.51	68.90	0	--
(cont.)		4/29/98	16.23	69.18	0	--
		6/3/98	16.48	68.93	0	--
		7/9/98	16.90	68.51	0	--
		8/4/98	17.24	68.17	0	--
		8/26/98	17.59	67.82	0	--
		11/2/98	18.37	67.04	0	--
		12/4/98	17.91	67.50	0	--
		1/5/99	18.35	67.06	NM	--
		2/8/99	16.82	68.59	0	--
		3/29/99	16.42	68.99	0	--
		4/30/99	16.30	69.11	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-8	85.50	10/28/92	27.70	57.80	0	--
		11/24/92	27.62	57.88	0	--
		12/22/92	27.40	58.10	NM	--
		4/3/93	26.64	58.86	0	--
		7/20/93	26.60	58.90	0	--
		11/9/93	27.18	58.32	0	--
		8/30/95	26.35	59.15	0	--
		10/2/95	26.60	58.90	0	--
		11/3/95	26.62	58.88	0	--
		11/30/95	26.72	58.78	0	--
		1/3/96	26.64	58.86	0	--
		2/2/96	26.28	59.22	0	--
		3/1/96	25.81	59.69	0	--
		4/4/96	25.81	59.69	0	--
		5/2/96	26.15	60.03	0	--
		6/5/96	26.17	60.01	0	--
		7/9/96	26.32	59.18	0	--
		8/8/96	26.41	59.09	0	--
		9/10/96	26.66	58.84	0	--
		10/1/96	26.65	58.85	0	--
		11/4/96	26.77	58.73	0	--
		12/2/96	26.59	58.91	0	--
		1/3/97	25.98	59.52	0	--
		2/6/97	25.84	59.66	0	--
		3/5/97	25.94	59.56	0	--
		4/1/97	26.34	59.16	0	--
		5/8/97	26.39	59.11	0	--
		6/6/97	26.45	59.05	0	--
		7/8/97	26.65	58.85	0	--
		8/7/97	26.72	58.78	0	--
		9/10/97	26.89	58.61	0	--
		10/1/97	26.91	58.59	0	--
		11/4/97	26.82	58.68	0	--
		12/4/97	26.69	58.81	0	--
		1/8/98	26.39	59.11	0	--
		2/5/98	25.57	59.93	0	--
		3/6/98	25.29	60.21	0	--
		4/2/98	25.38	60.12	0	--
		4/29/98	25.64	59.86	0	--
		6/3/98	25.38	60.12	0	--
		7/9/98	25.82	59.68	0	--
		8/4/98	25.96	59.54	0	--
		8/26/98	26.16	59.34	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-8 (cont.)	85.50	11/2/98	26.23	59.27	0	--
		12/4/98	26.27	59.23	0	--
		1/5/99	26.31	59.19	0	--
		2/8/99	26.10	59.40	0	--
		3/29/99	20.93	64.57	0	--
		4/30/99	25.92	59.58	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-9	90.37	10/28/92	23.37	67.00	0	--
		11/24/92	23.51	66.86	0	--
		12/22/92	23.31	67.06	NM	--
		4/3/93	21.14	69.23	0	--
		7/20/93	21.54	68.83	0	--
		11/9/93	27.53	62.84	0	--
		8/30/95	19.59	70.78	0	--
		10/2/95	20.05	70.32	0	--
		11/3/95	20.40	69.97	0	--
		11/30/95	20.65	69.72	0	--
		1/3/96	20.73	69.64	0	--
		2/2/96	20.19	70.18	0	--
		3/1/96	19.53	70.84	0	--
		4/4/96	18.74	71.63	0	--
		5/2/96	18.63	71.74	0	--
		7/9/96	19.15	71.22	0	--
		8/8/96	19.89	70.48	0.35	70.83
		9/10/96	20.11	70.26	0	--
		10/1/96	20.37	70.00	0	--
		11/4/96	20.69	69.68	0	--
		12/2/96	21.43	68.94	0	--
		1/3/97	20.72	69.65	0	--
		2/6/97	19.72	70.65	0	--
		3/5/97	19.59	70.78	0	--
		4/1/97	19.73	70.64	0	--
		5/8/97	19.96	70.41	0	--
		6/6/97	20.13	70.24	0	--
		7/8/97	20.53	69.84	0	--
		8/7/97	20.84	69.53	0	--
		9/10/97	21.15	69.22	0	--
		10/1/97	21.42	68.95	0	--
		11/4/97	21.55	68.82	0	--
		12/4/97	21.62	68.75	0	--
		1/8/98	21.31	69.06	0	--
		2/5/98	20.21	70.16	0	--
		3/6/98	20.99	69.38	0	--
		4/2/98	20.19	70.18	0	--
		4/29/98	19.27	71.10	0	--
		6/3/98	19.86	70.51	0	--
		7/9/98	19.61	70.76	0	--
		8/4/98	19.35	71.02	0	--
		8/26/98	19.18	71.19	0	--
		11/2/98	20.09	70.28	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-9	90.37	10/28/92	23.37	67.00	0	--
		11/24/92	23.51	66.86	0	--
		12/22/92	23.31	67.06	NM	--
		4/3/93	21.14	69.23	0	--
		7/20/93	21.54	68.83	0	--
		11/9/93	27.53	62.84	0	--
		8/30/95	19.59	70.78	0	--
		10/2/95	20.05	70.32	0	--
		11/3/95	20.40	69.97	0	--
		11/30/95	20.65	69.72	0	--
		1/3/96	20.73	69.64	0	--
		2/2/96	20.19	70.18	0	--
		3/1/96	19.53	70.84	0	--
		4/4/96	18.74	71.63	0	--
		5/2/96	18.63	71.74	0	--
		7/9/96	19.15	71.22	0	--
		8/8/96	19.89	70.48	0.35	70.83
		9/10/96	20.11	70.26	0	--
		10/1/96	20.37	70.00	0	--
		11/4/96	20.69	69.68	0	--
		12/2/96	21.43	68.94	0	--
		1/3/97	20.72	69.65	0	--
		2/6/97	19.72	70.65	0	--
		3/5/97	19.59	70.78	0	--
		4/1/97	19.73	70.64	0	--
		5/8/97	19.96	70.41	0	--
		6/6/97	20.13	70.24	0	--
		7/8/97	20.53	69.84	0	--
		8/7/97	20.84	69.53	0	--
		9/10/97	21.15	69.22	0	--
		10/1/97	21.42	68.95	0	--
		11/4/97	21.55	68.82	0	--
		12/4/97	21.62	68.75	0	--
		1/8/98	21.31	69.06	0	--
		2/5/98	20.21	70.16	0	--
		3/6/98	20.99	69.38	0	--
		4/2/98	20.19	70.18	0	--
		4/29/98	19.27	71.10	0	--
		6/3/98	19.86	70.51	0	--
		7/9/98	19.61	70.76	0	--
		8/4/98	19.35	71.02	0	--
		8/26/98	19.18	71.19	0	--
		11/2/98	20.09	70.28	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-9	90.37	12/4/98	20.43	69.94	0	--
(cont.)		1/5/99	20.41	69.96	0	--
		2/8/99	20.41	69.96	0	--
		3/29/99	18.46	71.91	0	--
		4/30/99	19.54	70.83	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-10	88.60	10/28/92	21.55	67.05	0	--
		11/24/92	21.86	66.74	0	--
		12/22/92	21.68	66.92	NM	--
		4/3/93	19.14	69.46	0	--
		7/20/93	19.79	68.81	0	--
		11/9/93	20.83	67.77	0	--
		8/30/95	17.99	70.61	0	--
		10/2/95	18.42	70.18	0	--
		11/3/95	18.82	69.78	0	--
		11/30/95	19.03	69.57	0	--
		1/3/96	18.96	69.64	0	--
		2/2/96	18.55	70.05	0	--
		3/1/96	17.81	70.79	0	--
		4/4/96	17.11	71.49	0	--
		5/2/96	17.04	71.56	0	--
		6/5/96	17.11	71.49	0	--
		7/9/96	17.64	70.96	0	--
		8/8/96	18.24	70.36	0	--
		9/10/96	18.82	69.78	0	--
		10/1/96	19.02	69.58	0	--
		11/4/96	19.59	69.01	0	--
		12/2/96	19.72	68.88	0	--
		1/3/97	18.86	69.74	0	--
		2/6/97	17.76	70.84	0	--
		3/5/97	17.84	70.76	0	--
		4/1/97	18.00	70.60	0	--
		5/8/97	18.36	70.24	0	--
		6/6/97	18.50	70.10	0	--
		7/8/97	18.98	69.62	0	--
		8/7/97	19.18	69.42	0	--
		9/10/97	19.58	69.02	0	--
		10/1/97	19.81	68.79	0	--
		11/4/97	19.95	68.65	0	--
		12/4/97	19.78	68.82	0	--
		1/8/98	19.26	69.34	0	--
		2/5/98	17.91	70.69	0	--
		3/6/98	16.07	72.53	0	--
		4/2/98	16.25	72.35	0	--
		4/29/98	15.84	72.76	0	--
		6/3/98	16.27	72.33	0	--
		7/9/98	16.79	71.81	0	--
		8/4/98	17.25	71.35	0	--
		8/26/98	17.74	70.86	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-10 (cont.)	88.60	11/2/98	18.75	69.85	0	--
		12/4/98	18.89	69.71	0	--
		1/5/99	19.04	69.56	0	--
		2/8/99	18.57	70.03	0	--
		3/29/99	17.23	71.37	0	--
		4/30/99	16.99	71.61	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-11	102.06	11/24/92	33.65	68.41	0	--
		12/22/92	33.37	68.69	NM	--
		4/5/93	31.03	71.03	0	--
		7/20/93	31.90	70.16	0	--
		11/9/93	32.60	69.46	0	--
		8/29/95	28.92	73.14	0	
		10/2/95	29.48	72.58	0	--
		11/3/95	29.73	72.33	0	--
		11/30/95	30.26	71.80	0	--
		1/3/96	30.06	72.00	0	--
		2/2/96	29.67	72.39	0	--
		3/1/96	28.74	73.32	0	--
		4/4/96	28.13	73.93	0	--
		5/2/96	28.26	74.06	0	--
		6/5/96	28.30	74.02	0	--
		7/9/96	28.92	73.14	0	--
		8/8/96	29.64	72.42	0	--
		9/10/96	30.66	71.40	0	--
		10/1/96	30.58	71.48	0	--
		11/4/96	31.14	70.92	0	--
		12/2/96	31.36	70.70	0	--
		1/3/97	30.73	71.33	0	--
		2/6/97	29.38	72.68	0	--
		3/5/97	29.22	72.84	0	--
		4/1/97	29.46	72.60	0	--
		5/8/97	29.93	72.13	0	--
		6/6/97	30.17	71.89	0	--
		7/8/97	30.62	71.44	0	--
		8/7/97	30.95	71.11	0	--
		9/10/97	31.38	70.68	0	--
		10/1/97	31.61	70.45	0	--
		11/4/97	31.88	70.18	0	--
		12/4/97	31.68	70.38	0	--
		1/8/98	31.05	71.01	0	--
		2/5/98	29.78	72.28	0	--
		3/6/98	27.75	74.31	0	--
		4/2/98	27.47	74.59	0	--
		4/29/98	27.22	74.84	0	--
		6/3/98	27.74	74.32	0	--
		7/9/98	28.30	73.76	0	--
		8/4/98	28.72	73.34	0	--
		8/26/98	29.19	72.87	0	--
		11/2/98	30.16	71.90	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-11 (cont.)	102.06	12/4/98	30.43	71.63	0	--
		1/5/99	30.54	71.52	0	--
		2/8/99	32.34	69.72	0	--
		3/29/99	29.07	72.99	0	--
		4/30/99	28.82	73.24	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-13	84.06	11/24/92	26.05	58.01	0	--
		12/22/92	25.08	58.98	NM	--
		4/5/93	24.64	59.42	0	--
		7/20/93	24.29	59.77	0	--
		11/9/93	24.23	59.83	0	--
		8/29/95	23.30	60.76	NM	--
		10/2/95	23.78	60.28	0	--
		11/3/95	23.73	60.33	0	--
		11/30/95	23.80	60.26	0	--
		1/3/96	23.95	60.11	0	--
		2/2/96	23.70	60.36	0	--
		3/1/96	23.36	60.70	0	--
		4/4/96	23.27	60.79	0	--
		5/2/96	23.35	60.87	0	--
		6/5/96	23.07	60.99	0	--
		7/9/96	23.31	60.75	0	--
		8/8/96	23.44	60.62	0	--
		9/10/96	23.66	60.40	0	--
		10/1/96	23.80	60.26	0	--
		11/4/96	24.04	60.02	0	--
		12/2/96	24.00	60.06	0	--
		1/3/97	23.30	60.76	0	--
		2/6/97	23.24	60.82	0	--
		3/5/97	23.24	60.82	0	--
		4/1/97	23.37	60.69	0	--
		5/8/97	23.46	60.60	0	--
		6/6/97	23.57	60.49	0	--
		7/8/97	23.80	60.26	0	--
		8/7/97	23.92	60.14	0	--
		9/10/97	24.07	59.99	0	--
		10/1/97	24.18	59.88	0	--
		11/4/97	24.27	59.79	0	--
		12/4/97	24.05	60.01	0	--
		1/8/98	23.83	60.23	0	--
		2/5/98	22.89	61.17	0	--
		3/6/98	22.51	61.55	0	--
		4/2/98	22.54	61.52	0	--
		4/29/98	22.27	61.79	0	--
		6/3/98	22.34	61.72	0	--
		7/9/98	22.55	61.51	0	--
		8/4/98	22.75	61.31	0	--
		8/26/98	22.89	61.17	0	--
		11/2/98	23.20	60.86	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-13	84.06	12/4/98	23.90	60.16	0	--
(cont.)		1/5/99	23.65	60.41	NM	--
		2/8/99	23.35	60.71	0	--
		3/29/99	23.11	60.95	0	--
		4/30/99	23.31	60.75	0	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-14	94.66	6/3/98	20.73	73.93	0	--
		7/9/98	21.23	73.43	0	--
		8/4/98	21.63	73.03	0	--
		8/26/98	22.06	72.60	0	--
		11/2/98	23.19	71.47	0	--
		12/4/98	23.42	71.24	0.23	71.47
		1/5/99	23.36	71.30	0.12	71.42
		2/8/99	23.17	71.49	trace	--
		3/29/99	22.08	72.58	trace	--
		4/30/99	21.17	73.49	0.01	73.50

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	TOC Elevation (feet)	Date	Groundwater Depth (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	Product Elevation (feet)
MW-15	94.76	6/3/98	21.13	73.63	0	--
		7/9/98	21.64	73.12	0	--
		8/4/98	22.03	72.73	0	--
		8/26/98	22.45	72.31	0	--
		11/2/98	23.37	71.39	0	--
		12/4/98	23.67	71.09	0	--
		1/5/99	23.73	71.03	0	--
		2/8/99	23.53	71.23	0	--
		3/29/99	22.46	72.30	0	--
		4/30/99	22.16	72.60	0	--

Reference datum: arbitrary benchmark established by Levine Fricke.
TOC = Top of casing
Groundwater depths are measured below TOC.
NM = Not measured
* New TOC elevation due to connection to remediation system.
† New TOC elevation following disconnection of piping associated with the remediation system.

