

File No. 8-90-420-GI

Alameda County

NOV 14 2002

Environmental Health

**GROUNDWATER MONITORING AND
SAMPLING AT THE PROPERTY
LOCATED AT 5175 BROADWAY STREET
OAKLAND, CALIFORNIA
JULY 19, 2002**

**PREPARED FOR:
MR. MOHAMMAD MEHDIZADEH
678 LA CORSO DRIVE
WALNUT CREEK, CALIFORNIA 94598**

**BY
ENVIRO SOIL TECH CONSULTANTS
131 TULLY ROAD
SAN JOSE, CALIFORNIA 95111**

ENVIRO SOIL TECH CONSULTANTS

LIST OF TABLE

TABLE 1 ... Groundwater Monitoring Data and Analytical Results

TABLE 2 ... Groundwater Analytical Results for Fuel Oxygenate
Constituents (8EPA 8260)

LIST OF FIGURES

FIGURE 1 ... Vicinity Map Showing 5175 Broadway Street, Oakland,
California

FIGURE 2 ... Site Plan Showing Building, Former UST Areas,
Monitoring Wells, Groundwater Flow Direction and
Groundwater Elevation Contour Lines

FIGURE 3 ... TPHg Concentration Contour Map

FIGURE 4 ... Benzene Concentration Contour Map

FIGURE 5 ... MTBE Concentration Contour Map

LIST OF APPENDICES

APPENDIX "A" ... Tables 1 and 2

APPENDIX "B" ... Figures 1, 2, 3, 4 and 5

APPENDIX "C" ... Graphs of Historical Chemical Concentrations and
Groundwater Elevations

APPENDIX "D" ... Standard Operation Procedures

APPENDIX "E" ... Analytical Laboratory Results and Chain-of-Custody Documentation

TABLE OF CONTENTS

PAGE NO.

LETTER OF TRANSMITTAL	1-2
PURPOSE	3
SITE DESCRIPTION	3
BACKGROUND	3-5
SCOPE OF PRESENT WORK	5-6
CURRENT FIELD WORK	6
GROUNDWATER MONITORING	6
GROUNDWATER SAMPLING	7
GROUNDWATER FLOW DIRECTION	7
LABORATORY ANALYTICAL RESULTS	7-8
RECOMMENDATION	8
LIMITATIONS	8-9

APPENDIX "A"

TABLE 1 - GROUNDWATER MONITORING DATA AND ANALYTICAL RESULTS	T1-T11
TABLE 2 - GROUNDWATER ANALYTICAL RESULTS FOR FUEL OXYGENATE CONSTITUENTS	T12-T19

APPENDIX "B"

FIGURE 1 - VICINITY MAP	M1
FIGURE 2 - SITE PLAN	M2
FIGURE 3 - TPHG CONCENTRATION CONTOUR MAP	M3
FIGURE 4 - BENZENE CONCENTRATION CONTOUR MAP	M4
FIGURE 5 - MTBE CONCENTRATION CONTOUR MAP	M5

TABLE OF CONTENTS CONT'D

PAGE NO.

APPENDIX "C"

GRAPHS OF HISTORICAL CHEMICAL CONCENTRATIONS AND GROUNDWATER ELEVATIONS

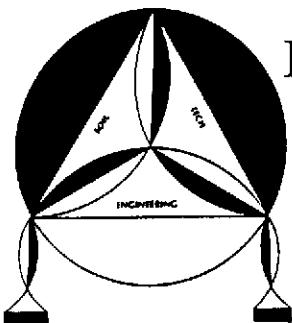
APPENDIX "D"

GROUNDWATER SAMPLING

SOP1

APPENDIX "E"

CURTIS & TOMPKINS, LTD. LABS REPORT AND CHAIN-OF-CUSTODY



ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116

July 19, 2002

File No. 8-90-420-GI

Mr. Mohammad Mehdizadeh
678 La Corso Drive
Walnut Creek, California 94598

**SUBJECT: GROUNDWATER MONITORING AND
SAMPLING AT THE PROPERTY**

Located at 5175 Broadway Street, in
Oakland, California

Dear Mr. Mehdizadeh:

Enviro Soil Tech Consultants (ESTC) has conducted groundwater monitoring and sampling on July 1, 2002, at the subject site located at 5175 Broadway Street, in Oakland, California (Figure 1).

The five monitoring wells (MW-1 through MW-3, STMW-4 and STMW-5) located on-site (Figure 2) were monitored for presence of floating product and/or distinctive odor and sampled for analyses.

This groundwater monitoring and sampling was conducted in accordance with SOMA's recommendations in the letter dated October 16, 2001, for preparation of risk-based corrective action (RBCA).

If have any questions or require additional information, please feel free to contact our office at (408) 297-1500 at your convenience.

Sincerely,



FRANK HAMEDI-FARD
GENERAL MANAGER

ENVIRO SOIL TECH CONSULTANTS



LAWRENCE KOO, P. E.
C. E. #34928

PURPOSE:

The purpose of this groundwater monitoring and sampling investigation was to collect additional data for preparation of RBCA.

SITE DESCRIPTION:

The site is located at 5175 Broadway Street, in Oakland, California. The area in the vicinity of the site consists mainly of residential and light commercial (Figure 1).

BACKGROUND:

In January 1990, Tank Protect Engineering, Inc. (TPE), was retained to supervise the removal of underground fuel tanks and to conduct soil sampling, soil excavation, soil treatment and disposal. In addition, TPE installed three monitoring wells on-site.

Initial analytical results of soil samples collected from the tank excavation area showed moderate levels of Total Petroleum Hydrocarbons as gasoline (TPHg) in two locations. The rest of the samples showed TPHg ranging from non-detected to less than 120 parts per million (ppm). Due to the presence of elevated levels of TPHg detected in the excavation, TPE installed three on-site monitoring wells (MW-1 to MW-3), as required by state and local regulatory agencies (Figure 2). TPE's preliminary groundwater assessment also indicated that the shallow groundwater had been impacted.

The Alameda County Health Department (ACHD) requested the property owner to conduct further investigation in order to define the extent of dissolved hydrocarbon contamination in the groundwater.

Soil Tech Engineering, Inc. (STE), was retained in September 1990 to conduct monitoring and sampling of the on-site monitoring wells. The objective of the quarterly groundwater sampling program was to monitor seasonal and long-term variations in the conditions of the shallow aquifer beneath the site and to assess the direction of groundwater flow for further investigation.

STE sampled the three on-site groundwater monitoring wells (MW-1 to MW-3) on September 26, 1990, and January 14, 1991. The sampling was conducted in accordance with ACHD and California Regional Water Quality Control Board (CRWQCB) guidelines and STE's Standard Operating Procedures (SOP) included in Appendix "C".

The three on-site wells contained moderate to high levels of dissolved hydrocarbons. A comparison of the September 1990 sampling with TPE's analytical results of April 1990 showed an increase in dissolved hydrocarbons in wells MW-1 and MW-2. In well MW-3 (the down-gradient well), TPHg and Toluene levels decreased, whereas Benzene, Ethylbenzene and Total Xylenes increased slightly.

The analytical results for groundwater samples collected on January 14, 1991, showed an increase in TPH and BTEX levels in well MW-2 compared to those reported in September 1990. Well MW-1 also showed a slight increase in TPH and Benzene, but showed a decrease in Toluene, Ethylbenzene and Total Xylenes levels. Well MW-3 showed a substantial decrease in TPH and BTEX.

The Alameda County Health Department (ACHD) in a letter dated March 29, 1991, requested additional investigation to define the extent of dissolved hydrocarbon plume. STE installed two additional monitoring wells STMW-1 (STMW-4) and STMW-2 (STMW-5) on June 21, 1991. The July 3, 1991, water sampling results showed low

levels of dissolved Total Hydrocarbons as gasoline (TPHg) and Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) in all five wells. The presence of low levels of TPHg and BTEX in the up-gradient well, STMW-1 (STMW-4), (located on the east corner of the property) indicated a potential off-site source. Based on the water level data, the groundwater direction was west to southwest on July 3, 1991. The detail of this investigation is summarized in STE's report dated July 23, 1991. STE recommended a quarterly monitoring and sampling of five on-site wells for at least a year.

The second quarterly sampling was conducted in November 1991. The detail of the sampling is described in STE's report dated November 22, 1991. The quarterly monitoring and samplings conducted by STE are described in STE's report dated March 10, 1992, June 1992, October 1992 and January 1993.

The last quarterly monitoring and sampling was conducted by STE on August 15, 1994, details in STE report dated September 20, 1994. STE prepared a work plan proposal for additional soil and groundwater investigation of the property dated October 5, 1994 but no further activity on the subject site was authorized by the owner. Hence, there was a discontinuation of quarterly monitoring and sampling activity from August 15, 1994 to November 7, 1996. The quarterly monitoring and sampling activity resumed on November 7, 1996, and the last quarterly monitoring and sampling was conducted on February 16, 2001.

SCOPE OF PRESENT WORK:

The scope of present work is as follow:

- 1) Measure the depth-to-groundwater and monitor the presence of dissolved petroleum hydrocarbons in the five on-site wells.

- 2) Collect groundwater samples from the monitoring wells for analyses of Total Petroleum Hydrocarbons as gasoline and diesel (TPHg and TPHd) by EPA Method 8015 MOD; EPA Method 8310; Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX) and Methyl tert-butyl Ether (MTBE) by EPA Method 8020 and other fuel oxygenate constituents per EPA Method 8260.
- 3) Update the database for water level/dissolved hydrocarbon level and groundwater field observation data.
- 4) Review analytical results and prepare a report.

CURRENT FIELD WORK:

On July 1, 2002, the five on-site wells were monitored, purged and sampled in accordance with ESTC's Standard Operating Procedures (SOP) (Appendix "D"), which comprise of state and local guidelines.

GROUNDWATER MONITORING:

During field observation, ESTC staff detected sewerage odor in monitoring well MW-1. No sheen or odor was detected in water sample from monitoring well MW-2. Rainbow sheen and sewerage odor were noted in monitoring wells MW-3, STMW-4 and STMW-5. Table 1 summarizes the groundwater monitoring data and laboratory analytical results.

GROUNDWATER SAMPLING:

Following groundwater monitoring, the on-site wells were purged at least five well volumes and sampled. The water samples were collected in 1 liter amber glass bottles and 40 milliliter glass vials with Teflon-lined caps, labeled and placed in an ice-cooled chest for transportation to Curtis & Tompkins, Ltd., a State-Certified laboratory with appropriate chain-of-custody record.

GROUNDWATER FLOW DIRECTION:

Groundwater elevation data was used to determine the direction of groundwater flow. Groundwater flow was approximately in a southwesterly direction as of July 1, 2002 (Figure 2).

LABORATORY RESULTS:

The groundwater samples were analyzed for TPHg & TPHd by EPA Method 8015 MOD (purgeable and extractable); BTEX, MTBE and other fuel oxygenate constituents per EPA Method 8260B.

Groundwater sample from monitoring wells detected TPHg ranging from 670 micrograms per liter ($\mu\text{g/L}$) to a maximum of 13000 $\mu\text{g/L}$; TPHd ranging from 280 $\mu\text{g/L}$ to a maximum of 6700 $\mu\text{g/L}$; Benzene ranging from 25 $\mu\text{g/L}$ to a maximum of 470 $\mu\text{g/L}$; Toluene ranging from non-detectable to a maximum of 220 $\mu\text{g/L}$; Ethylbenzene ranging from non-detectable to a maximum of 450 $\mu\text{g/L}$ and Total Xylenes ranging from non-detectable to maximum of 890 $\mu\text{g/L}$. MTBE was below laboratory detection limit in groundwater samples from all five wells.

Monitoring wells MW-2, MW-3, STMW-4 and STMW-5 detected other fuel oxygenate constituents (EPA 8260) in the groundwater samples. Table 1 and Table 2 summarize the groundwater samples analytical results.

RECOMMENDATION:

Due to the unusual elevated level of contamination in the recent sampling event, we highly recommend that one more round of water sampling to confirm the results prior to preparing the Risk Based Corrective Action (RBCA).

LIMITATIONS:

This report and the associated work have been provided in accordance with the general principles and practices currently employed in the environmental consulting profession. The contents of this report reflect the conditions of the site at this particular time. The findings of this report are based on:

- 1) The observations of field personnel.
- 2) The results of laboratory analyses performed by a state-certified laboratory.

It is possible that variations in the soil and groundwater could exist beyond the points explored in this investigation. Also, changes in groundwater conditions of a property can occur with the passage of time due to variations in rainfall, temperature, regional water usage and other natural processes or the works of man on this property or adjacent properties.

The services that ESTC provided have been in accordance with generally accepted environmental professional practices for the nature and conditions of the work completed in the same or similar localities at the time the work was performed.

This report was prepared in accordance with the currently accepted standards for environmental investigations. The contents of this report reflect the conditions of the subject site at this particular time. No other warranties, expressed or implied, as to the professional advice provided are made.

A P P E N D I X "A"

ENVIRO SOIL TECH CONSULTANTS

TABLE 1
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
4/30/89	MW-1 (97.71)	23	10	N/A	N/A	No sheen or odor	200	NA	18	5	2	12	NA
5/17/90				9.26*	88.45	N/A	NA	NA	NA	NA	NA	NA	NA
9/26/90				9.92*	87.79	No sheen Mild petroleum odor	1300	NA	55	31	120	100	NA
1/14/91				9.54*	88.17	No sheen Mild petroleum odor	3100	NA	350	83	86	130	NA
7/03/91	(102.04) resurveyed			9.42*	92.62	No sheen Light petroleum odor	580	NA	32	41	40	55	NA
11/11/91				9.45*	92.59	No sheen Mild petroleum odor	330	NA	20	2	2	11	NA
3/04/92	(101.83) resurveyed			7.93*	93.90	No sheen Light petroleum odor	810	NA	11	5	10	23	NA
6/02/92				8.98*	92.85	No sheen Mild sewerage odor	2200	NA	93	32	40	120	NA
9/28/92				9.29*	92.54	No sheen Mild sewerage odor	2900	NA	24	78	19	37	NA
1/11/93				7.56*	94.27	No sheen Light sewerage odor	1700	NA	5.7	6	11	28	NA
8/15/94				9.19*	92.64	No sheen Mild sewerage odor	2000	NA	120	3	6	16	NA
11/07/96	(97.50) resurveyed			8.73*	88.77	No sheen Light sewerage odor	1200	270	3	1.1	1.5	3.8	ND<0.5
2/12/97				7.92*	89.58	No sheen Light sewerage odor	1800	ND<50	13	5.7	4.8	17	ND<0.5
6/16/97				9.04*	88.46	No sheen/Very light sewerage odor	330	ND<50	2.7	ND<0.5	ND<0.5	1.2	ND<0.5

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
9/30/97	MW-1 (97.50)	23	10	7.56*	89.94	No sheen or odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1/27/98				7.96*	89.54	No sheen or odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
4/24/98				7.98*	89.52	Light rainbow sheen Light sewerage odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
8/17/98				8.98*	88.52	No sheen Light sewerage odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
11/16/98				8.90*	88.90	No sheen Light sewerage odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
2/16/99				8.64*	88.86	Light rainbow sheen Slight sewerage odor	110	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
5/17/99				8.50*	89.00	No sheen Strong sewerage odor	280	NA	1.1	0.6	ND<0.5	ND<0.5	ND<0.5
8/17/99				9.24*	88.26	Light sheen Sewerage odor	790	86	5.6	4.3	4.5	11	ND<5
11/17/99				10.44**	87.06	Light rainbow sheen Light sewerage odor	1300	NA	3.6	1.9	2.7	6.6	ND<1
2/17/00				8.48*	89.02	Light rainbow sheen Light sewerage odor	580	NA	1.1	2.3	3.6	4.9	ND<5
5/17/00				8.24*	89.26	Light rainbow sheen Light sewerage odor	1500	NA	130	6.8	6.1	ND<5	ND<5
8/17/00				8.77*	88.73	Rainbow sheen Light sewerage odor	550	NA	160	ND<25	ND<25	ND<25	ND<25
11/15/00				9.04*	88.46	Light rainbow sheen Light sewerage odor	130	NA	ND<5	ND<5	ND<5	ND<5	ND<5

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS (µg/L)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
2/16/01	MW-1 (97.50)	23	10	7.60*	89.90	No sheen Light sewerage odor	400	NA	26	ND<5	ND<5	ND<5	ND<5
1/11/02†				8.08*	89.42	No sheen Sewerage odor	600	160A	74	53	14	52	110
7/01/02	(161.03)• resurveyed			9.02*	152.01	No sheen Sewerage odor	670	280LY	25	ND<5	ND<5	ND<5	ND<5
4/30/89	MW-2 (97.78)	23	15	N/A	N/A	No sheen or odor	230	NA	39	18	5	23	NA
5/17/90				10.00*	87.78	NA	NA	NA	NA	NA	NA	NA	NA
9/29/90				10.83*	86.95	No sheen Mild petroleum odor	850	NA	940	5	25	47	NA
1/14/91				10.63*	87.15	No sheen or odor	3100	NA	30	52	24	34	NA
7/03/91	(102.02) resurveyed			10.08*	91.94	No sheen Light petroleum odor	1590	NA	30	52	24	34	NA
11/11/91				10.21*	91.81	No sheen Mild petroleum odor	960	NA	320	15	4	29	NA
3/04/92				8.70*	92.97	No sheen Light petroleum odor	1500	NA	9.5	8.4	9.8	22	NA
6/02/92				9.52*	92.15	No sheen Mild sewerage odor	2800	NA	84	41	59	95	NA
9/28/92				10.09*	91.58	No sheen Mild sewerage odor	1600	NA	47	20	47	97	NA
1/11/93				8.52*	93.15	No sheen Light sewerage odor	2500	NA	8.6	10	17	32	NA
8/15/94	(97.49) resurveyed			9.91*	91.76	No sheen Light petroleum odor	6000	NA	450	60	100	95	NA

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
11/07/96	MW-2 (97.49)	23	15	10.02	87.47	No sheen/Very light sewerage odor	4200	780	25	4.9	8.1	14	ND<0.5
2/12/97				8.91*	88.58	No sheen/Very light sewerage odor	1800	5700	16	3.1	3.4	8.8	ND<0.5
6/16/97				9.75*	87.74	No sheen/Very light sewerage odor	2500	ND<50	22	5.1	7.8	11	ND<0.5
9/30/97				7.89*	89.51	No sheen or odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
1/27/98				8.38*	89.11	No sheen or odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
4/24/98				8.68*	88.81	No sheen Slight sewerage odor	2100	1400	18	6.5	4.8	21	ND<0.5
8/17/98				9.74*	87.75	No sheen or odor	2900	ND<50	5.1	4.5	5.8	17	ND<0.5
11/16/98				10.14*	87.35	No sheen Light sewerage odor	1400	ND<50	2.1	1.9	2.3	4.8	ND<0.5
2/16/99				8.92*	88.57	No sheen Slight sewerage odor	1600	ND<50	82	16	ND<2.5	40	59
5/17/99				9.26*	88.23	No sheen Mild sewerage odor	8200	NA	43	73	140	100	ND<250
8/17/99				10.04*	87.45	No sheen Sewerage odor	2900	260	20	81	17	38	ND<5
11/17/99				11.52*	85.97	Light rainbow sheen Light sewerage odor	2600	ND<50	7	3.7	5.3	12.9	ND<1
2/17/00				9.50*	87.99	Light rainbow sheen Light sewerage odor	1700	NA	3.2	6.8	11	12.3	ND<5
5/17/00				8.84*	88.65	No sheen Light sewerage odor	3800	NA	450	65	110	80	ND<25
8/17/00				8.50*	88.99	No sheen or odor	4300	NA	440	ND<50	78	ND<50	ND<50
11/15/00				9.94*	87.55	No sheen Light sewerage odor	5800	NA	320	41	78	64	ND<25

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
2/16/01	MW-2 (97.49)	23	15	8.52*	88.97	No sheen or odor	2200	NA	110	20	38	33	ND<5
1/11/02†				8.82*	88.67	No sheen or odor	3100	620A	280	86	84	110	ND<50
7/01/02	(160.98)• resurveyed			9.64*	151.34	No sheen or odor	2600	940LY	300	29	45	27	ND<10
4/30/90	MW-3 (98.14)	27	20	N/A	N/A	No sheen Mild petroleum odor	56000	NA	3600	8600	1300	7200	NA
5/17/90				12.42*	85.72	N/A	NA	NA	NA	NA	NA	NA	NA
9/26/90				13.50*	84.64	No sheen Mild petroleum odor	54000	NA	5100	420	1600	8000	NA
1/14/91				12.58*	85.56	Light sheen Strong petroleum odor	35000	NA	2600	6600	1500	5700	NA
7/03/91	(102.46) resurveyed			12.08*	90.38	Rainbow sheen Strong petroleum odor	33000	NA	4120	4300	1400	4800	NA
11/11/91				12.29*	90.17	Very light rainbow sheen Mild petroleum odor	57000	NA	3900	8400	2100	14000	NA
3/04/92	(102.18) resurveyed			10.26*	91.92	Brown sheen Strong petroleum odor	57000	NA	720	870	81	3100	NA
6/02/92	(97.94) resurveyed			11.40*	90.78	Rainbow sheen Mild petroleum odor	50000	NA	240	240	220	740	NA
9/28/92				12.64*	89.54	Rainbow sheen spots Strong petroleum odor	64000	NA	110	93	97	250	NA
1/11/93				10.10*	92.08	Rainbow sheen Mild petroleum odor	68000	NA	210	280	360	990	NA
8/15/94				12.20*	89.98	Brown sheen spots Mild petroleum odor	50000	NA	870	1200	1300	3000	NA