TABLE 2
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Date	Product Removed by Hand Bailing (gallons)	Cumulative Product Removed by Hand Bailing (gallons)
MW-1	12/23/91	2.00	2.00
	12/26/91	0.50	2.50
	1/13/92	1.00	3.50
	2/28/92	2.00	5.50
	11/9/93	0.50	6.00
	11/3/95	0.25	6.75
	11/30/95	0.25	7.00
	1/3/96	0.53	7.53
	2/2/96	0.75	8.28
	3/1/96	0.10	8.38
	4/4/96	0.00	8.38
	5/2/96	0.00	8.38
	6/5/96	0.10	8.48
	7/9/96	0.10	8.58
	8/8/96	0.05	8.63
	9/10/96	0.10	8.73
	10/1/96	0.25	8.98
	11/4/96	0.13	9.11
	12/2/96	0.26	9.37
	1/3/97	0.39	9.76
	2/6/97	0.01	9.77
	3/5/97	0.00	9.77
	4/1/97	0.01	9.78
	5/8/97	0.02	9.80
	6/6/97	0.26	10.06
	7/8/97	0.20	10.26
	8/7/97	1.00	11.26
	9/10/97	1.50	12.76
	10/1/97	0.26	13.02
	11/4/97	0.26	13.28
	12/4/97	0.19	13.47
	1/8/98	0.00	13.47
	2/5/98	0.00	13.47
	3/6/98	0.00	13.47
	4/2/98	0.00	13.47
	4/29/98	0.00	13.47
	6/3/98	0.00	13.47
	7/9/98	0.00	13.47
	8/4/98	trace	13.47
	8/26/98	trace	13.47

TABLE 2
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Date	Product Removed by Hand Bailing (gallons)	Cumulative Product Removed by Hand Bailing (gallons)
MW-1	11/2/98	trace	13.47
(cont.)	12/4/98	0.01	13.48
	1/5/99	0.03	13.51
	2/8/99	0.25	13.76
	3/24/99	0.01	13.77
	4/30/99	0.00	13.77

TABLE 2
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Date	Product Removed by Hand Bailing (gallons)	Cumulative Product Removed by Hand Bailing (gallons)
MW-4	12/23/91	2.50	2.50
	12/26/91	6.00	8.50
	1/10/92	5.00	13.50
	2/28/92	4.00	17.50
	3/11/92	3.50	21.00
	3/13/92	3.50	24.50
	3/17/92	2.25	26.75
	3/18/92	2.50	29.25
	3/19/92	1.50	30.75
	3/23/92	4.00	34.75
	3/24/92	1.50	36.25
	3/25/92	1.00	37.25
	3/26/92	1.00	38.25
	3/27/92	0.50	38.75
	3/31/92	0.50	39.25
	4/1/92	0.25	39.50
	4/2/92	0.13	39.63
	4/6/92	0.13	39.76
	4/10/92	0.25	40.01
	4/13/92	0.25	40.26
	4/20/92	0.13	40.39
	5/4/92	0.13	40.52
	5/18/92	0.13	40.65
	5/26/92	0.13	40.78
	6/1/92	0.06	40.84
	6/29/92	0.25	41.09
	7/29/92	1.11	42.20
	8/28/92	1.68	43.88
	4/3/93	0.13	44.01
	11/9/93	0.03	44.04
	8/30/95	1.75	45.79
	10/2/95	0.50	46.29
	11/3/95	0.25	46.54
	11/30/95	0.25	46.79
	1/3/96	0.05	46.84
	2/2/96	0.10	46.94
	3/1/96	0.20	47.14
	4/4/96	0.20	47.34
	5/2/96	0.20	47.54
	6/5/96	0.15	47.59

TABLE 2
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Date	Product Removed by Hand Bailing (gallons)	Cumulative Product Removed by Hand Bailing (gallons)
MW-4	7/9/96	0.16	47.75
(cont.)	8/8/96	0.00	47.75
	9/10/96	0.05	47.80
	10/1/96	0.05	47.85
	11/4/96	0.02	47.87
	12/2/96	0.02	47.89
	1/3/97	0.02	47.91
	2/6/97	0.01	47.92
	none removed	2/97-4/99; checked on a monthly basis	
	4/30/99	trace	47.92

TABLE 2
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Date	Product Removed by Hand Bailing (gallons)	Cumulative Product Removed by Hand Bailing (gallons)
MW-6	12/23/91	7.50	7.50
	12/26/91	2.00	9.50
	1/10/92	1.00	10.50
	2/4/92	2.00	12.50
	2/28/92	3.00	15.50
	3/10/92	2.75	18.25
	3/12/92	2.00	20.25
	3/23/92	1.00	21.25
	3/30/92	0.50	21.75
	4/10/92	0.25	22.00
	4/13/92	0.13	22.13
	4/20/92	0.13	22.26
	5/4/92	0.13	22.39
	5/8/92	0.06	22.45
	5/26/92	0.13	22.58
	6/1/92	0.06	22.64
	6/29/92	0.19	22.83
	7/29/92	0.60	23.43
	8/28/92	2.40	25.83
	12/2/92	(obstruction in well)	--
	4/3/93	1.75	27.58
	11/9/93	0.83	28.41
	8/30/95	4.50	32.91
	10/2/95	4.00	36.91
	11/3/95	3.00	39.91
	11/30/95	2.50	42.41
	1/3/96	2.50	44.91
	2/2/95	5.00	49.90
	3/1/96	4.00	53.90
	4/4/96	5.00	58.90
	5/2/96	4.50	63.40
	6/5/96	4.00	67.40
	7/9/96	4.50	71.90
	8/8/96	4.00	75.90
	9/10/96	3.50	79.40
	10/1/96	4.00	83.40
	11/4/96	*NM	83.40
	12/2/96	*NM	83.40
	1/3/97	*NM	83.40

TABLE 2
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Date	Product Removed by Hand Bailing (gallons)	Cumulative Product Removed by Hand Bailing (gallons)
	2/6/97	*NM	83.40
MW-6	3/5/97	*NM	83.40
(cont.)	4/1/97	*NM	83.40
	5/8/97	0.40	83.80
	6/6/97	0.03	83.83
	7/8/97	0.00	83.83
	8/7/97	0.00	83.83
	9/10/97	0.00	83.83
	10/1/97	0.00	83.83
	11/4/97	0.02	83.85
	12/4/97	0.05	83.90
	1/8/98	0.66	84.56
	2/5/98	*NM	84.56
	3/6/98	0.04	84.60
	4/2/98	0.10	84.70
	4/29/98	0.09	84.79
	6/3/98	0.03	84.82
	7/9/98	0.05	84.87
	8/4/98	0.04	84.91
	8/26/98	0.01	84.92
	11/2/98	0.02	84.94
	12/4/98	0.01	84.95
	1/5/99	0.03	84.98
	2/8/99	0.13	85.11
	3/24/99	0.03	85.14
	4/30/99	0.10	85.24

TABLE 2
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Date	Product Removed by Hand Bailing (gallons)	Cumulative Product Removed by Hand Bailing (gallons)
MW-9	8/8/96	0.10	0.10
	none removed since 8/96; checked on a monthly basis		
MW-14	12/4/98	0.01	0.01
	1/5/99	0.01	0.02
	2/8/99	0.01	0.03
	3/24/99	trace	0.03
	4/30/99	trace	0.03
Total Product (gallons) removed by bailing			147.06
Total Product (gallons) removed by Soil Vapor Extraction (as of 3/31/98)			223.0
Cumulative Total of Product (gallons) Removed			370.06

*NM, product was being removed by vapor extraction at time of measurement.

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-1	10/5/90	68.08	620,000	<500	33,000	50,000	7,900	41,000	2,900	--	ND
	3/1/91	67.02	FP	--	--	--	--	--	--	**	--
	10/12/92	68.04	490,000	--	51,000	59,000	5,000	27,000	1,300	--	--
	11/24/92	67.85	320,000	4,600	35,000	43,000	4,200	22,000	1,600	--	ND
	4/5/93	70.71	270,000	25,000	50,000	58,000	4,600	25,000	1,800	--	ND
	7/21/93	69.97	FP	--	--	--	--	--	--	--	--
	11/9/93	68.42	FP	--	--	--	--	--	--	--	--
	8/30/95	72.75	FP	--	--	--	--	--	--	--	--
	12/4/95	72.54	FP	--	--	--	--	--	--	<200	--
	5/2/96	73.83	340,000	32,000	57,000	73,000	7,200	38,000	1,200	--	--
	11/5/96	70.19	270,000	--	43,000	56,000	4,500	34,000	--	--	--
	5/9/97	71.69	240,000	28,000[1,2]	36,000	45,000	3,300	17,900	930	--	--
	11/5/97	69.42	240,000	28,000[1,2]	42,000	48,000	3,600	18,800	1,200	<1,000	--
	2/9/98	71.84	220,000	27,000[1,2]	47,000	60,000	5,200	29,800	1,500	<1,000	ND
	5/1/98	74.53	160,000	29,000[1,2]	35,000	42,000	2,800	16,000	1,100	<1,000	ND
	11/3/98	71.19	200,000	37,000[1,2]	39,000	49,000	4,400	26,000	1,200	<500	ND
	3/24/99	72.18	FP	--	--	--	--	--	--	--	--
MW-2	3/1/91	66.95	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/24/92	66.90	<50	<50	<0.5	1.1	<0.5	1.5	<1.0	--	ND
	4/5/93	68.86	<50	870	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	7/21/93	69.22	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/10/93	68.09	<50	240	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER
FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-2	8/30/95	69.06	<50	150*	<0.5	<0.5	<0.5	<0.5	<1.0	--	--
(cont.)	5/3/96	71.53	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	5/8/97	70.23	<50	<50	<0.5	0.7	<0.5	<0.5	<1.0	--	--
	4/29/98	72.63	<50	<47	<0.5	<0.5	<0.5	<0.5	<1.0	<2	ND
MW-3	3/1/91	66.91	<50	<50	<50	0.6	<0.5	<0.5	<1.0	--	ND
	11/25/92	67.07	50	160	<0.5	0.9	<0.5	2	<1.0	--	ND
	4/5/93	67.97	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	7/21/93	66.15	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/10/93	66.94	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	8/30/95	69.47	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	--
	5/3/96	71.65	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	5/8/97	70.31	<50	<50	<0.5	0.7	<0.5	<0.5	<1.0	--	--
	4/29/98	72.16	<50	<47	<0.5	<0.5	<0.5	<0.5	<1.0	<2	ND

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER
FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-4	3/1/91	65.05	150,000	<500	20,000	38,000	2,800	14,000	610	**	ND
	10/12/92	66.36	230,000	--	15,000	32,000	2,500	14,000	430	--	--
	11/24/92	66.24	210,000	1,600	14,000	31,000	2,500	14,000	500	--	ND
	4/2/93	68.73	FP	--	--	--	--	--	--	--	--
	7/21/93	68.36	FP	--	--	--	--	--	--	--	--
	11/9/93	67.13	FP	--	--	--	--	--	--	--	--
	8/30/95	68.94	FP	--	--	--	--	--	--	--	--
	12/1/95	69.44	FP	--	--	--	--	--	--	--	--
	5/2/96	71.34	140,000	9,200	24,000	50,000	3,000	15,100	420	--	ND
	11/4/96	68.71	160,000	4,700 [1,2]	16,000	38,000	2,700	14,000	380	--	ND
	5/8/97	70.21	170,000	5,100 [1,2]	16,000	37,000	2,400	15,900	290	--	--
	11/5/97	68.65	190,000	3,700 [1,2]	15,000	31,000	2,200	14,600	290	<400	--
	2/9/98	70.56	110,000	4,800 [1,2]	19,000	42,000	2,500	18,300	300	<500	--
	5/1/98	72.73	130,000	5,000 [1,2]	15,000	31,000	2,000	13,400	260	<1,000	ND
	8/4/98	71.30	130,000	3,500 [1,2]	16,000	34,000	2,400	15,700	240	<400	ND
	11/2/98	69.63	140,000	7,200 [1,2]	16,000	32,000	2,300	15,500	230	<400	ND
	3/26/99	71.33	110,000	14,000 [1,2]	15,000	30,000	1,600	15,000	210	450 [6]	[4]

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-5	3/15/91	58.53	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/10/92	58.01	<50	50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	4/2/93	58.22	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	7/21/93	58.24	<50	190	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/9/93	57.60	<50	170	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	8/30/95	57.38	<50	180*	<0.5	<0.5	<0.5	<0.5	<1.0	--	--
	5/3/96	58.82	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	5/8/97	58.08	<50	<50	<0.5	0.5	<0.5	<0.5	<1.0	--	--
	4/29/98	59.49	<50	<47	<0.5	0.5	<0.5	<0.5	<1.0	<2	ND
MW-6	3/15/91	59.80	80,000	<50	12,000	13,000	1,100	5,400	1,400	--	Dibromochloromethane (160)
	10/12/92	60.60	19,000	--	3,200	1,400	200	560	840	--	--
	12/1/92	56.75	FP	--	--	--	--	--	--	--	--
	4/2/93	58.66	FP	--	--	--	--	--	--	--	--
	7/21/93	59.45	FP	--	--	--	--	--	--	--	--
	11/9/93	58.11	FP	--	--	--	--	--	--	--	--
	8/30/95	57.62	FP	--	--	--	--	--	--	--	--
	12/1/95	58.04	FP	--	--	--	--	--	71	<8,000,000	--
	5/3/96	58.79	130,000	9,000	37,000	50,000	3,200	14,200	2,400	--	ND
	5/9/97	60.40	1,700,000	53,000[1,2]	14,000	27,000	4,000	28,200	1,200	--	--
	11/5/97	60.78	160,000	65,000[1,2]	13,000	19,000	1,900	14,300	790	<200	--
	5/1/98	62.86	130,000	25,000[1,2]	15,000	23,000	1,700	13,200	1,100	<500	ND
	11/3/98	61.47	110,000	30,000[1,2]	17,000	21,000	1,800	10,700	990	<200	ND