ENVIRO SOIL TECH CONSULTANTS

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
11/07/96	MW-3 (97.94)	27	20	12.40*	85.54	Very thin layer of brown sheen/Light petroleum odor	68000	470	33	27	63	120	ND<0.5
2/12/97				10.23*	87.71	Brown sheen spots Light petroleum odor	25000	3500	39	43	15	91	ND<0.5
6/16/97				11.79*	86.15	Light brown sheen spots Very light petroleum odor	9700	ND<50	26	29	45	81	ND<0.5
9/30/97				9.40*	88.54	No sheen or odor	6000	1600	43	36	12	11	ND<0.5
1/27/98				9.80*	88.14	No sheen or odor	380	560	5.7	4.1	1.7	9.1	ND<0.5
4/24/98				9.90*	88.04	Rainbow sheen Light sewerage odor	ND<50	680	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
8/17/98				11.46*	86.48	No sheen or odor	16000	ND<50	200	18	31	82	ND<0.5
11/16/98				12.40*	85.54	Rainbow sheen Strong sewerage odor	68000	ND<50	86	54	69	130	ND<0.5
2/16/99				10.72*	87.2	Rainbow sheen Strong sewerage odor	33000	ND<50	270	110	ND<5	770	170
5/17/99				10.54*	87.40	Rainbow sheen Strong petroleum odor	72000	NA	280	230	320	890	ND<250
8/17/99				11.92*	86.02	Rainbow sheen Strong petroleum odor	20000	1800	51	41	61	130	ND<5
11/17/99				13.60*	84.34	Rainbow sheen Strong petroleum odor	1700	NA	39	22	31	84	ND<1
2/17/00				10.68*	87.26	Rainbow sheen Strong petroleum odor	8800	NA	16	39	74	90	ND<5
5/17/00				10.25*	87.69	Rainbow sheen Strong petroleum odor	22000	NA	300	260	410	940	ND<5
8/17/00				11.84*	86.10	Rainbow sheen Strong petroleum odor	15000	NA	230	140	470	750	ND<50

**TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)**

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
11/15/00	MW-3 (97.94)	27	20	11.82*	86.12	Rainbow sheen Strong petroleum odor	12000	NA	250	210	390	700	ND<25
2/16/01				9.68*	88.26	Rainbow sheen Strong petroleum odor	7400	NA	40	72	100	250	ND<25
1/11/02†				9.58*	88.36	Rainbow sheen Petroleum odor	9300	1900B	230	200	290	580	ND<25
7/01/02	(161.43)• resurveyed			11.14*	150.29	Rainbow sheen Sewerage odor	13000	5200L Y	230	220	450	890	ND<13
7/03/91	STMW-1 (103.58)	19.50	11.50	11.00*	92.58	Light rainbow sheen Mild petroleum odor	3100	NA	610	62	39	150	NA
11/11/91	STMW-4 Renamed			11.08*	92.50	Light rainbow sheen Strong petroleum odor	3600	NA	990	15	2.6	180	NA
3/04/92	(101.08) resurveyed			9.44*	91.64	Rainbow sheen spots Mild petroleum odor	5000	NA	35	20	22	71	NA
6/02/92	(98.80) resurveyed			10.32*	92.76	No sheen Light petroleum odor	13000	NA	140	45	63	210	NA
9/28/92				10.76*	92.32	Brown sheen spots Mild petroleum odor	40000	NA	35	20	48	110	NA
1/11/93				9.28*	93.80	Brown sheen spots Mild petroleum odor	24000	NA	26	88	92	280	NA
8/15/94				10.54*	92.54	Light rainbow sheen spots Light petroleum odor	9000	NA	500	34	46	130	NA
11/07/96				10.37*	88.43	Rainbow sheen spots Very light petroleum odor	13000	180	40	2.9	7.8	19	ND<0.5
2/12/97				9.36*	89.44	Rainbow sheen spots Very light petroleum odor	5300	5700	95	5.3	5.9	18	ND<0.5

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
6/16/97	STMW-4 (98.80)	19.50	11.50	10.40*	88.40	No sheen Very light sewerage odor	5300	ND<50	37	6.2	1.7	11	ND<0.5
9/30/97				8.50*	90.30	No sheen or odor	2700	ND<50	42	7.7	5.7	26	ND<0.5
1/27/98				8.90*	89.90	No sheen or odor	3000	300	60	17	12	49	ND<0.5
4/24/98				9.50*	89.30	Rainbow sheen Strong sewerage odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
8/17/98				10.36*	88.44	Rainbow sheen Light petroleum odor	29000	ND<50	36	24	59	160	ND<0.5
11/16/98				10.56*	88.24	Rainbow sheen Strong petroleum odor	13000	ND<50	26	21	20	41	NA
2/16/99				9.64*	89.16	Rainbow sheen Strong petroleum odor	32000	ND<50	660	16	16	150	ND<100
5/17/99				9.96*	88.84	Rainbow sheen Strong petroleum odor	13000	NA	1600	30	45	78	ND<250
8/17/99				10.64*	88.16	Rainbow sheen Light petroleum odor	12000	990	260	22	33	72	ND<5
11/17/99				12.02**	86.78	Rainbow sheen Light petroleum odor	7900	NA	21	12	17	40	ND<1
2/17/00				9.32*	98.48	Rainbow sheen Light petroleum odor	4900	NA	8.9	21	38	50	ND<5
5/17/00				9.65*	89.15	Rainbow sheen Strong petroleum odor	9600	NA	840	ND<50	61	ND<50	ND<50
8/17/00				10.34*	88.46	Rainbow sheen Strong petroleum odor	5100	NA	680	ND<50	62	ND<50	ND<50
11/15/00				10.52*	88.28	Rainbow sheen Strong petroleum odor	3900	NA	640	ND<25	26	27	ND<25

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
2/16/01	STMW-4 (98.80)	19.50	11.50	9.20*	89.60	Rainbow sheen Light petroleum odor	5700	NA	560	ND<25	ND<25	ND<25	ND<25
1/11/02†				9.58*	89.22	No sheen or odor	4900	930A	560	59	25	ND<25	ND<250
7/01/02	(162.31)• resurveyed			10.28*	152.03	Rainbow sheen Sewerage odor	6700	6700L Y	470	18	32	45	ND<13
7/03/91	STMW-2 (101.99)	24	16	13.29*	88.07	No sheen or odor	690	NA	99	81	19	98	NA
11/11/91	STMW-5 Renamed			14.00*	87.99	No sheen Very light petroleum odor	410	NA	61	2.4	1.4	20	NA
3/04/92	(101.36) resurveyed			11.80*	89.56	No sheen Very light petroleum odor	460	NA	13	6.5	11	18	NA
6/02/92				13.06*	88.30	No sheen Mild petroleum odor	1800	NA	27	20	21	43	NA
9/28/92				14.04*	87.32	No sheen Mild sewerage odor	1500	NA	14	6.1	18	22	NA
1/11/93				11.61*	89.75	No sheen Light sewerage odor	800	NA	1.8	3	3.1	9.4	NA
8/15/94				13.85*	87.51	No sheen Mild sewerage	3000	NA	320	62	34	220	NA
11/07/6	(97.14) resurveyed			13.67*	83.47	Rainbow sheen spots Very light petroleum odor	1200	330	11	1.7	4.4	13	ND<0.5
2/17/97				12.07*	82.07	Rainbow sheen spots Very light petroleum odor	1000	3700	11	17	1.7	9.7	ND<0.5
6/19/97				13.33*	83.81	No sheen Very light sewerage odor	950	2300	7.4	1	1	7.2	ND<0.5
9/30/97				11.24*	85.90	No sheen Light sewerage odor	710	1100	5.8	4	1	1	ND<0.5

TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
1/27/98	STMW-5 (97.14)	24	16	11.64*	85.50	No sheen Light sewerage odor	340	1100	2	1.8	1.6	8.2	ND<0.5
4/24/98				11.84*	85.30	Rainbow sheen Strong petroleum odor	3300	ND<50	12	9.4	8.5	37	ND<0.5
8/17/98				13.20*	83.94	Rainbow sheen Light sewerage odor	5300	ND<50	26	17	14	39	ND<0.5
11/16/98				13.74*	83.40	Rainbow sheen Strong sewerage odor	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
2/16/99				12.22*	84.92	Rainbow sheen Strong sewerage odor	950	ND<50	150	3.8	1.4	14	11
5/17/99				12.58*	84.56	Rainbow sheen Mild petroleum odor	2800	NA	67	9.4	ND<2.5	16	30
8/17/99				13.48*	83.66	Rainbow sheen Light petroleum odor	2800	230	18	17	18	36	ND<5
11/17/99				14.88*	82.26	Rainbow sheen Light petroleum odor	1600	NA	3.9	2.3	3.2	7.5	ND<1
2/17/00				12.56*	84.58	Rainbow sheen Light petroleum odor	770	NA	1.5	3.2	5.8	7	ND<5
5/17/00				12.08*	85.06	Rainbow sheen Strong petroleum odor	4500	NA	ND<25	ND<25	ND<25	ND<25	ND<25
8/17/00				13.56*	83.58	Rainbow sheen Strong petroleum odor	2900	NA	170	64	100	250	ND<10
11/15/00				13.28*	83.86	Rainbow sheen Strong petroleum odor	2100	NA	120	24	40	54	ND<5
2/16/01				11.60*	85.54	Rainbow sheen Light petroleum odor	850	NA	58	9.8	9.4	18	ND<5

**TABLE 1 CONT'D
GROUNDWATER MONITORING DATA (feet)
AND ANALYTICAL RESULTS ($\mu\text{g/L}$)**

Date	Well No./Elevation	Depth of Well	Depth of Perf.	Depth to Water	GW Elev.	Well Observation	TPHg	TPHd	B	T	E	X	MTBE
1/11/02†	STMW-5 (97.14)	24	16	11.72*	85.42	Rainbow sheen Sewerage odor	920	ND<50	76	16	16	28	13
7/01/02	(160.65)• resurveyed			13.14*	147.51	Rainbow sheen Sewerage odor	4300	1500L Y	71	14	14	36	ND<5

TPHg - Total Petroleum Hydrocarbons as gasoline

BTEX - Benzene, Toluene, Ethylbenzene, Total Xylenes

GW Elev. - Groundwater Elevation

ND - Not detected (Below Laboratory Detection Limit)

N/A - Not Applicable

** Well casings are not submerged

† TPHg was analyzed by EPA 8015 MOD (Purgeable); TPHd was analyzed by EPA 8015 MOD (Extractable),
BTEX and MTBE were analyzed by EPA 8020

A - Reported TPH as Diesel value is a result of carry over from light hydrocarbons into the diesel quantitation range

B - There are two fuels present, one in the TPH as Diesel quantitation range and a second in the TPH as Hydraulic Oil range.