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER
FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-7	3/15/91	63.78	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/24/92	63.89	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	4/2/93	65.33	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	7/21/93	65.82	<50	150	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/9/93	64.76	<50	200	<0.5	1	<0.5	1.7	<1.0	--	ND
	8/30/95	66.63	<50	170*	<0.5	<0.5	<0.5	<0.5	<1.0	--	--
	12/1/95	65.94	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	5/2/96	68.26	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	8/8/96	66.93	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<2	ND
	11/4/96	66.72	<50	<50	<1	<1	<1	<1	<1.0	--	ND
	2/6/97	67.97	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<2	ND
	5/8/97	67.69	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	--
	8/7/97	66.92	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<2	ND
	11/5/97	66.55	<50	<50	<0.5	<0.5	<0.5	<0.5	1	<2	--
	2/9/98	67.85	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<2	--
	4/29/98	69.18	<50	<47	<0.5	<0.5	<0.5	<0.5	<1.0	<2	ND
	8/4/98	68.17	<50	<50	<0.5	<0.5	<0.5	<0.5	1.1	<2	ND
	11/2/98	67.50	<50	<50	<0.5	<0.5	<0.5	<0.5	1.2	<2	ND
	3/26/99	68.99	<50	<50	<0.5	<0.5	<0.5	<0.5	ND	<2	ND

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER
FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-8	10/12/92	57.80	70	--	20	1	1	3	210	--	--
	11/25/92	57.88	<50	170	<0.5	<0.5	<0.5	<0.5	200	--	ND
	4/8/93	58.86	490	100	15	45	5.1	73	210	--	ND
	7/21/93	58.90	180	90	2.5	3	<0.5	1.9	350	--	ND
	11/11/93	58.32	310	170	23	<0.5	<0.5	<0.5	240	--	ND
	8/30/95	59.15	660	240*	360	6.8	13	2.8	130	--	--
	12/4/95	58.78	250	<50	46	0.9	4.9	<0.5	94	--	ND
	5/3/96	60.03	69	94	110	<0.5	<0.5	1.5	100	--	ND
	8/8/96	59.09	120	250 [1,2]	11	<0.5	<0.5	<0.5	93	<2	ND
	11/5/96	58.73	110	<50	20	<1	1	<1	98	--	ND
	2/6/97	59.66	67 [1,2]	130	51	<0.5	0.56	<0.5	81	<2	ND
	5/9/97	59.11	110 [1,2]	120 [1,2]	59	<0.5	<0.5	<0.5	76	--	--
	8/7/97	58.78	<50	150 [2]	12 [3]	<0.5	<0.5	<0.5	79	<2	ND
	11/5/97	58.68	<50	110 [1,2]	9.4	<0.5	<0.5	<0.5	84	<2	--
	2/9/98	59.93	<50	75 [1,2]	6	<0.5	<0.5	<0.5	85	<2	--
	5/1/98	59.86	430	210 [1,2]	490	7.1	27	26	85	<10	ND
	8/5/98	59.54	140	260 [1,2]	19	<0.5	5.2	5.3	69	<2	ND
	11/3/98	59.23	150	190 [1,2]	110	1.1	4.3	4.5	67	<2	ND
	3/31/99	64.57	54 [5]	200 [1,5]	170 [4]	1.5	4.1	1.9	5.9	4.4 [6]	1,1DCA 0.7

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER
FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-9	11/24/92	66.86	19,000	320	180	590	23	2000	340	--	Chloroform (15)
	4/5/93	69.23	2,300	920	48	4	0.6	13	600	--	Chloroform (2)
	7/21/93	68.83	2,300	450	170	8.1	15	<0.5	1100	--	ND
	11/10/93	62.84	4,400	450	69	7.3	21	9.7	900	--	ND
	8/30/95	70.78	3,200	680	3,900	49	80	22.8	960	--	--
	12/4/95	69.72	--	--	--	--	--	--	--	<2	--
	5/2/96	71.74	<1300	710	2,600	<13	200	<13	550	--	ND
	11/5/96	69.68	1,800	420	280	<5	65	<5	770	--	ND
	5/9/97	70.41	1,100	490 [1,2]	160	<0.5	42	<0.5	690	--	--
	8/8/97	69.53	570 [1,2]	480 [2]	<0.5	<0.5	<0.5	0.78 [3]	680	<2	ND
	11/5/97	68.82	490 [1]	370 [1,2]	<0.5	<0.5	6	<0.5	500	<2	--
	2/9/98	70.16	270 [1]	410 [1,2]	48	17	5.8	<0.5	520	<2	--
	5/1/98	71.10	550	450 [1,2]	70	<0.5	22	2.2	390	<2	ND
	8/5/98	71.02	550 [1]	630 [1,2]	88	<0.5	13	1.9 [3]	420	<2	ND
	11/2/98	69.94	580	500 [1,2]	<0.5	<0.5	7.5 [3]	1.6 [3]	430	<2	ND
	3/25/99	71.91	1100	630 [1,2]	160	<0.5	21	2.1 [3]	550	5.7 [5]	ND

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-10	10/12/92	67.05	28,000	--	2,700	3,800	210	1,300	150	--	--
	11/24/92	66.74	130,000	1,300	9,700	19,000	1,400	8,400	370	--	ND
	4/5/93	69.46	63,000	5,000	6,300	14,000	1,100	7,500	70	--	ND
	7/21/93	68.81	140,000	20,000	16,000	31,000	2,200	13,000	700	--	ND
	8/30/95	70.61	92,000	5,900	13,000	24,000	1,800	9,100	300	--	--
	5/3/96	71.56	81,000	5,600	17,000	29,000	2,100	8,500	320	--	ND
	5/9/97	70.24	63,000	2,500 [1,2]	7,400	13,000	940	4,100	150	--	--
	5/1/98	72.76	60,000	2,000 [1,2]	7,100	14,000	1100	5,300	120	<250	ND
MW-11	11/24/92	68.41	<50	220	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	12/8/92***	68.69	<50	140	<0.1	<0.1	<0.1	<0.1	--	--	--
	12/8/92	68.69	<50	120	<0.5	<0.5	<0.5	<0.5	--	--	--
	4/5/93	71.03	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	7/21/93	70.16	160	150	<0.5	1.8	<0.5	<0.5	<1.0	--	ND
	11/9/93	69.46	80	60	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	8/30/95	73.14	<50	240*	<0.5	<0.5	<0.5	<0.5	<1.0	--	--
	5/3/96	74.06	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	5/8/97	72.13	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	--
	4/29/98	74.84	<50	<47	<0.5	<0.5	<0.5	<0.5	<1.0	<2	ND

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER
FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-13	11/24/92	58.01	<50	3,600	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	12/8/92***	58.98	<50	210	<0.1	<0.1	<0.1	<0.1	--	--	--
	12/8/92	58.98	<50	100	<0.5	<0.5	<0.5	<0.5	--	--	--
	4/5/93	59.42	<50	<50	<0.5	0.9	<0.5	<0.5	<1.0	--	ND
	7/21/93	59.77	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	11/9/93	59.83	<50	160	<0.5	<0.5	<0.5	<0.5	<1.0	--	ND
	8/30/95	60.76	<50	<50	49	<0.5	<0.5	<0.5	3.6	--	--
	12/1/95	60.26	<50	<50	<0.5	<0.5	<0.5	<0.5	4.1	--	ND
	5/3/96	60.87	<50	<50	<0.5	<0.5	<0.5	<0.5	4	--	ND
	8/8/96	60.62	<50	<50	32	<0.5	<0.5	<0.5	6.4	<2	ND
	11/5/96	60.02	<50	<50	<1	<1	<1	<1	5.7	--	ND
	2/6/97	60.82	<50	<50	<0.5	<0.5	<0.5	<0.5	3.5	<2	ND
	5/8/97	60.60	<50	<50	81	<0.5	<0.5	<0.5	5.5	--	--
	8/8/97	60.14	<50	<50	<0.5	<0.5	<0.5	<0.5	6.8	<2	ND
	11/5/97	59.79	<50	<50	<0.5	<0.5	<0.5	<0.5	5.5	<2	--
	2/9/98	61.17	<50	<50	<0.5	<0.5	<0.5	<0.5	2.9	<2	--
	4/29/98	61.79	<50	<47	24	<0.5	<0.5	<0.5	5.7	<2	ND
	8/4/98	61.31	120	78 [1,2]	200	<1	<1	<1	6.2	<4	ND
	11/3/98	60.16	59 [1]	<50	33	<0.5	<0.5	<0.5	6.1	<2	ND
	3/31/99	60.95	130	<48	0.56	<0.5	<0.5	<0.5	1.4	<2	ND

TABLE 3
SUMMARY OF PETROLEUM HYDROCARBON AND VOC CONCENTRATIONS IN GROUNDWATER FROM MONITORING WELLS
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Groundwater Elevation (feet)	TVH µg/l	TEH µg/l	B µg/l	T µg/l	E µg/l	X µg/l	1,2-DCA µg/l	MtBE µg/l	Other VOC's µg/l
MW-14	5/26/98	72.99	41,000	7,700 [1,2]	7,100	11,000	720	3,900	440	<1000	ND
MW-15	5/26/98	72.89	130,000	1,700 [1,2]	30,000	38,000	2,500	12,600	1,200	<1000	ND

NOTES:
µg/l = micrograms per liter = parts per billion = ppb
TVH = Total Volatile Hydrocarbons
TEH = Total Extractable Hydrocarbons
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
1,2-DCA = 1,2-Dichloroethane
MtBE = Methyl tertiary butyl ether
* = Suspect laboratory contamination contributing to test result.
** = Fuel fingerprint analysis indicates MTBE is not present in the free product sample collected from this well.
*** = Duplicate sample sent to a different chemical laboratory.

<0.5 = Chemical not present at a concentration in excess of detection limit shown
ND = None detected, chemicals not present at concentrations above detection limits reported on laboratory test reports
MW-1 was initially referred to as Sample 5
-- = Test not requested
FP = Free product encountered in well
1 = Sample exhibits fuel pattern which does not resemble standard
2 = Lighter hydrocarbons than indicated standard
3 = Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two
4 = Other substances found: Acetone, 1,2-Dibromoethane, Ethylbenzene, Styrene, Isopropylbenzene, Propylbenzene, 1,3,5-Trimethylbenzene, 2-Chlorotoluene, 1,2,4-Trimethylbenzene, n-Butylbenzene, and Naphthalene. See laboratory results for details.
5 = sample exhibits unknown single peak or peaks
6 = detection may potentially be a false positive, to be checked during the next event.

TABLE 4
SUMMARY OF SEMI-VOLATILE ORGANIC COMPOUNDS AND OIL & GREASE
IN GROUNDWATER FROM MONITORING WELL MW-1
3093 BROADWAY
OAKLAND, CALIFORNIA

Well	Sampling Date	Oil & Grease (mg/l)	2,4-Dichloro-phenol (µg/l)	2,4-Dimethyl-phenol (µg/l)	2-methyl naphthalene (µg/l)	2-methyl-phenol (µg/l)	3,4-methyl phenol (µg/l)	Benzoic Acid (µg/l)	bis (2-ethyl hexyl) phthalate (µg/l)	Naphthalene (µg/l)	Phenol (µg/l)	Other SVOC's Compounds
MW-1	8/30/95	10	1,700	<240	630	<240	NI	<1,200	240	1,200	<240	ND
	5/2/96	<5	<47	<47	250	<47	NI	<240	<47	640	<47	ND
	11/5/96	9.8	--	--	--	--	--	--	--	--	--	--
	5/9/97	20	<47	<47	280	<47	NI	570	<47	650	93	ND
	11/5/97	<5	<190	<190	720	<190	<190	<940	<190	1,500	<190	ND
	2/9/98	<5	<47	<47	160	<47	52	700	<47	570	92	ND
	5/27/98	5.7	<200	110J	120J	210	200J	<1,000	<200	630	480	ND
	11/3/98	63	<94	<9.4	500	<94	59J	500	<94	1,100	130	ND

NOTES:
<5 = Analyte not detected above laboratory reporting limit stated.
ND = Analytes not detected above their laboratory reporting limits.
NI = Not included in laboratory analyte list.
-- = Test not requested.
J = Estimated value below the laboratory reporting list
SVOC = Semi- volatile organics

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

ANALYTICAL REPORT

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 05-APR-99
Lab Job Number: 138635
Project ID: 447.055
Location: Connell Olds

Reviewed by: _____

Reviewed by: _____

13863S

PAGE 1 OF 1

CHAIN OF CUSTODY FORM

PROJECT NAME: Connell Oldsmobile

JOB NUMBER: 447.055 LAB: C+T

PROJECT CONTACT: Mey Mendoza TURNAROUND: Normal

SAMPLED BY: John Wolfe REQUESTED BY: John Wolfe

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE			METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES
1	MW-9	/						6	2										3	2	5	9	
2	MW-4	/						6	2										3	2	6	9	
3	MW-7	/						6	2										3	2	6	9	

ANALYSIS REQUESTED: TVH/BTEX; TEH; DCA by 8260

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
John Wolfe	3/26/99 1130		3/26/99 1130
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

SCI
Subsurface Consultants, Inc.
171 - 12th Street, Suite 202, Oakland, CA 94607
(510) 268-0461 - FAX: (510) 268-0137
3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
(925) 299-7960 - (925) 299-7970

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
138635-001	MW-9	47073	03/25/99	03/29/99	03/29/99	
138635-002	MW-4	47110	03/26/99	03/30/99	03/30/99	
138635-003	MW-7	47073	03/26/99	03/29/99	03/29/99	