Both are a typical of normal Diesel and Hydraulic Oil patterns and both carry over into each other's range

L - Lighter hydrocarbons contributed to the quantitation

Y - Sample exhibits fuel pattern which does not resemble standard

• Mean Sea Level. Groundwater elevation benchmarks are NGVD 1929 Datum

TPHd - Total Petroleum Hydrocarbons as diesel

MTBE - Methyl Tertiary Butyl Ether

Perf. - Perforation

NA - Not Analyzed

* - Well casings are submerged

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection ($\mu\text{g/L}$)
1/28/99	MW-1	Not Analyzed	
5/17/99		Diisopropyl Ether	120
8/17/99		Benzene	5.2
		o-Xylene	5.4
		p-Xylene	5.3
11/17/99		Benzene	3.6
		Ethylbenzene	2.7
		Toluene	1.9
		o-Xylene	2.5
		m-Xylene	1.8
		p-Xylene	2.3
2/17/00		Benzene	1.1
		Ethylbenzene	3.6
		Toluene	2.3
		o-Xylene	2.1
		m-Xylene	1.2
		p-Xylene	1.6
5/17/00		1,2,4-Trimethylbenzene	9.8
		Benzene	130
		Diisopropyl Ether	130
		Ethylbenzene	6.1
		Isopropylbenzene	5.3
		n-Propylbenzene	5.6
		Toluene	6.8
8/17/00		Benzene	160
11/15/00		Diisopropyl Ether	22
2/16/01		Benzene	26
		Diisopropyl Ether	110
1/11/02		1,2,4-Trimethylbenzene	7
		1,3,5-Trimethylbenzene	10
		Benzene	74
		Diisopropyl Ether	110
		Ethylbenzene	13
		Isopropylbenzene*	3.5
		Methyl tert-butyl Ether	7.9
		n-Propylbenzene	5.1
		sec-Butylbenzene*	0.6
		Toluene	60
		Xylenes, Total	54

TABLE 2 CONT'D
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection (ug/L)
7/01/02	MW-1	Benzene	25
1/28/99	MW-2	Not Analyzed	
5/17/99		Benzene	400
		Ethylbenzene	140
8/17/99		Benzene	19
		Ethylbenzene	19
		Toluene	18
		o-Xylene	14
		m-Xylene	11
		p-Xylene	15
11/17/99		Benzene	7
		Ethylbenzene	5.3
		Toluene	3.7
		o-Xylene	4.9
		m-Xylene	3.6
		p-Xylene	4.4
2/17/00		Benzene	3.2
		Ethylbenzene	11
		Toluene	6.8
		o-Xylene	5.9
		m-Xylene	3.4
		p-Xylene	3.9
5/17/00		1,2,4-Trimethylbenzene	51
		Benzene	450
		Ethylbenzene	110
		Toluene	65
		Xylenes, Total	80
8/17/00		Benzene	440
		Ethylbenzene	78
11/15/00		1,2,4-Trimethylbenzene	48
		Benzene	320
		Ethylbenzene	78
		Toluene	41
		Xylenes, Total	64

TABLE 2 CONT'D
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection (µg/L)
2/16/01	MW-2	1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene n-Propylbenzene Naphthalene Toluene Xylenes, Total	22 5.7 110 38 5.1 6.6 20 33
1/11/02		1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Isopropylbenzene* n-Butylbenzene n-Propylbenzene* Toluene Xylenes, Total	28 33 220 63 6 5.6 13 71 94
7/01/02		Benzene Toluene Ethylbenzene m,p-Xylenes Propylbenzene	300 29 45 27 13
1/28/99	MW-3	Not Analyzed	
5/17/99		Benzene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Xylenes, Total	190 480 290 590
8/17/99		Benzene Ethylbenzene Toluene o-Xylene m-Xylene p-Xylene	39 31 22 31 21 30
11/17/99		Benzene Ethylbenzene Toluene o-Xylene m-Xylene p-Xylene	39 31 22 31 21 30

TABLE 2 CONT'D
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection (µg/L)
2/17/00	MW-3	Benzene Ethylbenzene Toluene o-Xylene m-Xylene p-Xylene	16 74 39 37 22 31
5/17/00		1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Naphthalene Toluene Xylenes, Total	930 290 300 410 160 260 940
8/17/00		1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Isopropylbenzene n-Butylbenzene n-Propylbenzene Naphthalene Toluene Xylenes, Total	900 290 230 470 51 100 100 160 140 750
11/15/00		1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Isopropylbenzene n-Propylbenzene Naphthalene Toluene Xylenes, Total	760 240 250 390 34 92 180 210 700
2/16/01		1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene n-Butylbenzene n-Propylbenzene Naphthalene Toluene Xylenes, Total	300 110 40 100 43 30 41 72 250

TABLE 2 CONT'D
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection (µg/L)
1/11/02	MW-3	1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Isopropylbenzene* n-Butylbenzene* n-Propylbenzene* Toluene Xylenes, Total	400 220 150 250 20 35 60 170 510
7/01/02		Benzene Toluene Ethylbenzene m,p-Xylenes o-Xylene Isopropylbenzene Propylbenzene 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene n-Butylbenzene Naphthalene	230 220 450 720 170 35 120 180 490 57 140
1/28/99	STMW-4	Not Analyzed	
5/24/99		Benzene	1600
8/17/99		Benzene Ethylbenzene Toluene o-Xylene m-Xylene p-Xylene	24 31 25 28 21 26
11/17/99		Benzene Ethylbenzene Toluene o-Xylene m-Xylene p-Xylene	21 17 12 15 11 14
2/17/00		Benzene Ethylbenzene Toluene o-Xylene m-Xylene p-Xylene	8.9 38 21 19 14 17

TABLE 2 CONT'D
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection (µg/L)
5/17/00	STMW-4	1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Isopropylbenzene n-Butylbenzene n-Propylbenzene	170 87 840 61 53 85 84
8/17/00		1,2,4-Trimethylbenzene Benzene Ethylbenzene	69 680 62
11/15/00		1,2,4-Trimethylbenzene Benzene Diisopropyl Ether Ethylbenzene n-Propylbenzene tert-Butanol Xylenes, Total	31 640 34 26 28 100 27
2/16/01		1,2,4-Trimethylbenzene Benzene Diisopropyl Ether Hexane n-Propylbenzene	48 560 26 140 26
1/11/02		1,2,4-Trimethylbenzene* 1,3,5-Trimethylbenzene* Benzene Ethylbenzene* Isopropylbenzene* n-Butylbenzene* n-Propylbenzene* Toluene* Xylenes, Total*	25 30 460 22 13 7.6 20 48 63
7/01/02		Benzene Toluene Ethylbenzene M,p-Xylenes Isopropylbenzene Propylbenzene 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene n-Butylbenzene Naphthalene	470 18 32 45 20 31 41 75 16 20

TABLE 2 CONT'D
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection ($\mu\text{g/L}$)
1/28/99	STMW-5	Not Analyzed	
5/17/99		Benzene	88
8/17/99		Benzene	19
		Ethylbenzene	21
		Toluene	16
		o-Xylene	14
		m-Xylene	11
		p-Xylene	16
11/17/99		Benzene	3.9
		Ethylbenzene	3.2
		Toluene	2.3
		o-Xylene	2.9
		m-Xylene	2.1
		p-Xylene	2.5
2/17/00		Benzene	1.5
		Ethylbenzene	5.8
		Toluene	3.2
		o-Xylene	2.5
		m-Xylene	2.2
		p-Xylene	2.3
5/17/00		1,2,4-Trimethylbenzene	59
8/17/00		1,2,4-Trimethylbenzene	38
		Benzene	170
		Ethylbenzene	100
		Isopropylbenzene	10
		n-Butylbenzene	11
		n-Propylbenzene	24
		Naphthalene	20
		Toluene	64
		Xylenes, Total	250
11/15/00		1,2,4-Trimethylbenzene	26
		Benzene	120
		Ethylbenzene	40
		Isopropylbenzene	6.5
		n-Butylbenzene	9.4
		n-Propylbenzene	23
		Naphthalene	15
		Toluene	24
		Xylenes, Total	54

TABLE 2 CONT'D
GROUNDWATER ANALYTICAL RESULTS FOR
FUEL OXYGENATE CONSTITUENTS (8260)

Date	Sample Number	Compounds	Detection ($\mu\text{g/L}$)
2/16/01	STMW-5	Benzene Ethylbenzene n-Propylbenzene Toluene Xylenes, Total	58 9.4 9.9 9.8 18
1/11/02		1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Benzene Ethylbenzene Isopropylbenzene n-Butylbenzene n-Propylbenzene sec-Butylbenzene* Toluene Xylenes, Total	6.8 7.9 87 18 5.1 5.6 16 1.3 16 32
7/01/02		Benzene Toluene Ethylbenzene m,p-Xylenes Isopropylbenzene Propylbenzene 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene n-Butylbenzene Naphthalene	71 14 14 36 5.9 22 6.8 15 18 5.6

$\mu\text{g/L}$ - Micrograms Per Liter

* Estimated value for tentatively identified compounds or if result is below Practical Quantitation Limit but above Method Detection Limit

A P P E N D I X "B"

ENVIRO SOIL TECH CONSULTANTS



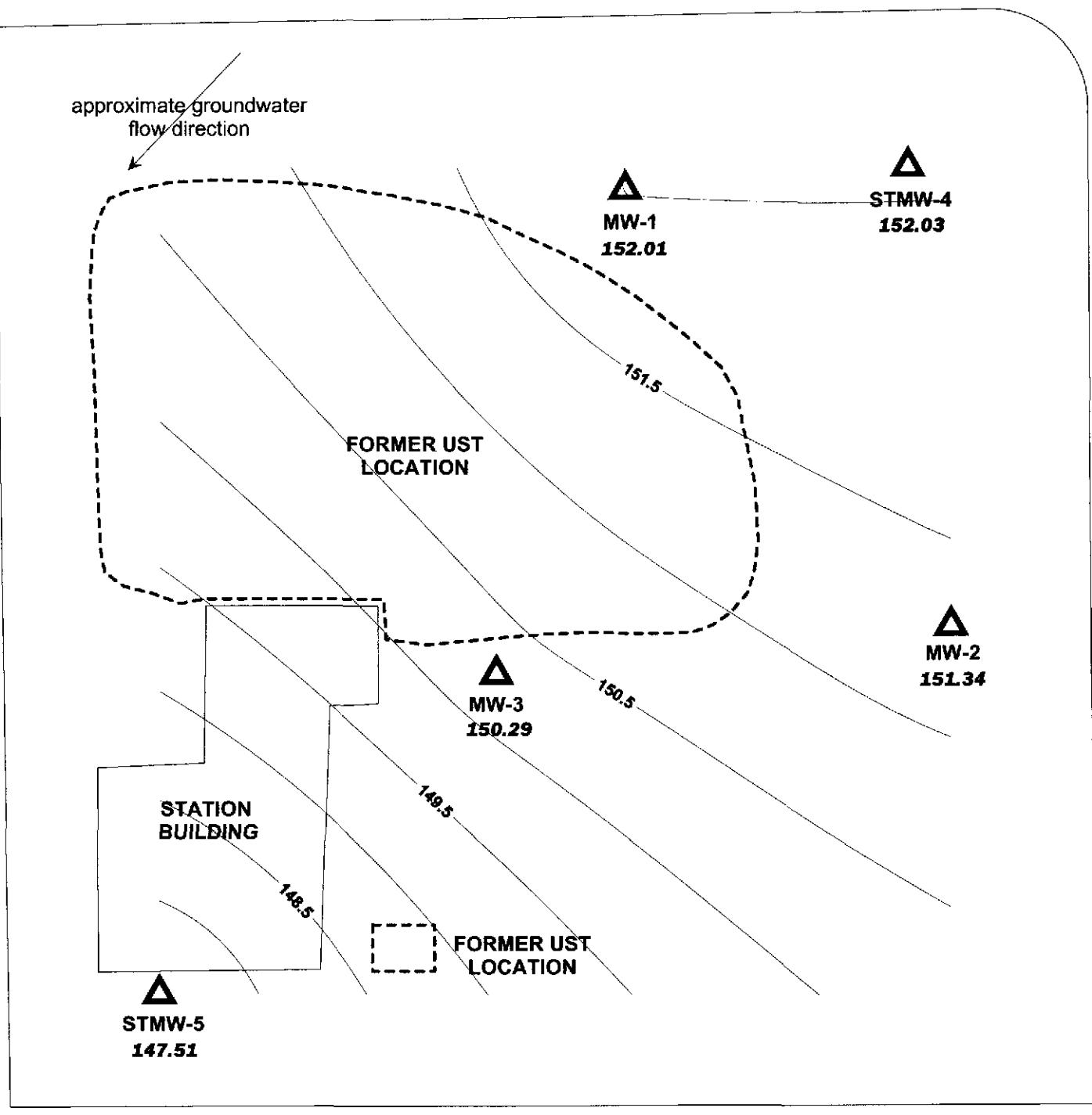
ENVIRO SOIL TECH CONSULTANTS

Figure 1



CORONADO AVENUE

BROADWAY



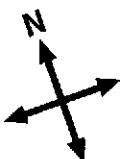
approximate scale in feet

0 10 20

COMMERCIAL
AREA

△ Monitoring Well

Figure 2: Groundwater elevation contour map in feet.
July 1, 2002..ENVIRO SOIL
CONSULTANTS



CORONADO AVENUE

BROADWAY

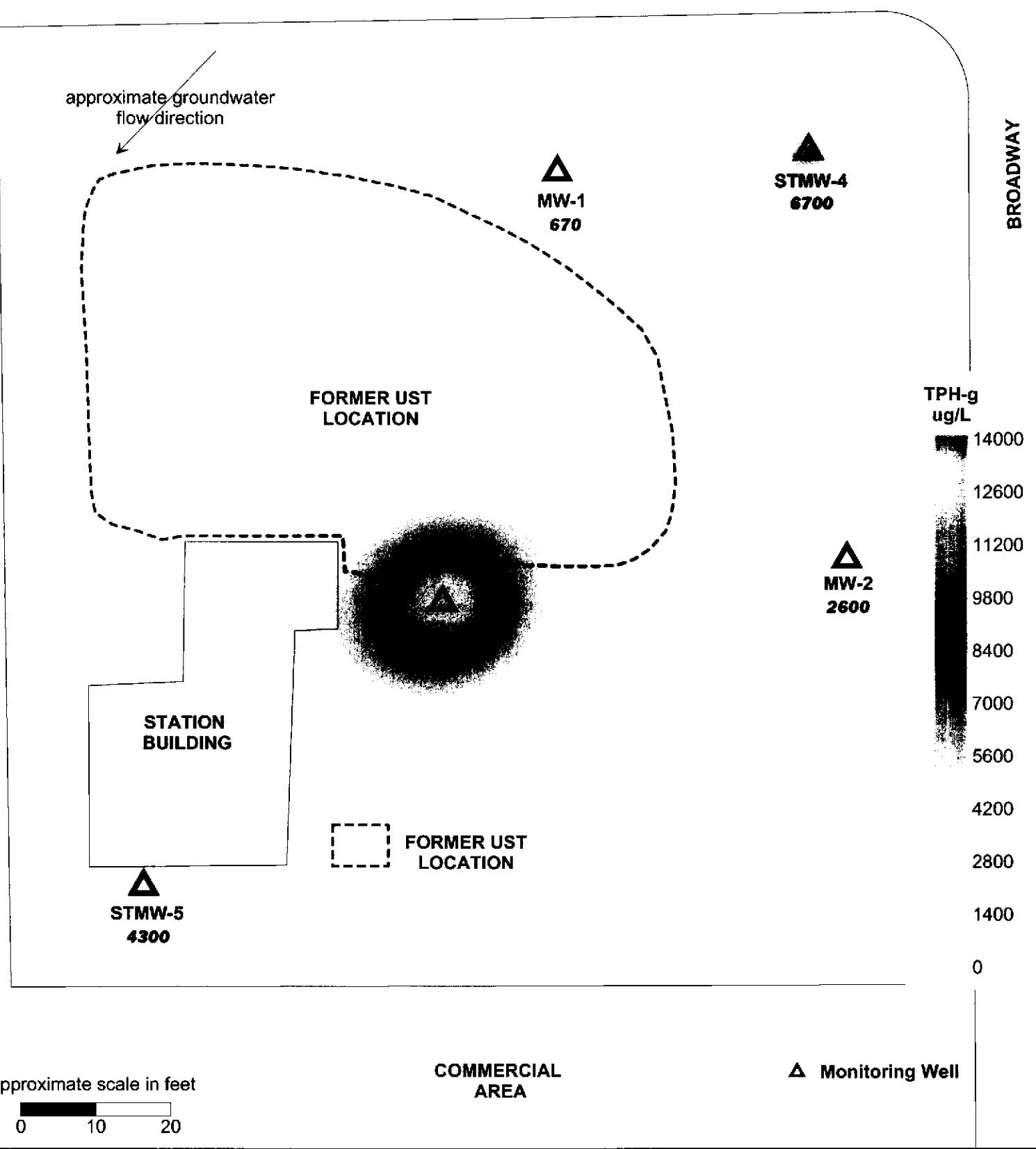
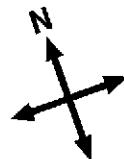


Figure 3: Contour map of TPH-g concentrations in the groundwater.
July 1, 2002..

CORONADO AVENUE



BROADWAY

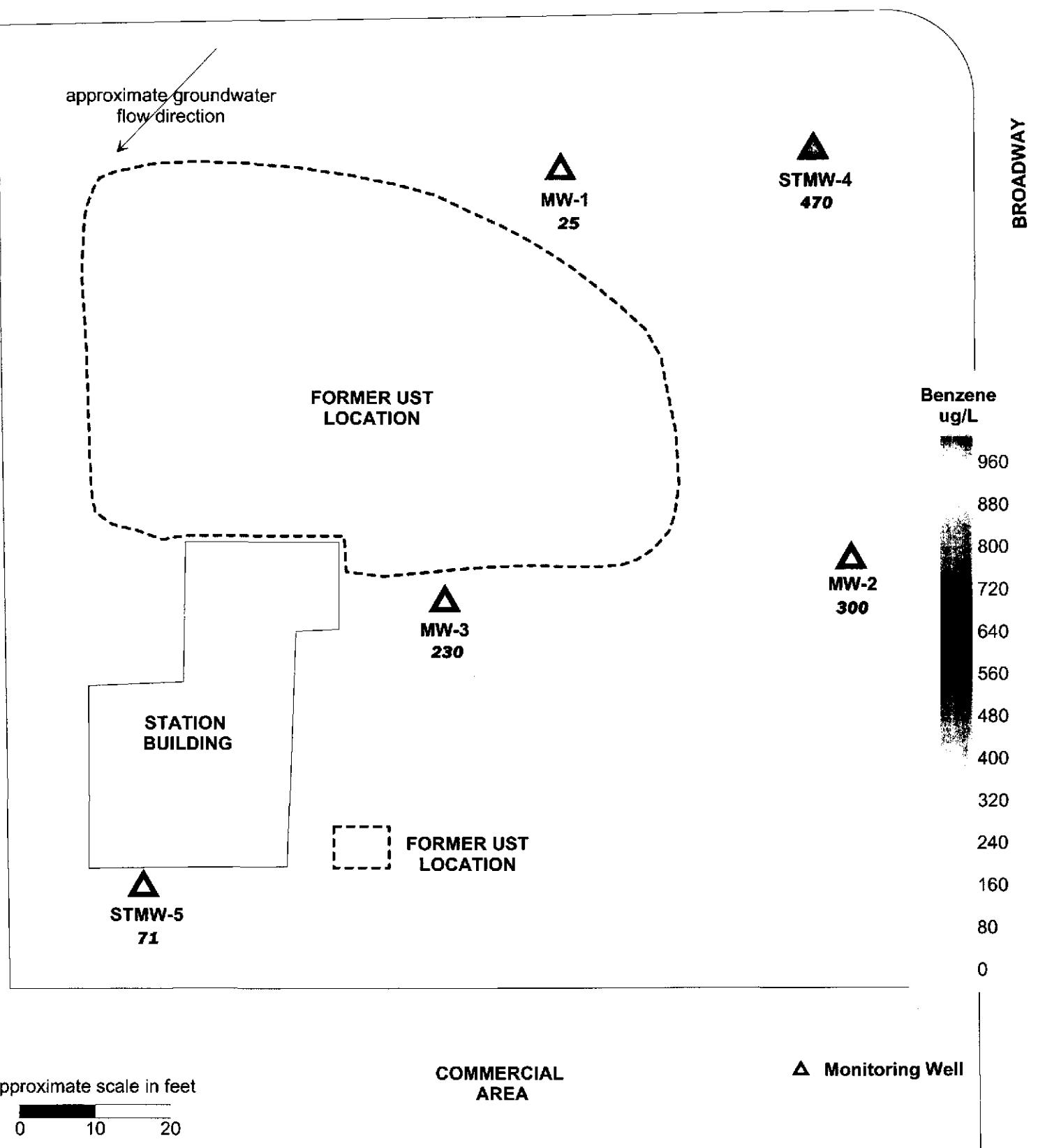
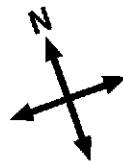
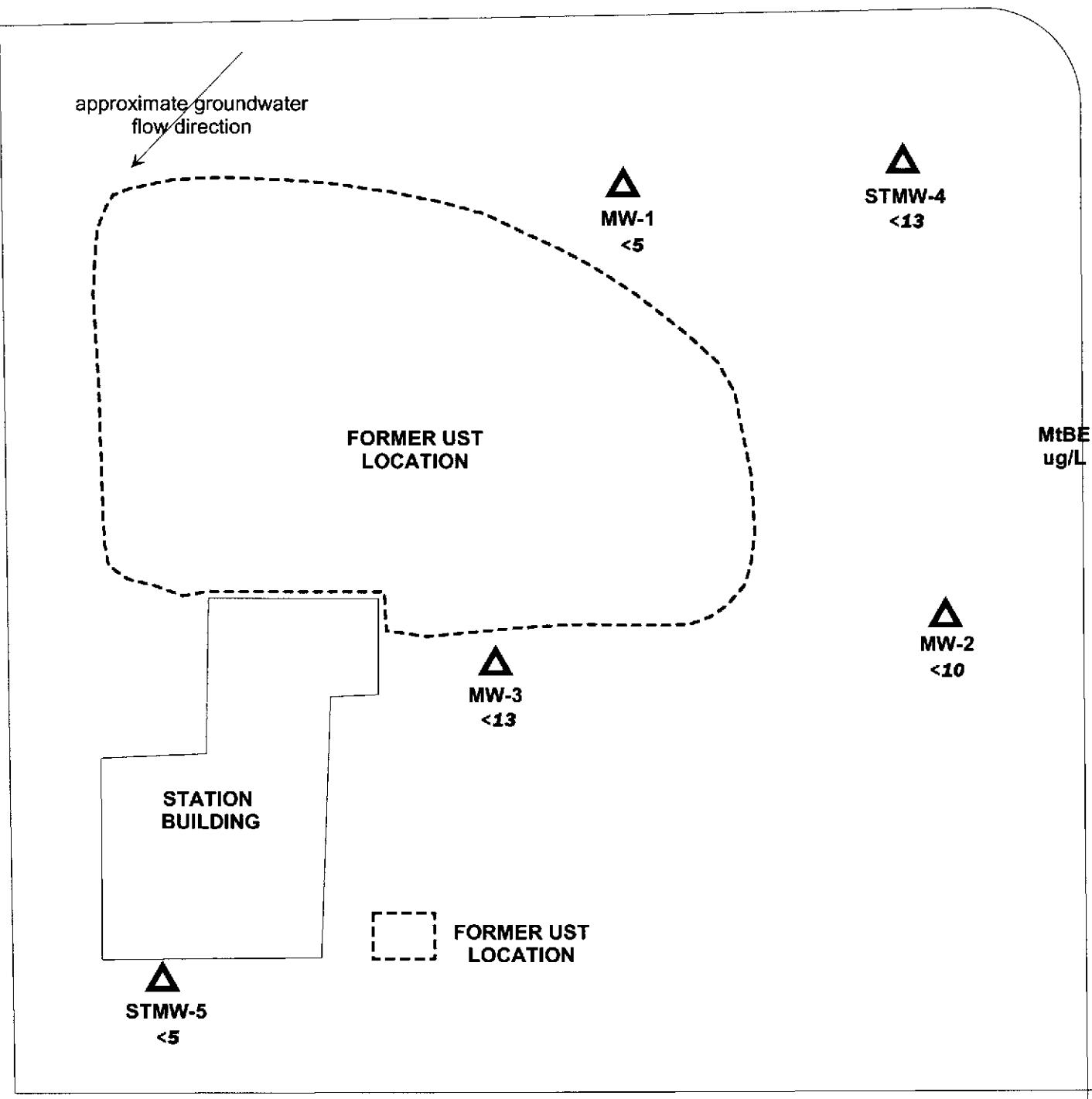