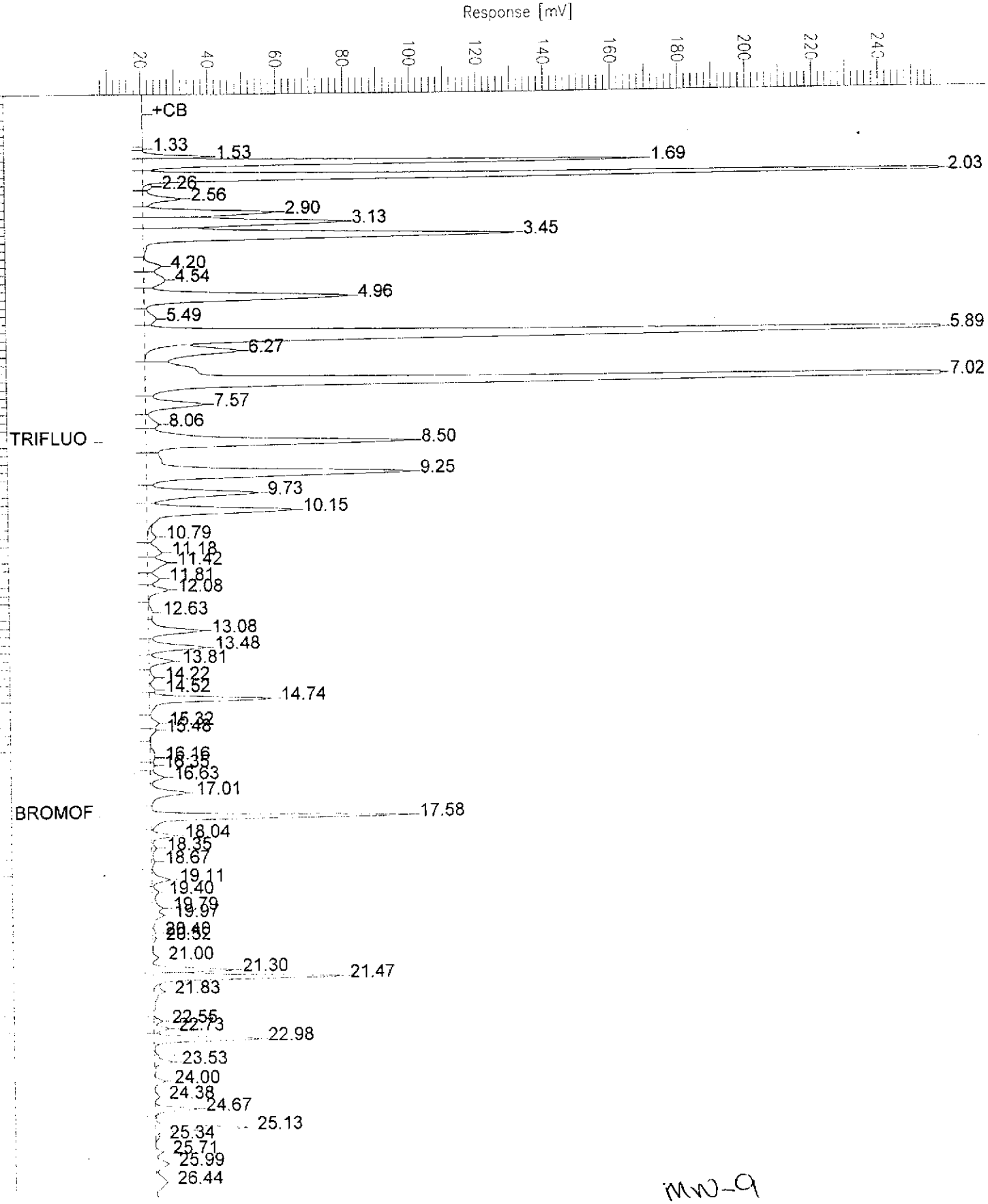
Matrix: Water

Analyte	Units	138635-001	138635-002	138635-003
Diln Fac:		1	125	1
Gasoline C7-C12	ug/L	1100	110000	<50
Surrogate				
Trifluorotoluene	%REC	131	101	104
Bromofluorobenzene	%REC	103	105	98

Chromatogram

Sample Name : 138635-001,47073
FileName : G:\GC05\DATA\088G020.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Sample Factor: -1.0 Plot Offset: 8 mV

Sample #:
Date : 3/30/99 10:30 AM
Time of Injection: 3/29/99 09:58 PM
Low Point : 7.98 mV High Point : 257.98 mV
Plot Scale: 250.0 mV

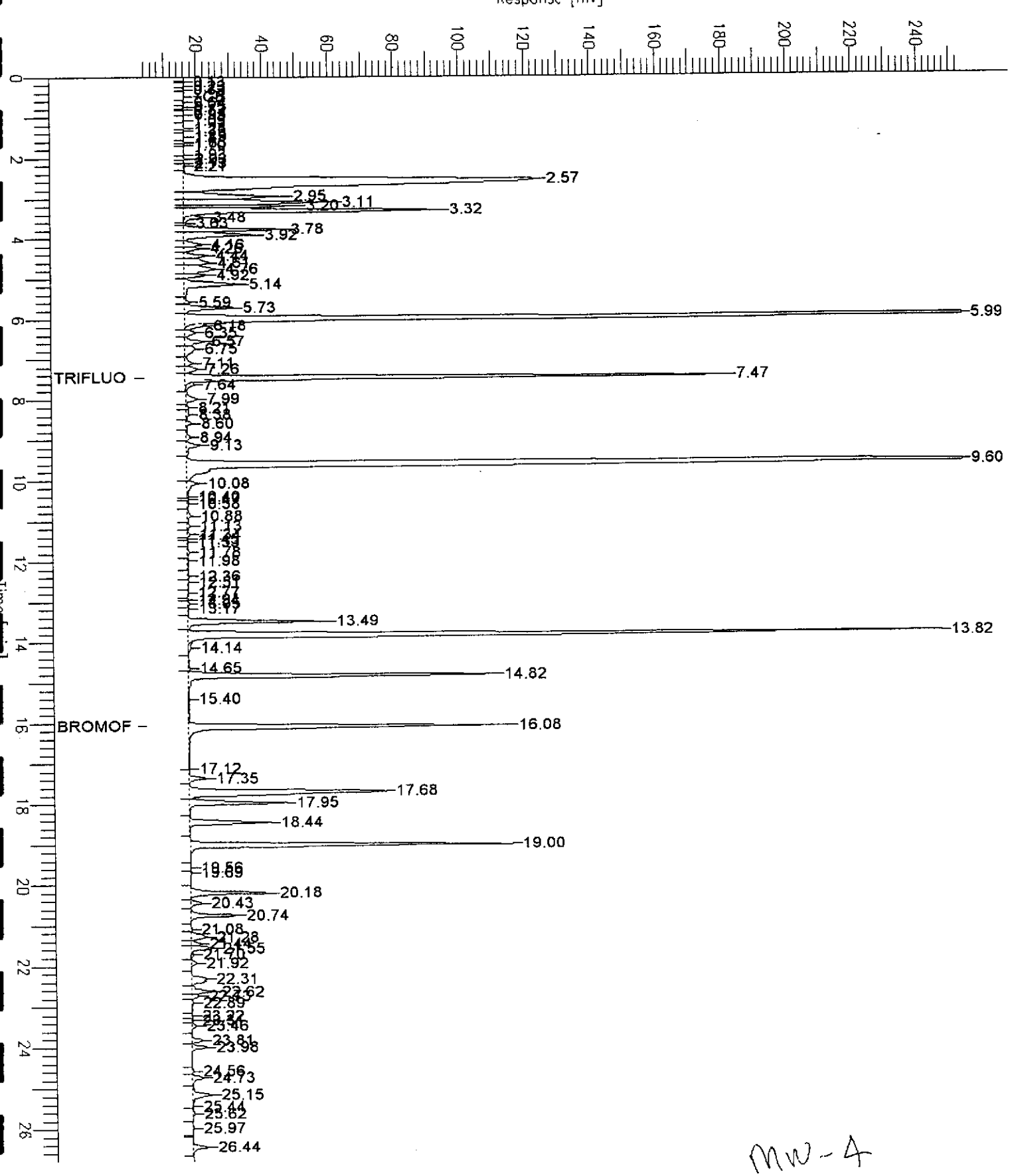


MW-9

GC19 TVH 'X' Data File (FID)

Sample Name : RR,138635-002,47110
FileName : G:\GC19\DATA\089X021.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 4 mV

Sample #:
Date : 3/30/99 10:39 PM
Time of Injection: 3/30/99 10:12 PM
Low Point : 3.53 mV High Point : 253.53 mV
Plot Scale: 250.0 mV



MW-4

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 47073
Units: ug/L
Diln Fac: 1

Prep Date: 03/29/99
Analysis Date: 03/29/99

MB Lab ID: QC93903

Analyte	Result
Gasoline C7-C12	<50

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	103	53-150
Bromofluorobenzene	104	53-149

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	447.055	Prep Method:	EPA 5030
Location:	Connell Olds		

METHOD BLANK

Matrix:	Water	Prep Date:	03/30/99
Batch#:	47110	Analysis Date:	03/30/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC94041

Analyte	Result	
Gasoline C7-C12	<50	
Surrogate	**%Rec**	**Recovery Limits**
Trifluorotoluene	92	53-150
Bromofluorobenzene	91	53-149

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 47073
Units: ug/L
Diln Fac: 1

Prep Date: 03/29/99
Analysis Date: 03/29/99

LCS Lab ID: QC93901

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1929	2000	96	77-117

Surrogate	%Rec	Limits
Trifluorotoluene	130	53-150
Bromofluorobenzene	95	53-149

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 47110
Units: ug/L
Diln Fac: 1

Prep Date: 03/30/99
Analysis Date: 03/30/99

LCS Lab ID: QC94039

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1937	2000	97	77-117

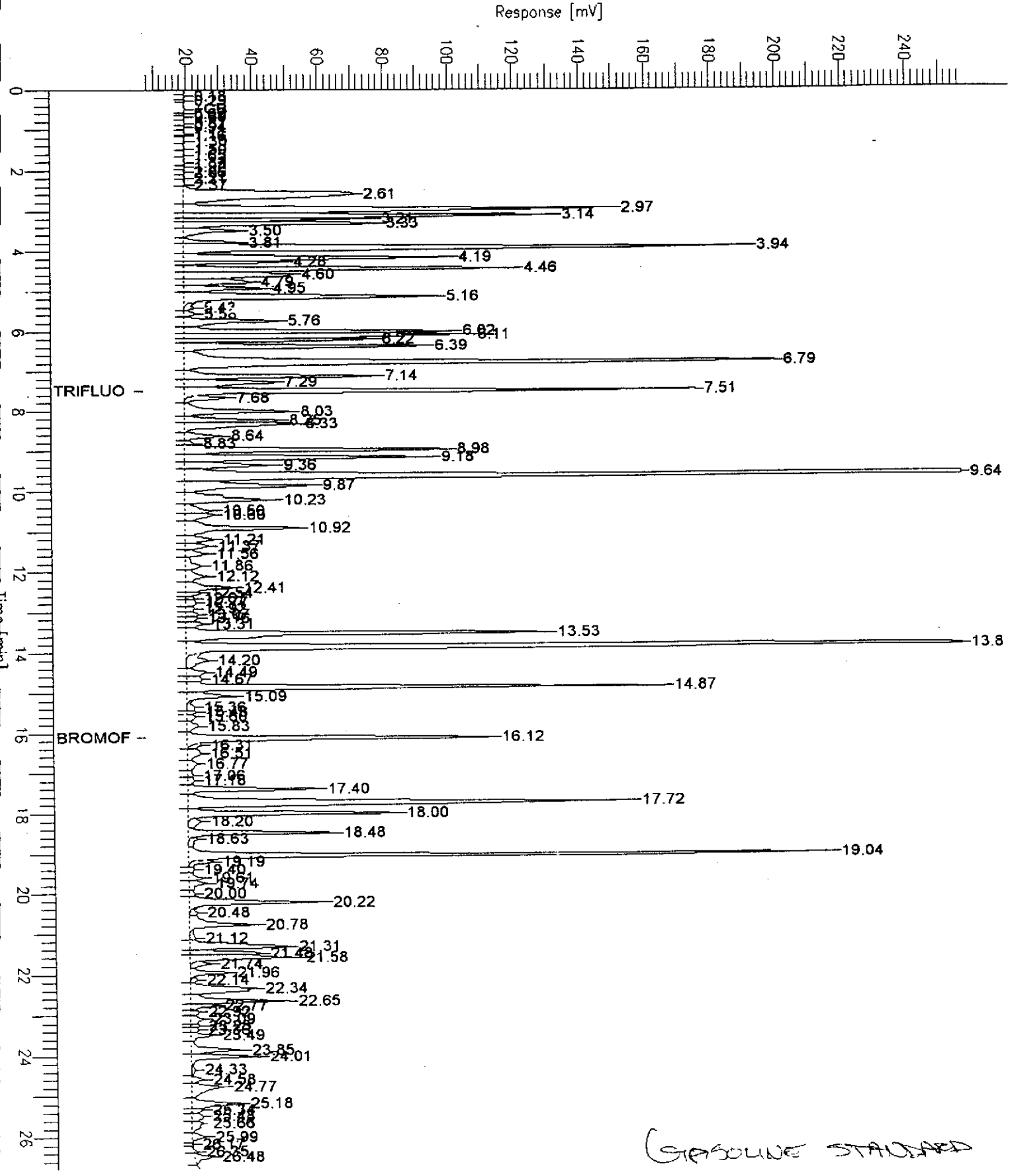
Surrogate	%Rec	Limits
Trifluorotoluene	101	53-150
Bromofluorobenzene	112	53-149

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

GC19 TVH 'X' Data File (FID)

mple Name : CCV/LCS,QC94039,99WS7170,47110
leName : G:\GC19\DATA\089X002.raw
ethod : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 7 mV

Sample #: GAS Page 1 of 1
Date : 3/30/99 09:31 AM
Time of Injection: 3/30/99 09:03 AM
Low Point : 6.76 mV High Point : 256.76 mV
Plot Scale: 250.0 mV



GASOLINE STANDARD

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
138635-001	MW-9	47073	03/25/99	03/29/99	03/29/99	
138635-002	MW-4	47142	03/26/99	04/01/99	04/01/99	
138635-003	MW-7	47073	03/26/99	03/29/99	03/29/99	

Matrix: Water

Analyte	Units	138635-001	138635-002	138635-003
Diln Fac:		1	200	1
MTBE	ug/L	5.7	450	<2
Benzene	ug/L	160	15000	<0.5
Toluene	ug/L	<0.5	30000	<0.5
Ethylbenzene	ug/L	21	1600	<0.5
m,p-Xylenes	ug/L	<0.5	11000	<0.5
o-Xylene	ug/L	2.1C	4000	<0.5
Surrogate				
Trifluorotoluene	%REC	129	79	106
Bromofluorobenzene	%REC	102	80	99

C: Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 47073
Units: ug/L
Diln Fac: 1

Prep Date: 03/29/99
Analysis Date: 03/29/99

MB Lab ID: QC93903

Analyte	Result
MTBE	<2.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	106	51-143
Bromofluorobenzene	98	37-146

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 47142
Units: ug/L
Diln Fac: 1

Prep Date: 03/31/99
Analysis Date: 03/31/99

MB Lab ID: QC94166

Analyte	Result
MTBE	<2.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	82	51-143
Bromofluorobenzene	82	37-146

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 47073
Units: ug/L
Diln Fac: 1