Figure 4: Contour map of Benzene concentrations in the groundwater.
July 1, 2002..

CORONADO AVENUE



BROADWAY



approximate scale in feet

0 10 20

COMMERCIAL
AREA

△ Monitoring Well

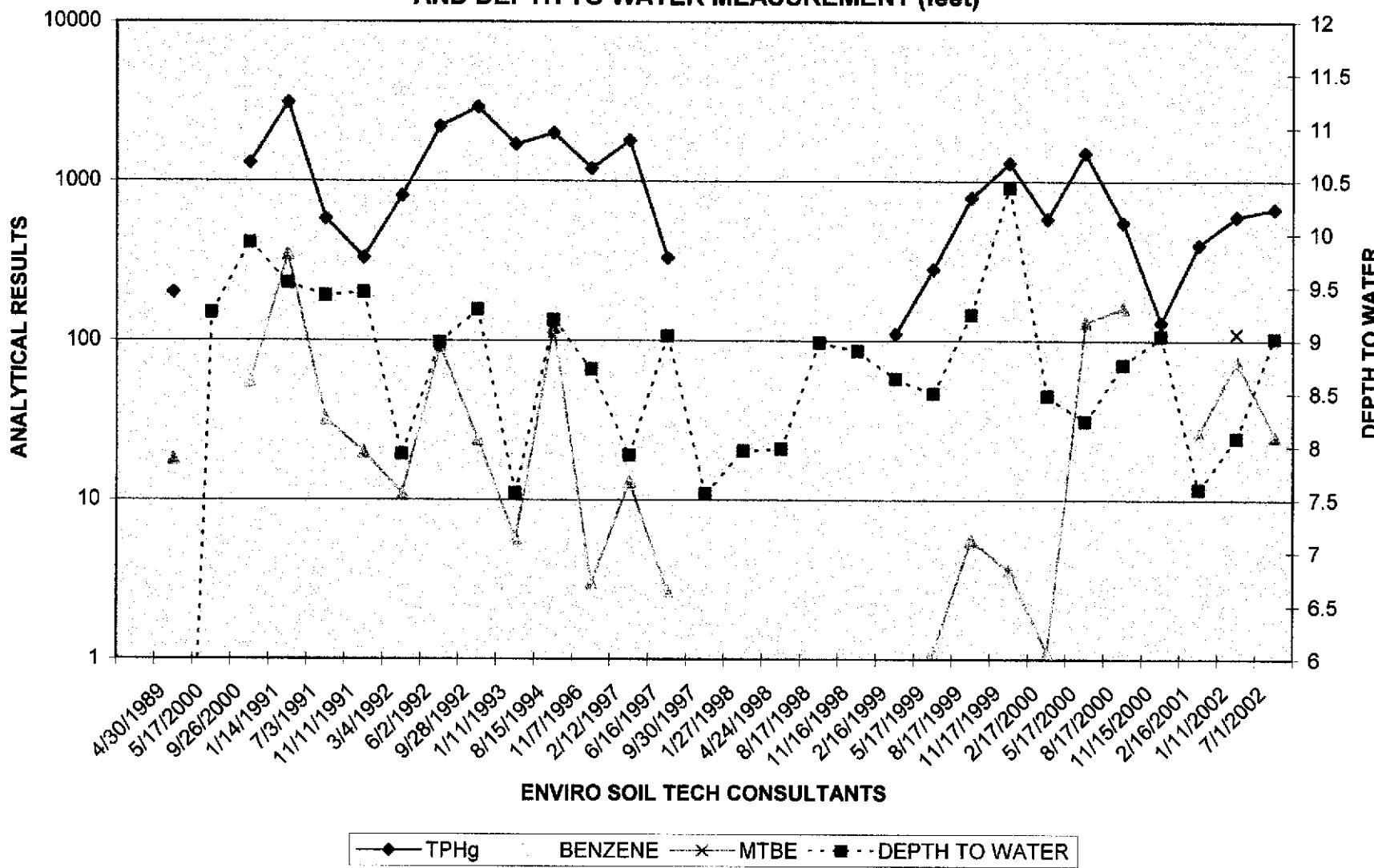
< Less than Lab reporting limit

Figure 5: Contour map of MtBE concentrations in the groundwater.
July 1, 2002..ENVIRO SOIL
CONSULTANTS

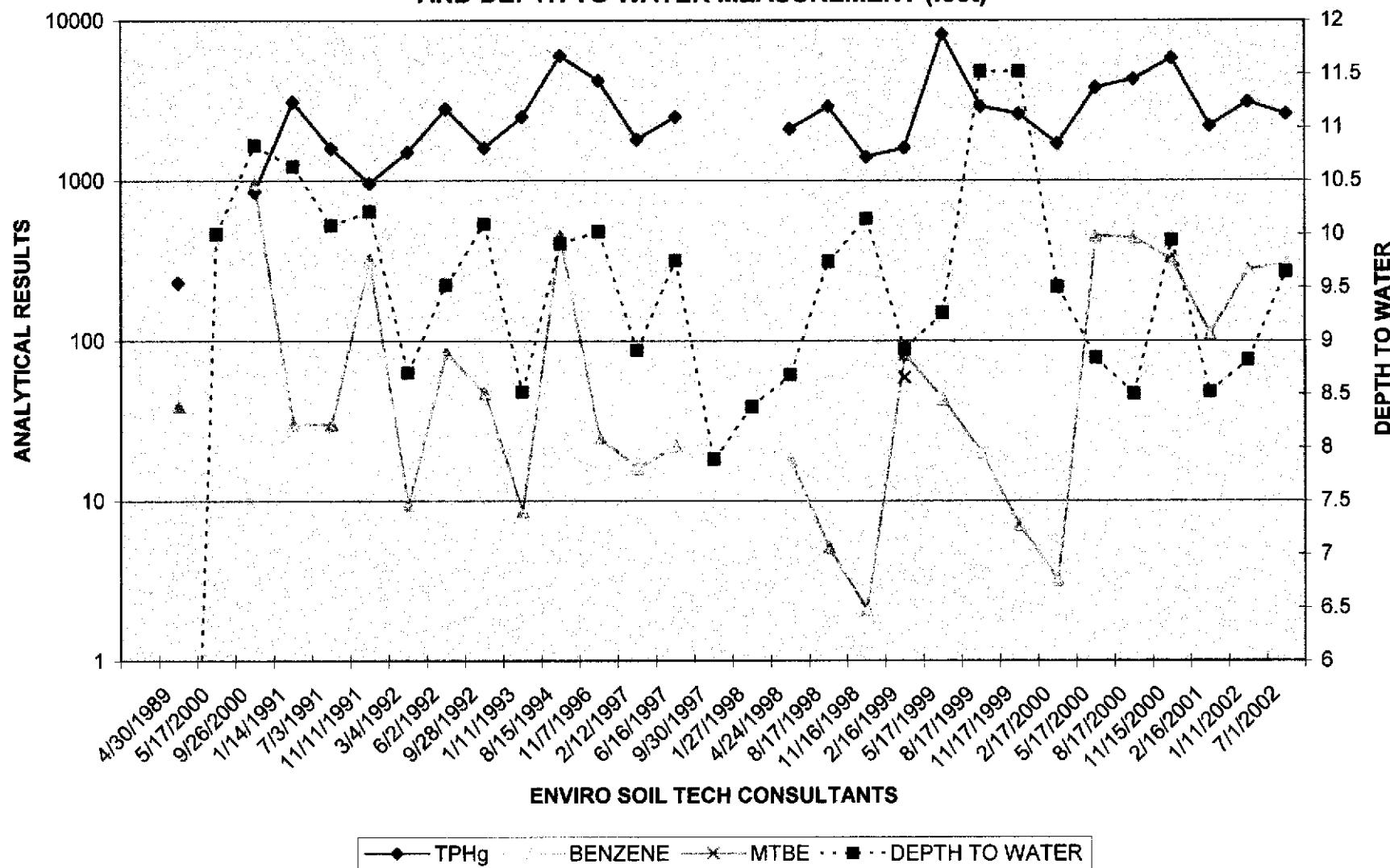
A P P E N D I X "C"

ENVIRO SOIL TECH CONSULTANTS

File No.: 8-90-420-GI
TPHg, BENZENE & MTBE RESULTS FOR MW-1 ($\mu\text{g/L}$)
AND DEPTH TO WATER MEASUREMENT (feet)

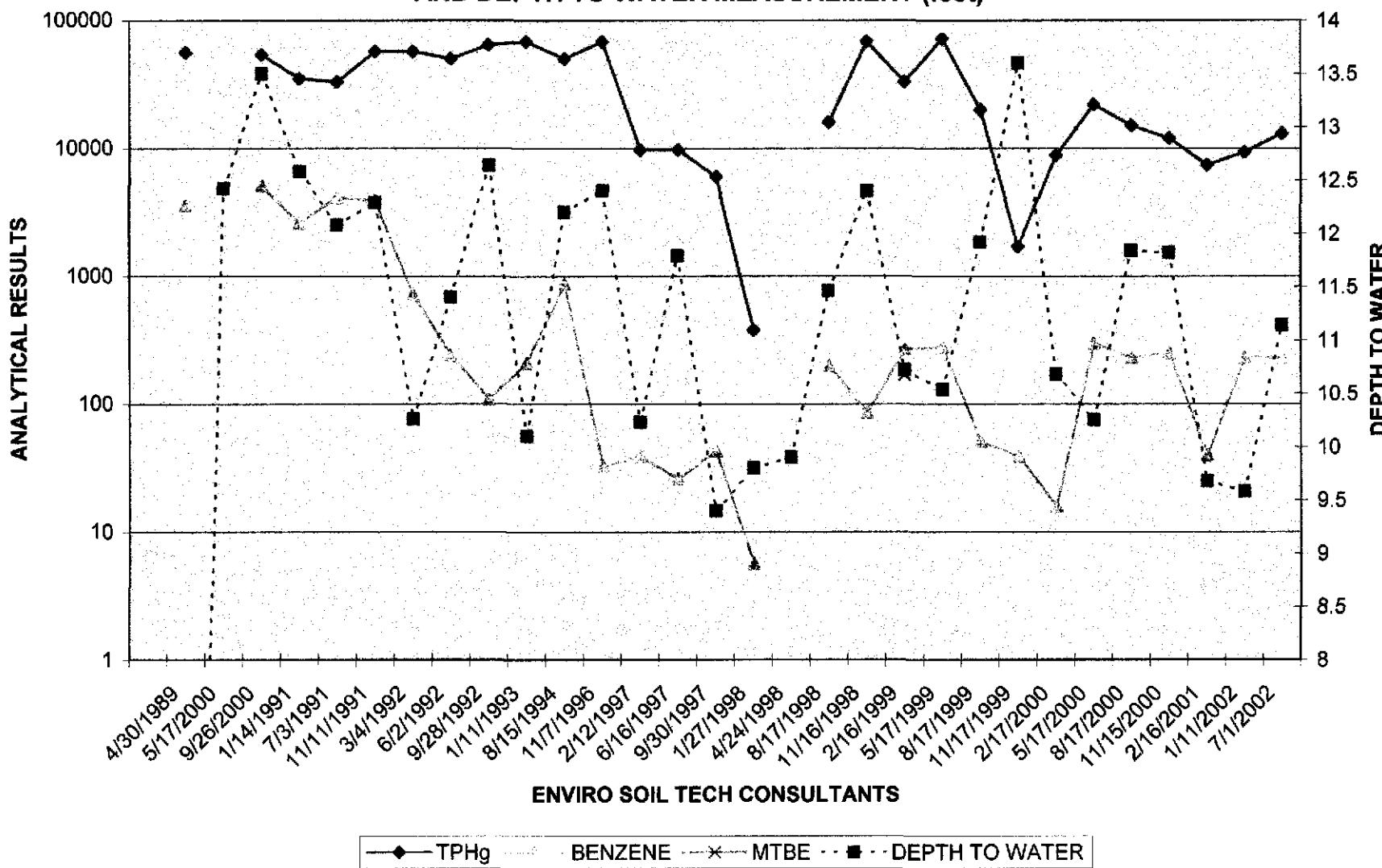


File No.: 8-90-420-GI
TPHg, BENZENE & MTBE RESULTS FOR MW-2 ($\mu\text{g/L}$)
AND DEPTH TO WATER MEASUREMENT (feet)