Prep Date: 03/29/99
Analysis Date: 03/29/99

LCS Lab ID: QC93902

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	15.66	20	78	65-135
Benzene	18.74	20	94	65-111
Toluene	19.77	20	99	76-117
Ethylbenzene	20.19	20	101	71-121
m,p-Xylenes	41.09	40	103	80-123
o-Xylene	20.53	20	103	75-127

Surrogate	%Rec	Limits
Trifluorotoluene	107	51-143
Bromofluorobenzene	98	37-146

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 47142
Units: ug/L
Diln Fac: 1

Prep Date: 03/31/99
Analysis Date: 03/31/99

LCS Lab ID: QC94165

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	15.75	20	79	65-135
Benzene	16.97	20	85	65-111
Toluene	18.74	20	94	76-117
Ethylbenzene	19.08	20	95	71-121
m,p-Xylenes	40.07	40	100	80-123
o-Xylene	18.82	20	94	75-127

Surrogate	%Rec	Limits
Trifluorotoluene	85	51-143
Bromofluorobenzene	86	37-146

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 138665-001
Matrix: Water
Batch#: 47142
Units: ug/L
Diln Fac: 1

Sample Date: 03/29/99
Received Date: 03/29/99
Prep Date: 03/31/99
Analysis Date: 03/31/99

MS Lab ID: QC94167

Analyte	Spike Added	Sample	MS	%Rec #	Limits
MTBE	20	<2	17.16	86	65-135
Benzene	20	<0.5	17.77	89	55-122
Toluene	20	<0.5	19.71	99	63-139
Ethylbenzene	20	<0.5	20.05	100	61-137
m,p-Xylenes	40	<0.5	42.12	105	57-148
o-Xylene	20	<0.5	19.85	99	70-141

Surrogate	%Rec	Limits
Trifluorotoluene	90	51-143
Bromofluorobenzene	91	37-146

MSD Lab ID: QC94168

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
MTBE	20	17.55	88	65-135	2	20
Benzene	20	17.92	90	55-122	1	10
Toluene	20	19.9	100	63-139	1	10
Ethylbenzene	20	20.27	101	61-137	1	10
m,p-Xylenes	40	42.52	106	57-148	1	10
o-Xylene	20	20.21	101	70-141	2	10

Surrogate	%Rec	Limits
Trifluorotoluene	89	51-143
Bromofluorobenzene	91	37-146

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
138635-001	MW-9	47065	03/25/99	03/26/99	04/01/99	
138635-002	MW-4	47065	03/26/99	03/26/99	04/01/99	
138635-003	MW-7	47065	03/26/99	03/26/99	04/01/99	

Matrix: Water

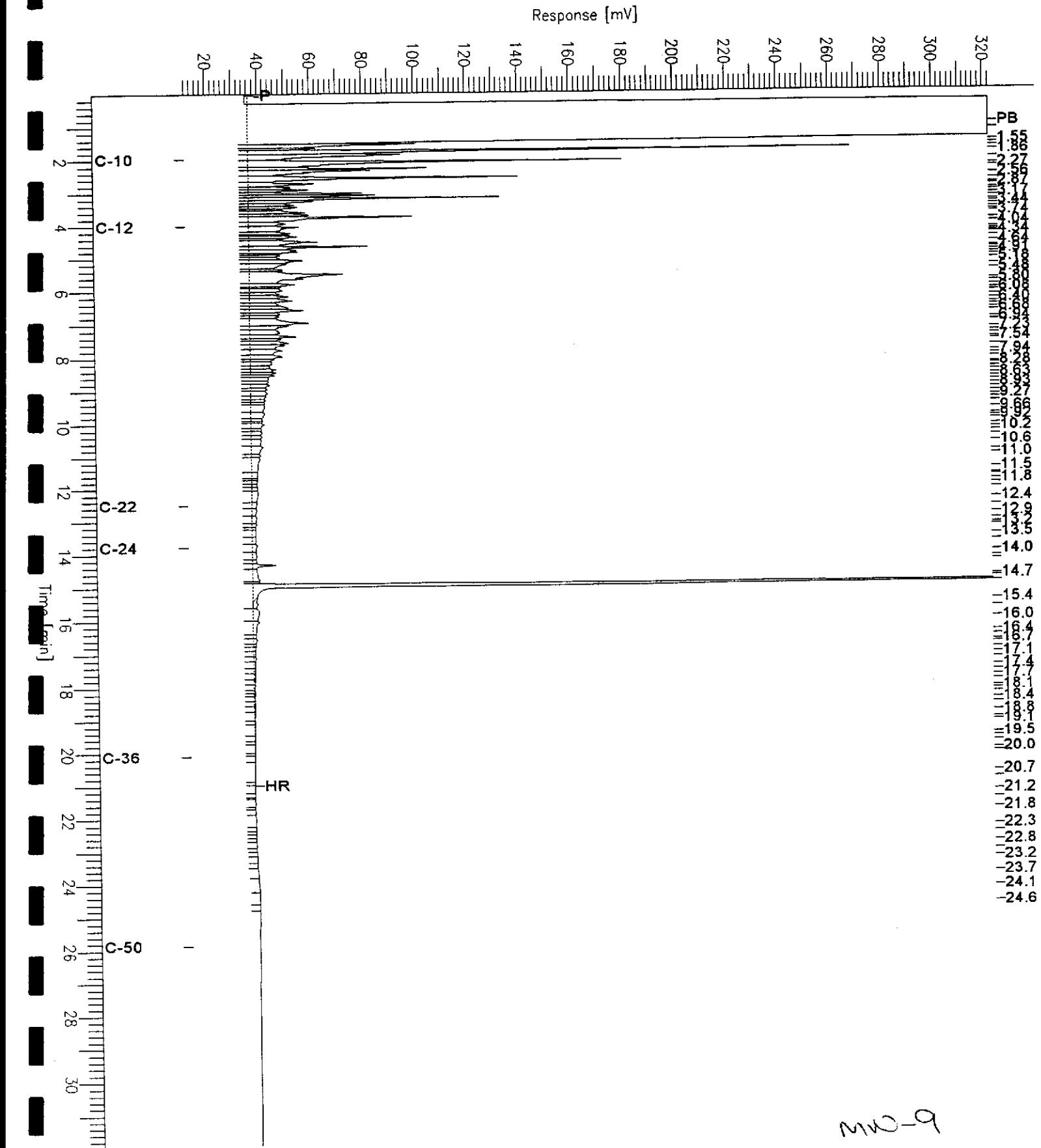
Analyte	Units	138635-001	138635-002	138635-003
Diln Fac:		1	2	1
Diesel C10-C24	ug/L	630 YL	14000 YL	<50
Surrogate				
Hexacosane	%REC	86	98	99

Y: Sample exhibits fuel pattern which does not resemble standard
L: Lighter hydrocarbons than indicated standard

Chromatogram

mple Name : 138635-001,47065
leName : G:\GC15\CHB\089B048.RAW
Method : B082TEH.MTH
Start Time : 0.01 min End Time : 31.91 min
ale Factor: 0.0 Plot Offset: 12 mV

Sample #: 47065 Page 1 of 1
Date : 4/1/99 10:19 AM
Time of Injection: 4/1/99 05:20 AM
Low Point : 11.99 mV High Point : 322.17 mV
Plot Scale: 310.2 mV

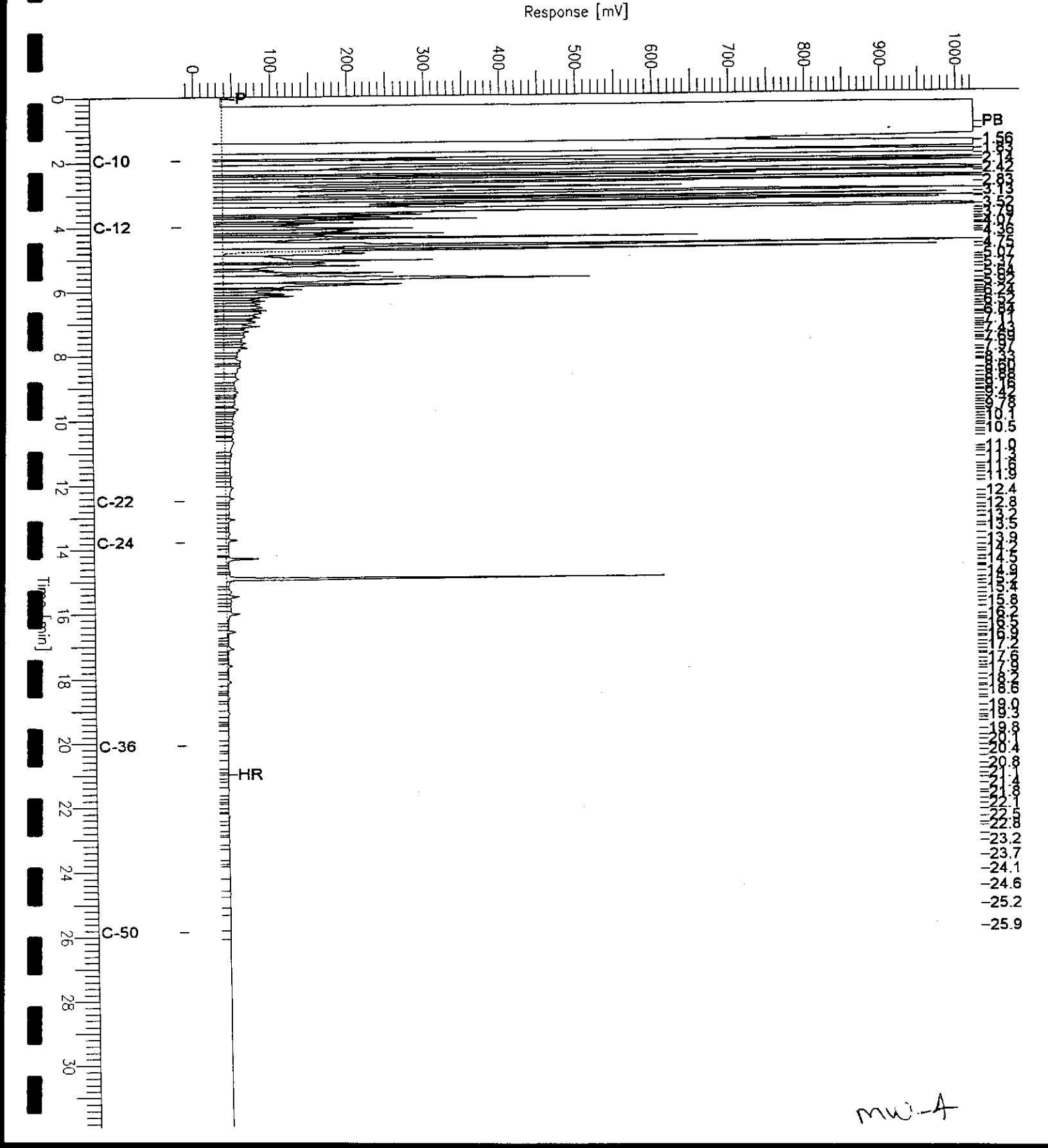


MW-9

Chromatogram

mple Name : 138635-002,47065
leName : G:\GC15\CHB\089B049.RAW
Method : B082TEH.MTH
Start Time : 0.00 min End Time : 31.90 min
ale Factor: 0.0 Plot Offset: -17 mV

Sample #: 47065
Date : 4/1/99 10:21 AM
Time of Injection: 4/1/99 06:03 AM
Low Point : -16.90 mV High Point : 1024.00 mV
Plot Scale: 1040.9 mV



MW-A

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 47065
Units: ug/L
Diln Fac: 1

Prep Date: 03/26/99
Analysis Date: 03/31/99

MB Lab ID: QC93878

Analyte	Result	
Diesel C10-C24	<50	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	102	58-128

Curtis & Tompkins, Ltd.

Lab #: 138635

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 47065
Units: ug/L
Diln Fac: 1

Prep Date: 03/26/99
Analysis Date: 04/01/99

BS Lab ID: QC93879

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C10-C24	2475	1895	77	50-114

Surrogate	%Rec	Limits
Hexacosane	91	58-128

BSD Lab ID: QC93880

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C10-C24	2475	1798	73	50-114	5	25

Surrogate	%Rec	Limits
Hexacosane	93	58-128

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

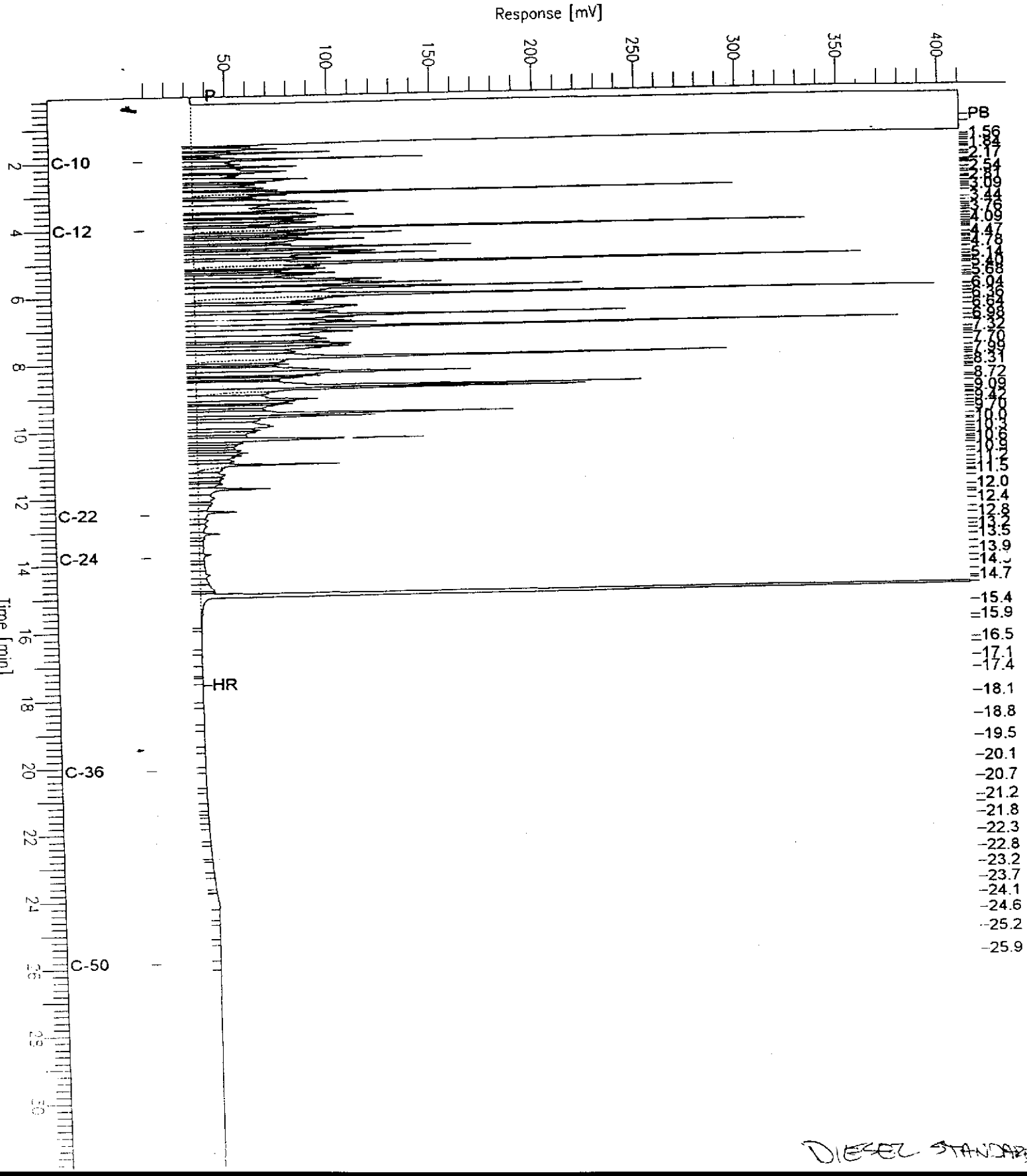
Chromatogram

Sample Name : ccv,99ws7216,dsl
FileName : G:\GC15\CHB\089B002.RAW
Method : B082TEH.MTH
Start Time : 0.09 min
Scale Factor: 0.0

End Time : 31.91 min
Plot Offset: 9 mV

Sample #: 500mg/l
Date : 3/31/99 04:09 PM
Time of Injection: 3/30/99 06:04 PM
Low Point : 9.17 mV
Plot Scale: 401.1 mV

High Point : 410.30 mV



DIESEL STANDARD

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: MW-9
Lab ID: 138635-001
Matrix: Water
Batch#: 47081
Units: ug/L
Diln Fac: 4

Sampled: 03/25/99
Received: 03/26/99
Extracted: 03/29/99
Analyzed: 03/29/99

Analyte	Result	Reporting Limit
Freon 12	ND	40
Chloromethane	ND	40
Vinyl Chloride	ND	40
Bromomethane	ND	40
Chloroethane	ND	40
Trichlorofluoromethane	ND	20
Acetone	ND	80
Freon 113	ND	20
1,1-Dichloroethene	ND	20
Methylene Chloride	ND	80
Carbon Disulfide	ND	20
trans-1,2-Dichloroethene	ND	20
Vinyl Acetate	ND	200
1,1-Dichloroethane	ND	20
2-Butanone	ND	40
cis-1,2-Dichloroethene	ND	20
2,2-Dichloropropane	ND	20
Chloroform	ND	20
Bromochloromethane	ND	40
1,1,1-Trichloroethane	ND	20
1,1-Dichloropropene	ND	20
Carbon Tetrachloride	ND	20
1,2-Dichloroethane	550	20
Benzene	130	20
Trichloroethene	ND	20
1,2-Dichloropropane	ND	20
Bromodichloromethane	ND	20
Dibromomethane	ND	20
4-Methyl-2-Pentanone	ND	40
cis-1,3-Dichloropropene	ND	20
Toluene	ND	20
trans-1,3-Dichloropropene	ND	20
1,1,2-Trichloroethane	ND	20
2-Hexanone	ND	40
1,3-Dichloropropane	ND	20
Tetrachloroethene	ND	20
Dibromochloromethane	ND	20
1,2-Dibromoethane	ND	20

Volatile Organics by GC/MS

Field ID:	MW-9	Sampled:	03/25/99
Lab ID:	138635-001	Received:	03/26/99
Matrix:	Water	Extracted:	03/29/99
Batch#:	47081	Analyzed:	03/29/99
Units:	ug/L		
Diln Fac:	4		

Analyte	Result	Reporting Limit
Chlorobenzene	ND	20
1,1,1,2-Tetrachloroethane	ND	20
Ethylbenzene	ND	20
m,p-Xylenes	ND	20
o-Xylene	ND	20
Styrene	ND	20
Bromoform	ND	20
Isopropylbenzene	ND	20
1,1,2,2-Tetrachloroethane	ND	20
1,2,3-Trichloropropane	ND	20
Propylbenzene	ND	20
Bromobenzene	ND	20
1,3,5-Trimethylbenzene	ND	20
2-Chlorotoluene	ND	20
4-Chlorotoluene	ND	20
tert-Butylbenzene	ND	20
1,2,4-Trimethylbenzene	ND	20
sec-Butylbenzene	ND	20
para-Isopropyl Toluene	ND	20
1,3-Dichlorobenzene	ND	20
1,4-Dichlorobenzene	ND	20
n-Butylbenzene	ND	20
1,2-Dichlorobenzene	ND	20
1,2-Dibromo-3-Chloropropane	ND	20
1,2,4-Trichlorobenzene	ND	20
Hexachlorobutadiene	ND	20
Naphthalene	ND	20
1,2,3-Trichlorobenzene	ND	20

Surrogate	%Recovery	Recovery Limits
Dibromofluoromethane	118	81-121
1,2-Dichloroethane-d4	118	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	110	82-118

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: MW-4
Lab ID: 138635-002
Matrix: Water
Batch#: 47067
Units: ug/L
Diln Fac: 16.67

Sampled: 03/26/99
Received: 03/26/99
Extracted: 03/29/99
Analyzed: 03/29/99

Analyte	Result	Reporting Limit
Freon 12	ND	170
Chloromethane	ND	170
Vinyl Chloride	ND	170
Bromomethane	ND	170
Chloroethane	ND	170
Trichlorofluoromethane	ND	83
Acetone	830	330
Freon 113	ND	83
1,1-Dichloroethene	ND	83
Methylene Chloride	ND	330
Carbon Disulfide	ND	83
trans-1,2-Dichloroethene	ND	83
Vinyl Acetate	ND	830
1,1-Dichloroethane	ND	83
2-Butanone	ND	170
cis-1,2-Dichloroethene	ND	83
2,2-Dichloropropane	ND	83
Chloroform	ND	83
Bromochloromethane	ND	170
1,1,1-Trichloroethane	ND	83
1,1-Dichloropropene	ND	83
Carbon Tetrachloride	ND	83
1,2-Dichloroethane	210	83
Benzene	16000	1000
Trichloroethene	ND	83
1,2-Dichloropropane	ND	83
Bromodichloromethane	ND	83
Dibromomethane	ND	83
4-Methyl-2-Pentanone	ND	170
cis-1,3-Dichloropropene	ND	83
Toluene	30000	1000
trans-1,3-Dichloropropene	ND	83
1,1,2-Trichloroethane	ND	83
2-Hexanone	ND	170
1,3-Dichloropropane	ND	83
Tetrachloroethene	ND	83
Dibromochloromethane	ND	83
1,2-Dibromoethane	530	83

Volatile Organics by GC/MS

Field ID:	MW-4	Sampled:	03/26/99
Lab ID:	138635-002	Received:	03/26/99
Matrix:	Water	Extracted:	03/29/99
Batch#:	47067	Analyzed:	03/29/99
Units:	ug/L		
Diln Fac:	16.67		

Analyte	Result	Reporting Limit
Chlorobenzene	ND	83
1,1,1,2-Tetrachloroethane	ND	83
Ethylbenzene	1900	83
m,p-Xylenes	11000	1000
o-Xylene	4100	1000
Styrene	120	83
Bromoform	ND	83
Isopropylbenzene	95	83
1,1,2,2-Tetrachloroethane	ND	83
1,2,3-Trichloropropane	ND	83
Propylbenzene	250	83
Bromobenzene	ND	83
1,3,5-Trimethylbenzene	1300	83
2-Chlorotoluene	140	83
4-Chlorotoluene	ND	83
tert-Butylbenzene	ND	83
1,2,4-Trimethylbenzene	5300	1000
sec-Butylbenzene	ND	1000
para-Isopropyl Toluene	ND	83
1,3-Dichlorobenzene	ND	83
1,4-Dichlorobenzene	ND	83
n-Butylbenzene	100	83
1,2-Dichlorobenzene	ND	83
1,2-Dibromo-3-Chloropropane	ND	83
1,2,4-Trichlorobenzene	ND	83
Hexachlorobutadiene	ND	83
Naphthalene	1100	83
1,2,3-Trichlorobenzene	ND	83

Surrogate	%Recovery	Recovery Limits
Dibromofluoromethane	114	81-121
1,2-Dichloroethane-d4	114	76-127
Toluene-d8	101	90-109
Bromofluorobenzene	102	82-118

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: MW-7
Lab ID: 138635-003
Matrix: Water
Batch#: 47067
Units: ug/L
Diln Fac: 1

Sampled: 03/26/99
Received: 03/26/99
Extracted: 03/29/99
Analyzed: 03/29/99

Analyte	Result	Reporting Limit
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0

Volatile Organics by GC/MS

Field ID:	MW-7	Sampled:	03/26/99
Lab ID:	138635-003	Received:	03/26/99
Matrix:	Water	Extracted:	03/29/99
Batch#:	47067	Analyzed:	03/29/99
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
Dibromofluoromethane	112	81-121
1,2-Dichloroethane-d4	116	76-127
Toluene-d8	101	90-109
Bromofluorobenzene	107	82-118

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8260 Volatile Organics

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8260
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 47067
Units: ug/L
Diln Fac: 1

Prep Date: 03/28/99
Analysis Date: 03/28/99

BS Lab ID: QC93885

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	55.91	112	64-139
Benzene	50	52.08	104	71-127
Trichloroethene	50	51.78	104	72-129
Toluene	50	50.31	101	73-129
Chlorobenzene	50	49.47	99	77-126

Surrogate	%Rec	Limits
Dibromofluoromethane	111	81-121
1,2-Dichloroethane-d4	113	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	103	82-118

BSD Lab ID: QC93886

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	54.4	109	64-139	3	13
Benzene	50	51.49	103	71-127	1	10
Trichloroethene	50	50.87	102	72-129	2	10
Toluene	50	49.43	99	73-129	2	10
Chlorobenzene	50	48.31	97	77-126	2	10

Surrogate	%Rec	Limits
Dibromofluoromethane	111	81-121
1,2-Dichloroethane-d4	114	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	104	82-118

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Lab #: 138635

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8260 Volatile Organics

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8260
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 47081
Units: ug/L
Diln Fac: 1

Prep Date: 03/29/99
Analysis Date: 03/29/99

BS Lab ID: QC93936

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	63.82	128	64-139
Benzene	50	54.18	108	71-127
Trichloroethene	50	54.2	108	72-129
Toluene	50	53.01	106	73-129
Chlorobenzene	50	51.71	103	77-126

Surrogate	%Rec	Limits
Dibromofluoromethane	114	81-121
1,2-Dichloroethane-d4	116	76-127
Toluene-d8	101	90-109
Bromofluorobenzene	103	82-118

BSD Lab ID: QC93937

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	57.41	115	64-139	11	13
Benzene	50	52.97	106	71-127	2	10
Trichloroethene	50	53.43	107	72-129	1	10
Toluene	50	52.24	104	73-129	1	10
Chlorobenzene	50	50.58	101	77-126	2	10

Surrogate	%Rec	Limits
Dibromofluoromethane	114	81-121
1,2-Dichloroethane-d4	116	76-127
Toluene-d8	100	90-109
Bromofluorobenzene	104	82-118

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900, Fax (510) 486-0532

A N A L Y T I C A L R E P O R T

Prepared for:

Subsurface Consultants
3736 Mt. Diablo Blvd.
Suite 200
Lafayette, CA 94549

Date: 28-APR-99
Lab Job Number: 138732
Project ID: 447.055
Location: Connell Olds

Reviewed by: _____

Reviewed by: _____

CHAIN OF CUSTODY FORM

13873J

PAGE ____ OF ____

PROJECT NAME: Connell Oldsmobile

JOB NUMBER: 447.055 LAB: C+T

PROJECT CONTACT: Meg Mendoza TURNAROUND: Normal

SAMPLED BY: John Wolfe REQUESTED BY: John Wolfe

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH/BTEX	TEH	DCA by 8260
1	MW-13	/				6	2			VOA			/		3	3	0	9	9	1600		/	/	/
2	MW-8	/				6	2			VOA			/		3	3	1	9	9	0900		/	/	/

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
John Wolfe	3/3/99 1200	[signature]	3/31/99 2:15
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

Subsurface Consultants, Inc.
171 - 12th Street, Suite 202, Oakland, CA 94607
(510) 268-0461 - FAX: (510) 268-0137
3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
(925) 299-7960 - (925) 299-7970

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
138732-001	MW-13	47199	03/30/99	04/03/99	04/03/99	
138732-002	MW-8	47199	03/31/99	04/03/99	04/03/99	

Matrix: Water

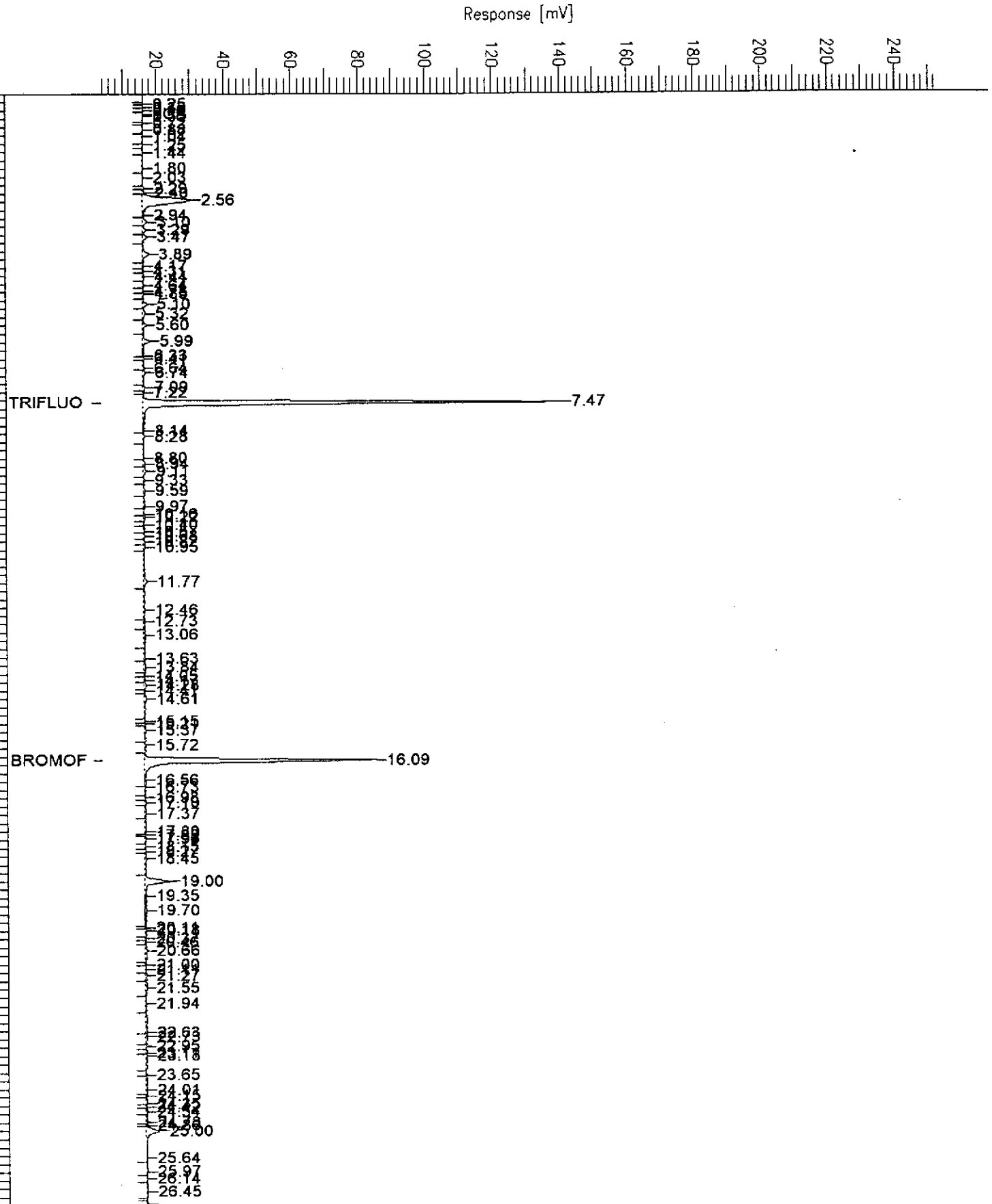
Analyte	Units	138732-001	138732-002
Diln Fac:		1	1
Gasoline C7-C12	ug/L	54	130 Z
Surrogate			
Trifluorotoluene	%REC	77	86
Bromofluorobenzene	%REC	77	93

Z: Sample exhibits unknown single peak or peaks

GC19 TVH 'X' Data File (FID)

mple Name : 138732-001,47199
leName : G:\GC19\DATA\092X021.raw
thod : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 3 mV

Sample #:
Date : 4/3/99 10:15 AM
Time of Injection: 4/3/99 09:48 AM
Low Point : 3.35 mV High Point : 253.35 mV
Plot Scale: 250.0 mV

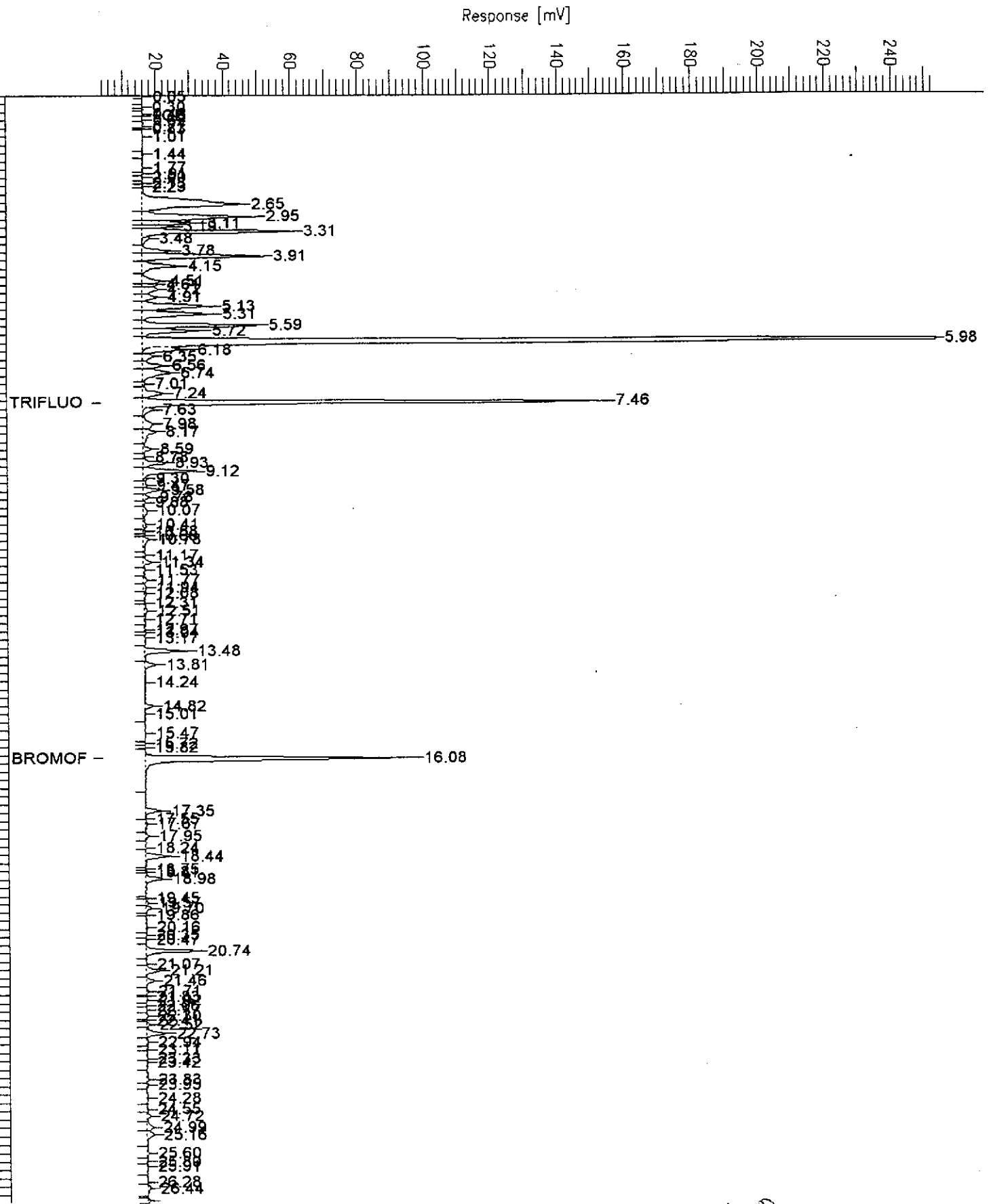


MW-13

GC19 TVH 'X' Data File (FID)

Sample Name : 138732-002,47199
FileName : G:\GC19\DATA\092X022.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 3 mV

Sample #:
Date : 4/3/99 05:43 PM
Time of Injection: 4/3/99 10:28 AM
Low Point : 3.34 mV High Point : 253.34 mV
Plot Scale: 250.0 mV



MW-8

Lab #: 138732

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	447.055	Prep Method:	EPA 5030
Location:	Connell Olds		

METHOD BLANK

Matrix:	Water	Prep Date:	04/02/99
Batch#:	47199	Analysis Date:	04/02/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC94374

Analyte	Result
Gasoline C7-C12	<50

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	85	53-150
Bromofluorobenzene	81	53-149

Lab #: 138732

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 47199
Units: ug/L
Diln Fac: 1

Prep Date: 04/02/99
Analysis Date: 04/02/99

LCS Lab ID: QC94372

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1760	2000	88	77-117

Surrogate	%Rec	Limits
Trifluorotoluene	95	53-150
Bromofluorobenzene	103	53-149

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	447.055	Prep Method:	EPA 5030
Location:	Connell Olds		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	03/31/99
Lab ID:	138708-010	Received Date:	03/31/99
Matrix:	Water	Prep Date:	04/03/99
Batch#:	47199	Analysis Date:	04/03/99
Units:	ug/L		
Diln Fac:	1		

MS Lab ID: QC94375

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	201.9	2038	92	69-131

Surrogate	%Rec	Limits
Trifluorotoluene	88	53-150
Bromofluorobenzene	103	53-149

MSD Lab ID: QC94376

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	2064	93	69-131	1	13

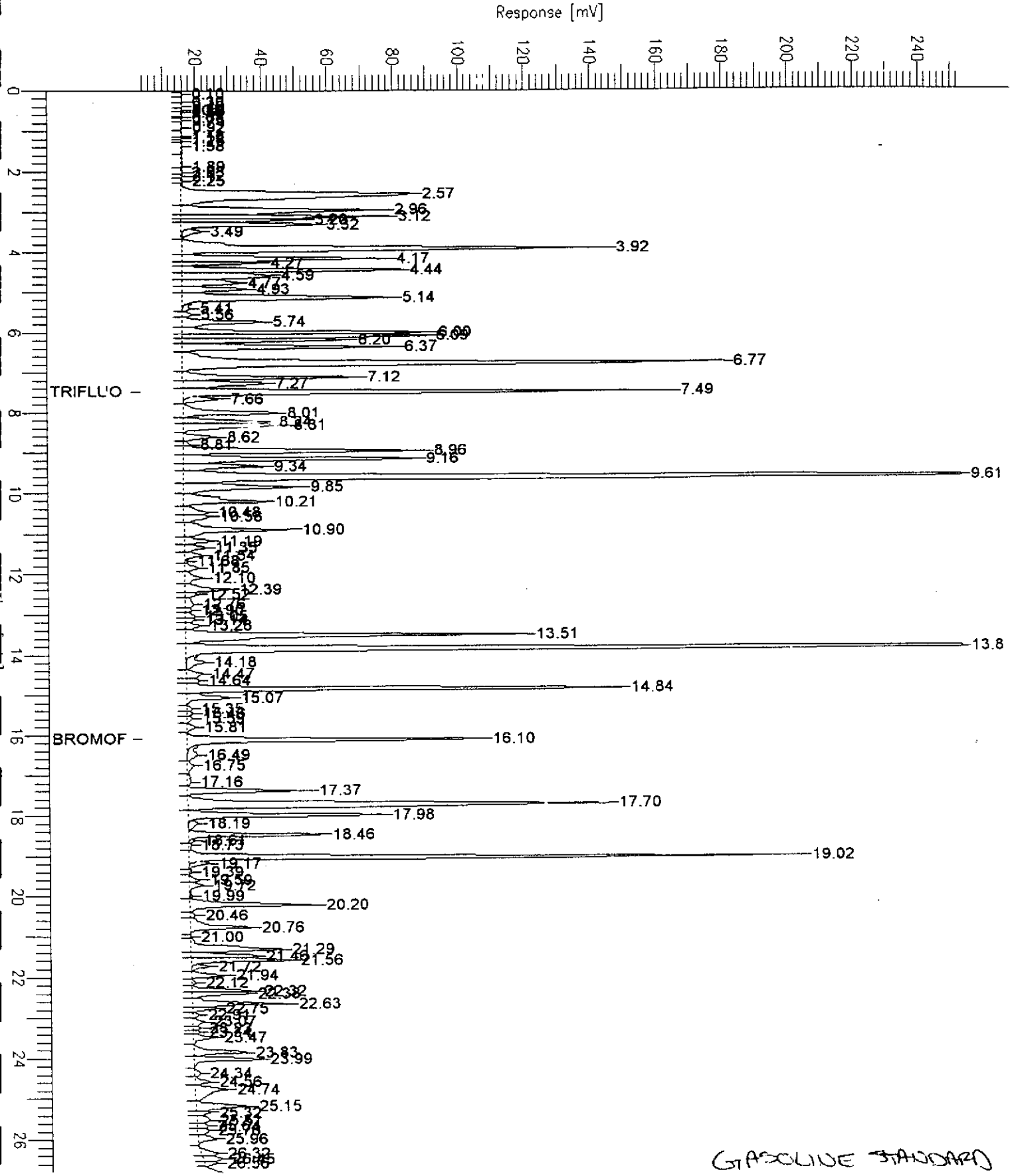
Surrogate	%Rec	Limits
Trifluorotoluene	84	53-150
Bromofluorobenzene	102	53-149

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

GC19 TVH 'X' Data File (FID)

Sample Name : CCV/LCS,QC94372,99WS7170,47199
FileName : G:\GC19\DATA\092X002.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 3 mV

Sample #: GAS Page 1 of 1
Date : 4/2/99 07:17 PM
Time of Injection: 4/2/99 06:50 PM
Low Point : 3.35 mV High Point : 253.35 mV
Plot Scale: 250.0 mV



GASOLINE STANDARD

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
138732-001	MW-13	47199	03/30/99	04/03/99	04/03/99	
138732-002	MW-8	47199	03/31/99	04/03/99	04/03/99	

Matrix: Water

Analyte	Units	138732-001	138732-002
Diln Fac:		1	1
MTBE	ug/L	<2	4.4
Benzene	ug/L	0.56	170
Toluene	ug/L	<0.5	1.5
Ethylbenzene	ug/L	<0.5	4.1
m,p-Xylenes	ug/L	<0.5	1.2
o-Xylene	ug/L	<0.5	0.74
Surrogate			
Trifluorotoluene	%REC	68	77
Bromofluorobenzene	%REC	70	82

Lab #: 138732

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client:	Subsurface Consultants	Analysis Method:	EPA 8021B
Project#:	447.055	Prep Method:	EPA 5030
Location:	Connell Olds		

METHOD BLANK

Matrix:	Water	Prep Date:	04/02/99
Batch#:	47199	Analysis Date:	04/02/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC94374

Analyte	Result
MTBE	<2.0
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylenes	<0.5
o-Xylene	<0.5

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	78	51-143
Bromofluorobenzene	77	37-146

Lab #: 138732

BATCH QC REPORT

Curtis & Tompkins, Ltd.

BTXE

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8021B
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 47199
Units: ug/L
Diln Fac: 1

Prep Date: 04/02/99
Analysis Date: 04/02/99

LCS Lab ID: QC94373

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	16.47	20	82	65-135
Benzene	16.94	20	85	65-111
Toluene	19.09	20	95	76-117
Ethylbenzene	19.5	20	98	71-121
m,p-Xylenes	40.64	40	102	80-123
o-Xylene	19.14	20	96	75-127

Surrogate	%Rec	Limits
Trifluorotoluene	84	51-143
Bromofluorobenzene	85	37-146

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 6 outside limits

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 3520

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
138732-001	MW-13	47244	03/30/99	04/05/99	04/07/99	
138732-002	MW-8	47244	03/31/99	04/05/99	04/07/99	

Matrix: Water

Analyte	Units	138732-001	138732-002
Diln Fac:		1	1
Diesel C10-C24	ug/L	<48	200 YZ
Surrogate			
Hexacosane	%REC	72	78

Y: Sample exhibits fuel pattern which does not resemble standard
Z: Sample exhibits unknown single peak or peaks

Curtis & Tompkins, Ltd.

Lab #: 138732

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 47244
Units: ug/L
Diln Fac: 1

Prep Date: 04/05/99
Analysis Date: 04/09/99

MB Lab ID: QC94556

Analyte	Result	
Diesel C10-C24	<50	
Surrogate	**%Rec**	**Recovery Limits**
Hexacosane	92	58-128

Curtis & Tompkins, Ltd.

Lab #: 138732

BATCH QC REPORT

TEH-Tot Ext Hydrocarbons

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8015M
Prep Method: EPA 3520

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 47244
Units: ug/L
Diln Fac: 1

Prep Date: 04/05/99
Analysis Date: 04/09/99

BS Lab ID: QC94557

Analyte	Spike Added	BS	%Rec #	Limits
Diesel C10-C24	2475	2073	84	50-114

Surrogate	%Rec	Limits
Hexacosane	92	58-128

BSD Lab ID: QC94558

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Diesel C10-C24	2475	2256	91	50-114	8	25

Surrogate	%Rec	Limits
Hexacosane	97	58-128

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Volatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8260
Prep Method: EPA 5030

Field ID: MW-13
Lab ID: 138732-001
Matrix: Water
Batch#: 47202
Units: ug/L
Diln Fac: 1

Sampled: 03/30/99
Received: 03/31/99
Extracted: 04/02/99
Analyzed: 04/02/99

Analyte	Result	Reporting Limit
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	10
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0

Volatile Organics by GC/MS

Field ID:	MW-13	Sampled:	03/30/99
Lab ID:	138732-001	Received:	03/31/99
Matrix:	Water	Extracted:	04/02/99
Batch#:	47202	Analyzed:	04/02/99
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
Dibromofluoromethane	95	81-121
1,2-Dichloroethane-d4	99	76-127
Toluene-d8	103	90-109
Bromofluorobenzene	100	82-118

Lab #: 138732

BATCH QC REPORT

Curtis & Tompkins, Ltd.

EPA 8260 Volatile Organics

Client: Subsurface Consultants
Project#: 447.055
Location: Connell Olds

Analysis Method: EPA 8260
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 47202
Units: ug/L
Diln Fac: 1

Prep Date: 04/02/99
Analysis Date: 04/02/99

BS Lab ID: QC94386

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	53.46	107	64-139
Benzene	50	51.79	104	71-127
Trichloroethene	50	54.09	108	72-129
Toluene	50	57.3	115	73-129
Chlorobenzene	50	53.56	107	77-126

Surrogate	%Rec	Limits
Dibromofluoromethane	93	81-121
1,2-Dichloroethane-d4	97	76-127
Toluene-d8	105	90-109
Bromofluorobenzene	96	82-118

BSD Lab ID: QC94387

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	50.92	102	64-139	5	13
Benzene	50	49.38	99	71-127	5	10
Trichloroethene	50	50.75	102	72-129	6	10
Toluene	50	54.58	109	73-129	5	10
Chlorobenzene	50	51.32	103	77-126	4	10

Surrogate	%Rec	Limits
Dibromofluoromethane	95	81-121
1,2-Dichloroethane-d4	96	76-127
Toluene-d8	105	90-109
Bromofluorobenzene	96	82-118

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

WELL SAMPLING FORM

Project Name: Cornell Oldsmobile Well Number: MW-8

Job No.: _____ Well Casing Diameter: 6 inch

Sampled By: John Wolfe Date: 3/31/99

TOC Elevation: _____ Weather: clear

Depth to Casing Bottom (below TOC) 39.50 feet

Depth to Groundwater (below TOC) 20.93 feet

Feet of Water in Well 18.57 feet

Depth to Groundwater When 80% Recovered 24.64 feet

Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 27.27 gallons

Depth Measurement Method Tape & Paste / Electronic Sounder / Other

Free Product none

Purge Method 2" dia Submersible pump

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
20	7.53 7.43	21.1 22.4	920		clear, gasoline odor
30	7.46	22.3	920		
40	7.19	22.0	1000		
50	7.29	22.0	990		
60	7.26	21.5	1000		
70 80	7.32 7.34	21.4 21.4	1010 1010		

Total Gallons Purged 80 gallons

Depth to Groundwater Before Sampling (below TOC) 21.0 feet

Sampling Method 2" dia Submersible pump

Containers Used 6 HCl (40 ml) 2 (liter) _____ (pint)

Subsurface Consultants

JOB NUMBER | DATE | APPROVED | PLATE

WELL SAMPLING FORM

Project Name: Connell Oldsmobile
Well Number: MW-7
Job No.: 447.055
Well Casing Diameter: 2 inch
Sampled By: John Wolfe
Date: 3/26/99
TOC Elevation:
Weather: clear, warm

Depth to Casing Bottom (below TOC) 30.00 feet
Depth to Groundwater (below TOC) 16.42 feet
Feet of Water in Well 13.58 feet
Depth to Groundwater When 80% Recovered 19.14 feet
Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 2.21 gallons
Depth Measurement Method Tape & Paste / (Electronic Sounder) / Other
Free Product None
Purge Method Teflon bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
0	6.28	20.8	350		Slightly Turbid Faint odor
2	6.53	18.8	350		
4	6.51	18.9	400		
6	6.87	18.8	450		
8	6.91	18.7	450		

Total Gallons Purged 8 gallons
Depth to Groundwater Before Sampling (below TOC) 17.01 feet
Sampling Method Teflon bailer
Containers Used 6 HCL (40 ml) 2 (liter) (pint)

Subsurface Consultants

JOB NUMBER | DATE | APPROVED | PLATE

WELL SAMPLING FORM

Project Name: Connd Olds

Job No.: 447 055

Sampled By: 9TW

TOC Elevation:

Well Number: mw-4

Well Casing Diameter: 2 inch

Date: 3/26/99

Weather: Clear

Depth to Casing Bottom (below TOC) 24.50 feet

Depth to Groundwater (below TOC) 17.51 feet

Feet of Water in Well 6.99 feet

Depth to Groundwater When 80% Recovered 18.9 feet

Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 1.14 gallons

Depth Measurement Method (Tape & Paste) / (Electronic Sounder) / Other

Free Product no

Purge Method Teflon bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
1	7.39	18.0	520		Clear, strong odor
2	7.60	18.3	600		↓
3	7.19	18.2	590		↓
4	7.36	18.3	590		↓

Total Gallons Purged 4 gallons

Depth to Groundwater Before Sampling (below TOC) 17.71 feet

Sampling Method Teflon bailer

Containers Used 6 HCL (40 ml) 2 (liter) (pint)

Subsurface Consultants

JOB NUMBER | DATE | APPROVED | PLATE

WELL SAMPLING FORM

Project Name: Connell oils
Well Number: MW-13
Job No.: 137.055
Well Casing Diameter: 2 inch
Sampled By: TW
Date: 3/30/99
TOC Elevation:
Weather: cool

Depth to Casing Bottom (below TOC) 40.0 feet
Depth to Groundwater (below TOC) 23.11 feet
Feet of Water in Well 16.89 feet
Depth to Groundwater When 80% Recovered 26.48 feet
Casing Volume (feet of water x Casing DIA ² x 0.0408) 27.56 gallons
Depth Measurement Method Tape & Paste / (Electronic Sounder) / Other
Free Product
Purge Method

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
0	7.25	20.0	610		clear
2	7.16	21.1	630		slightly turbid
4	7.01	21.3	620		
6	6.99	21.2	630		
9	6.97	21.3	630		

Total Gallons Purged gallons
Depth to Groundwater Before Sampling (below TOC) 25.00 feet
Sampling Method Teflon bailer
Containers Used 5 HCl (40 ml) 2 (liter) (pint)

Subsurface Consultants

JOB NUMBER DATE APPROVED PLATE

WELL SAMPLING FORM

Project Name: Connell
Well Number: MW-9
Job No.: 133.055
Well Casing Diameter: 2 inch
Sampled By: TW
Date: 3/25/94
TOC Elevation:
Weather: cool

Depth to Casing Bottom (below TOC) 30.50 feet
Depth to Groundwater (below TOC) 18.46 feet
Feet of Water in Well 12.02 feet
Depth to Groundwater When 80% Recovered 20.86 feet
Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 1.96 gallons
Depth Measurement Method Tape & Paste / Electronic Sounder / Other
Free Product None
Purge Method Teflon bailer

Slow recharge 30 min

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
1	7.09	22.0	990		Slight turbid / Slight odor
2	7.11	20.8	185		
3	7.18	20.2	910		
4	7.11	20.2	900		
5	7.31	20.1	890		

Total Gallons Purged 5 gallons
Depth to Groundwater Before Sampling (below TOC) 19.25 feet
Sampling Method Teflon bailer
Containers Used 6 (40 ml) 2 (liter) (pint)

Subsurface Consultants

JOB NUMBER | DATE | APPROVED | PLATE

GROUNDWATER DEPTHS

Project Name: Connell Oldsmobile, Oakland CA

Job No.: 447.055

Measured by: John Wolfe

Well	Date	Time	Groundwater Depth (feet)	Comments
MW-1	1/5/99	1040	23.51	Depth to product 23.09 0.42 feet product Depth to water 23.51 1" in bailer ≈ 100 ml (.0264 gal.)
MW-2	1/5/99	~~1030~~	.	No access, covered by full dumpsters
MW-3	1/5/99	1030	20.01	needs locks
MW-4	1/5/99		19.33	~~under pressure, Needs bolts, locks~~
MW-5	1/5/99	0850	*25.69	*under pressure, needs bolts, locks (needs lid, bolts)
MW-6	1/5/99	0810	24.51	Depth to product 24.11 0.40 feet product Depth to water 24.51 1" in bailer ≈ 1 cup 100 ml (.0264 gal)
MW-7	1/5/99	0840	18.35	
MW-8	1/5/99	0830	26.31	No Product
MW-9	1/5/99	0940	20.41	No Product
MW-10	1/5/99	1010	19.04	No Product
MW-11	1/5/99	1000	30.54	needs lock
MW-13	1/5/99	1025	23.65	
MW-14	1/5/99	950	23.36	Depth to product 23.36 0.12 feet product Depth to water 23.48 1/2" in bailer ≈ 1/2 cup 40 ml (.01 gallons)
MW-15	1/5/49	1045	23.73	No Product

GROUNDWATER DEPTHS

Project Name: Connell Oldsmobile

Job No.: 447.055

Measured by: J Rasmussen

Well	Date	Time	Groundwater Depth (feet)	Comments
mw-1	2/8/99	1400	23.08	Hold 24.0 wet 0.92 1.75" FP in bailer = 0.05 in well
2			25.00	
3			20.05	
4			18.88	
5			26.00	
6			24.00	Hold 25.0 wet 1.0' FP in bailer = 0.08' = 0.03' in well
7			16.82	
8			26.10	
9			20.41	
10			18.57	
11			32.34	
13			23.35	
14			23.17	Hold 24.0 wet 0.83' FP Sheen on bailer
15		1540	23.53	

GROUNDWATER DEPTHS

Project Name: Connell - Oldsmobile

Job No.: 133.055

Measured by: STW

Well	Date	Time	Groundwater Depth (feet)	Comments
MW-1	3/29/99	~~0830~~ 1000	21.90	1/8" product 0.01 gal.
MW-14			22.08	Trace of product
MW-15			22.46	Faint odor, no product
MW-9			18.46	no product
MW-10			17.23	no product
MW-4			17.51	Slight strong odor no product Lock
MW-3			19.15	under pressure Lock
MW-6			23.82	2.31 inches of product / bailer. ~120ml = .03 gallons needs lid
MW-8			20.93	no product, Strong odor lock
MW-7			16.42	no product under pressure
MW-5			25.73	no product under pressure
MW-13			23.11	no product
MW-2	↓	1400		No access
MW-11	↓		29.07	

MW-6 Bail 120 ml product
.03 gallons

GROUNDWATER DEPTHS

Project Name: Connell Olds.

Job No.: 447.055

Measured by: John Wolf

Well	Date	Time	Groundwater Depth (feet)	Comments	
MW-13	4/30/99	1305	23.31	under slight pressure NP NL	NL - needs Lock
MW-11	"	1330	28.82	NP WL	
MW-2				under large pressure / lot's sludge NP NL	
MW-15		1350	22.16	Strong gas odor	Lock won't RT
MW-14		1400	21.71	Strong gas odor 1/8" product ≈.001 gallon	NL + plug
MW-1		1415	21.52	Strong odor, no product	
MW-9	"	14:29	19.54	Slight Pressure, no product, slight odor	NL
MW-10			16.99	" slight odor	NL
MW-4		14:45	17.28	Trace of product	NL
MW-2		14:49	23.08	No odor	
MW-3		1450	18.12	no odor	NL
MW-7		14.55	16.30	no odor	NL needs plug
MW-8		15:02	25.92	Strong odor, no product	
MW-5		15:07	25.80	no odor, high pressure	
MW-6		15:30	23.60	strong odor 13½ inches product 0.1 gallons	Need lid

Replace all locks

13865

PAGE 1 OF 1

CHAIN OF CUSTODY FORM

PROJECT NAME: Connell Oldsmobile
JOB NUMBER: 447.055 LAB: C+T
PROJECT CONTACT: Mey Mendoza TURNAROUND: Normal
SAMPLED BY: John Wolfe REQUESTED BY: John Wolfe

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH/BTEX	TEH	DCA by 8260
1	MW-9	/				6	2								3	2	5	9	9	1430		/	/	/
2	MW-4	/				6	2								3	2	6	9	9	0800		/	/	/
3	MW-7	/				6	2								3	2	6	9	9	0900		/	/	/

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
John Wolfe	3/26/99 1130		3/26/99 1130
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

Subsurface Consultants, Inc.
171 - 12th Street, Suite 202, Oakland, CA 94607
(510) 268-0461 - FAX: (510) 268-0137
3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
(925) 299-7960 - (925) 299-7970

CHAIN OF CUSTODY FORM

13873J

PAGE 1 OF

PROJECT NAME: Connell Oldsmobile

JOB NUMBER: 447.055 LAB: C+T

PROJECT CONTACT: Meg Mendoza TURNAROUND: Normal

SAMPLED BY: John Wolf REQUESTED BY: John Wolf

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH/BTEX	TEH	DCA by 8260
1	MW-13	X				6	2			HCl			X		3	30	99	1600		X	X	X
2	MW-8	X				6	2			HCl			X		3	31	99	0900		X	X	X

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
John Wolf	3/31/99 1200		3/31/99 2115
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

Subsurface Consultants, Inc.
171 - 12th Street, Suite 202, Oakland, CA 94607
(510) 268-0461 - FAX: (510) 268-0137
3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549
(925) 299-7960 - (925) 299-7970