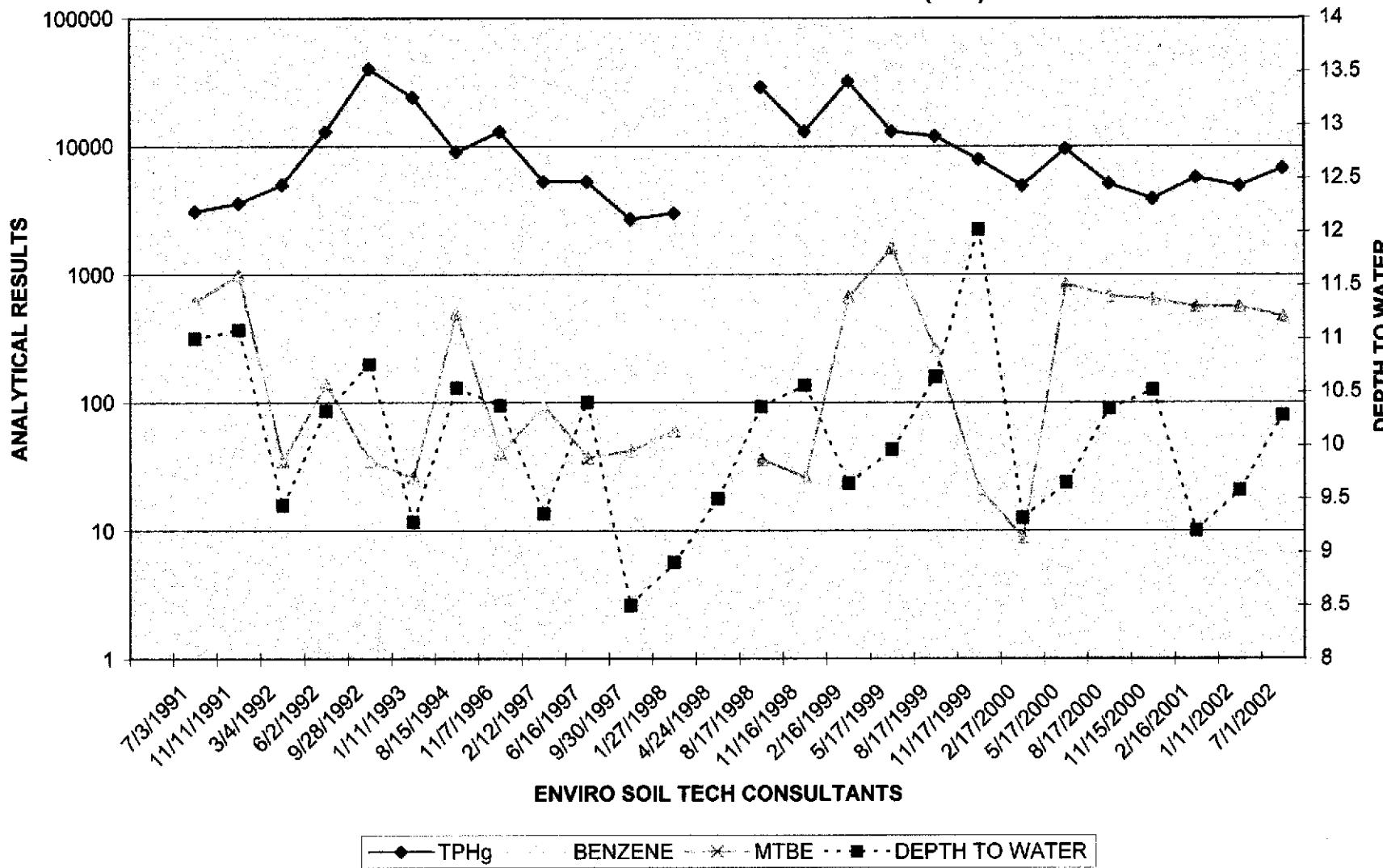


File No.: 8-90-420-GI

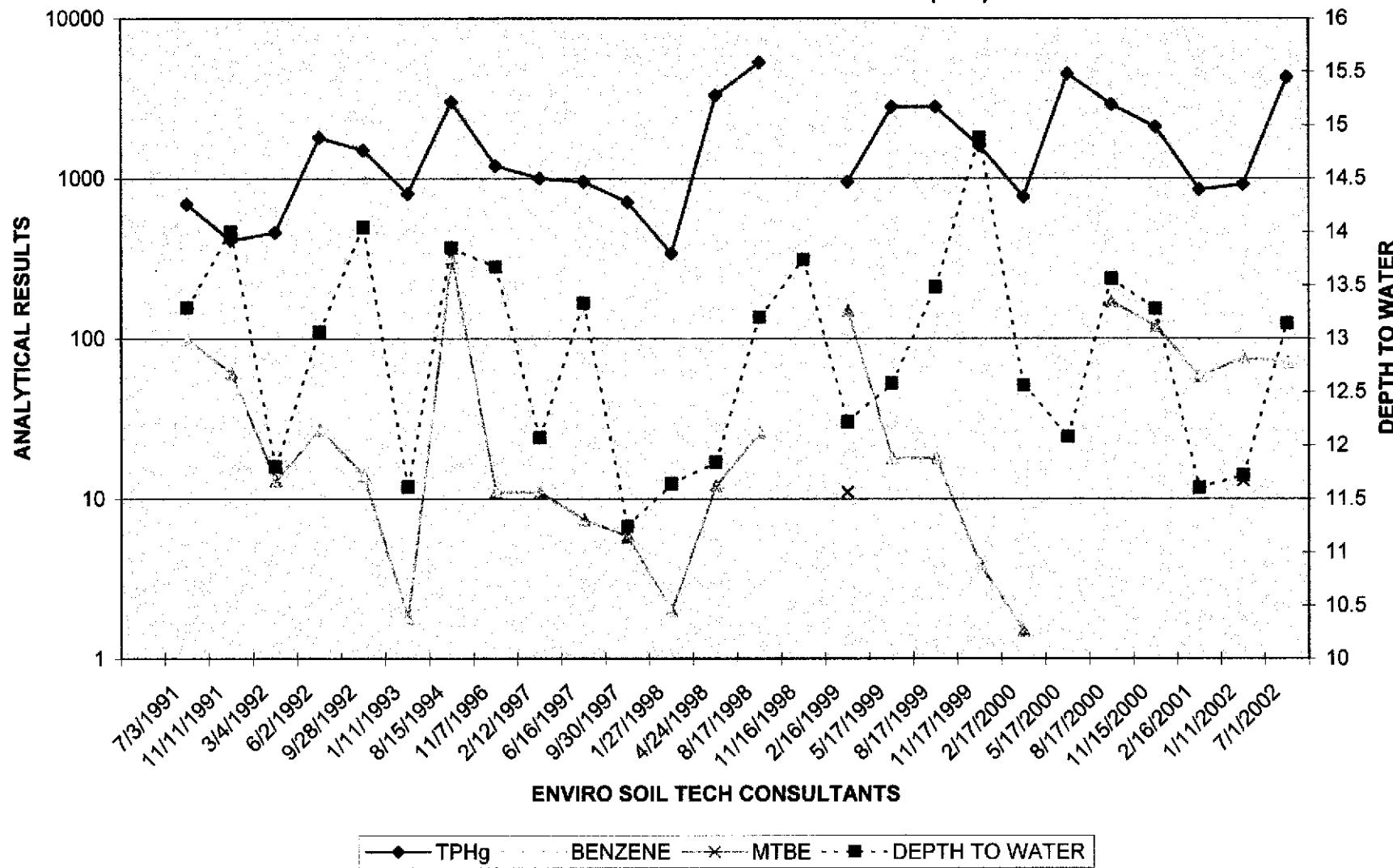
**TPHg, BENZENE & MTBE RESULTS FOR MW-3 ($\mu\text{g/L}$)
AND DEPTH TO WATER MEASUREMENT (feet)**



File No.: 8-90-420-GI
TPHg, BENZENE & MTBE RESULTS FOR STMW-4 ($\mu\text{g/L}$)
AND DEPTH TO WATER MEASUREMENT (feet)



File No.: 8-90-420-GI
TPHg, BENZENE & MTBE RESULTS FOR STMW-5 ($\mu\text{g/L}$)
AND DEPTH TO WATER MEASUREMENT (feet)



File No. 8-90-420-GI

A P P E N D I X "D"

ENVIRO SOIL TECH CONSULTANTS

GROUNDWATER SAMPLING

Prior to collection of groundwater samples, all of the sampling equipment (i.e. bailer, cables, bladder pump, discharge lines and etc...) was cleaned by pumping TSP water solution followed by distilled water.

Prior to purging, the well "Water Sampling Field Survey Forms" were filled out (depth to water and total depth of water column were measured and recorded). The well was then bailed or pumped to remove four to ten well volumes or until the discharged water temperature, conductivity and pH stabilized. "Stabilized" is defined as three consecutive readings within 15% of one another.

The groundwater sample was collected when the water level of the well recovered to 80% of its static level.

One liter amber glass bottles and forty milliliter (ml) glass volatile organic analysis (VOA) vials with Teflon septa were used as sample containers. The groundwater sample was decanted into each VOA vial in such a manner that there was a meniscus at the top. The cap was quickly placed over the top of the vial and securely tightened. The VOA vial was then inverted and tapped to see if air bubbles were present. If none were present, the sample was labeled and refrigerated for delivery under chain-of-custody to the laboratory. The label information would include a sample identification number, job identification number, date, time, type of analysis requested and the sampler's name.

A P P E N D I X "E"

ENVIRO SOIL TECH CONSULTANTS

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

Prepared for:

Enviro Soil Tech Consultants
131 Tully Road
San Jose, CA 95111

Date: 15-JUL-02
Lab Job Number: 159514
Project ID: 8-90-420-GI
Location: 5175 Broadway, Oakland

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by:

Paul Prendergast
Project Manager

Reviewed by:

Dawn K Morris for 40
Operations Manager

This package may be reproduced only in its entirety.



Curtis & Tompkins, Ltd.

Laboratory Number: **159514**
Client: **Enviro Soil Tech Consultants**
Project Name: **5175 Broadway Street, Oakland**
Project #: **8-90-420-GI**
Receipt Date: **07/03/02**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for five water samples received from the above referenced project on July 3rd, 2002. The samples were received cold and intact.

Total Volatile Hydrocarbons (EPA 8015B(M)):

The recoveries for the trifluorotoluene and bromofluorobenzene surrogates were outside the acceptable QC limits for client IDs MW-3 (C&T ID 159514-003), STMW-4 (C&T ID 159514-004) and STME-5 (C&T ID 159514-005) due to coelution of sample hydrocarbons with these surrogates. No other analytical problems were encountered.

Total Extractable Hydrocarbons (EPA 8015B(M)):

No analytical problems were encountered.

Purgeable Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Total Volatile Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	8015B(M)
Matrix:	Water	Sampled:	07/01/02
Units:	ug/L	Received:	07/03/02

Field ID: MW-1 Diln Fac: 1.000
 Type: SAMPLE Batch#: 73536
 Lab ID: 159514-001 Analyzed: 07/08/02

Analyte	Result	RL
Gasoline C7-C12	670	50
Surrogate		
Trifluorotoluene (FID)	111	68-145
Bromofluorobenzene (FID)	123	66-143

Field ID: MW-2 Diln Fac: 1.000
 Type: SAMPLE Batch#: 73513
 Lab ID: 159514-002 Analyzed: 07/05/02

Analyte	Result	RL
Gasoline C7-C12	2,600	50
Surrogate		
Trifluorotoluene (FID)	124	68-145
Bromofluorobenzene (FID)	127	66-143

Field ID: MW-3 Diln Fac: 2.000
 Type: SAMPLE Batch#: 73536
 Lab ID: 159514-003 Analyzed: 07/08/02

Analyte	Result	RL
Gasoline C7-C12	13,000	100
Surrogate		
Trifluorotoluene (FID)	149 *	68-145
Bromofluorobenzene (FID)	136	66-143

Field ID: STMW-4 Diln Fac: 1.000
 Type: SAMPLE Batch#: 73513
 Lab ID: 159514-004 Analyzed: 07/05/02

Analyte	Result	RL
Gasoline C7-C12	6,700	50
Surrogate		
Trifluorotoluene (FID)	157 *	68-145
Bromofluorobenzene (FID)	163 *	66-143

*= Value outside of QC limits; see narrative

ND= Not Detected

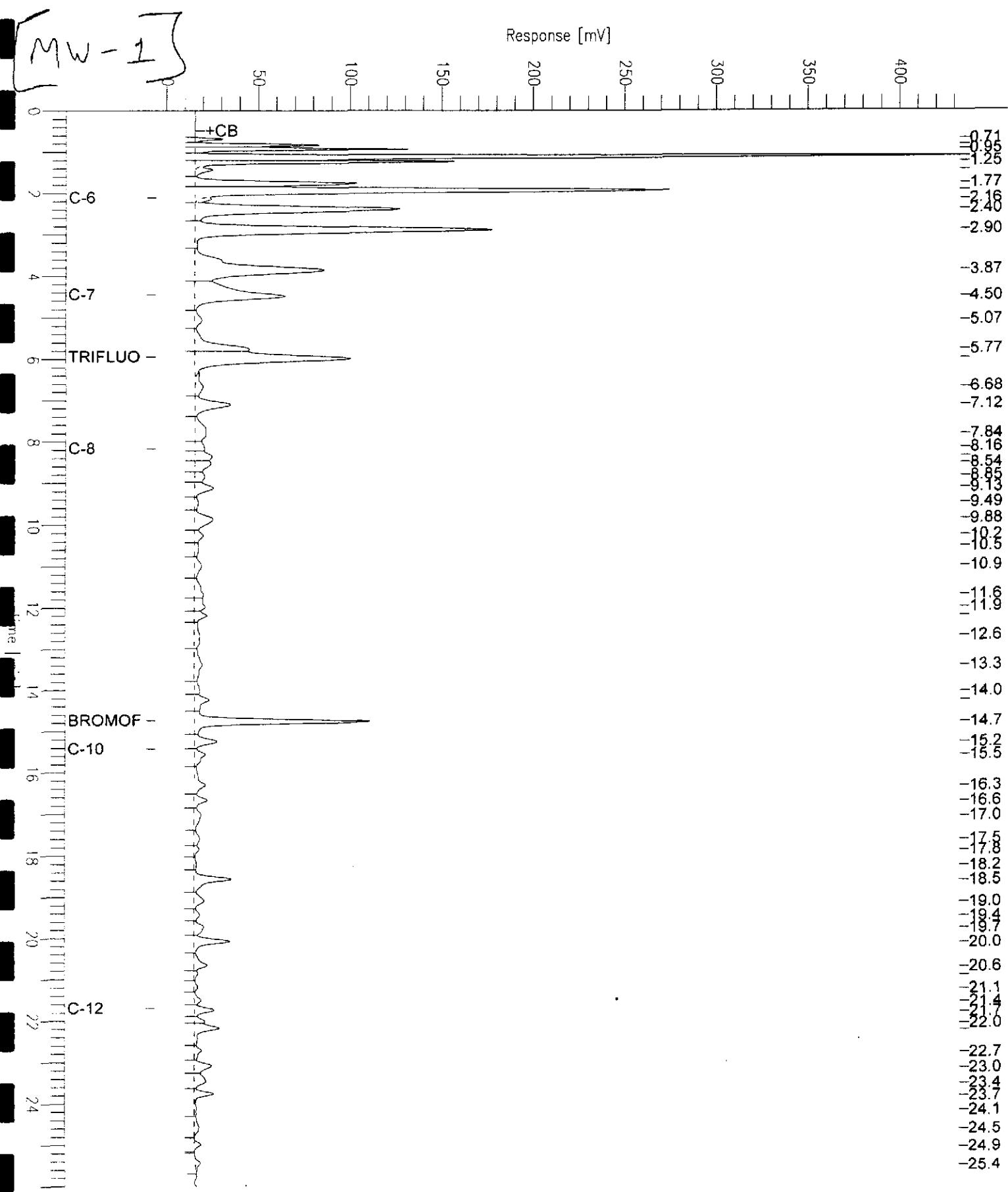
RL= Reporting Limit

Page 1 of 2

GC07 TVH 'A' Data File RTX 502

Sample Name : 159514-001,73536
FileName : G:\GC07\DATA\187A028.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -5 mV

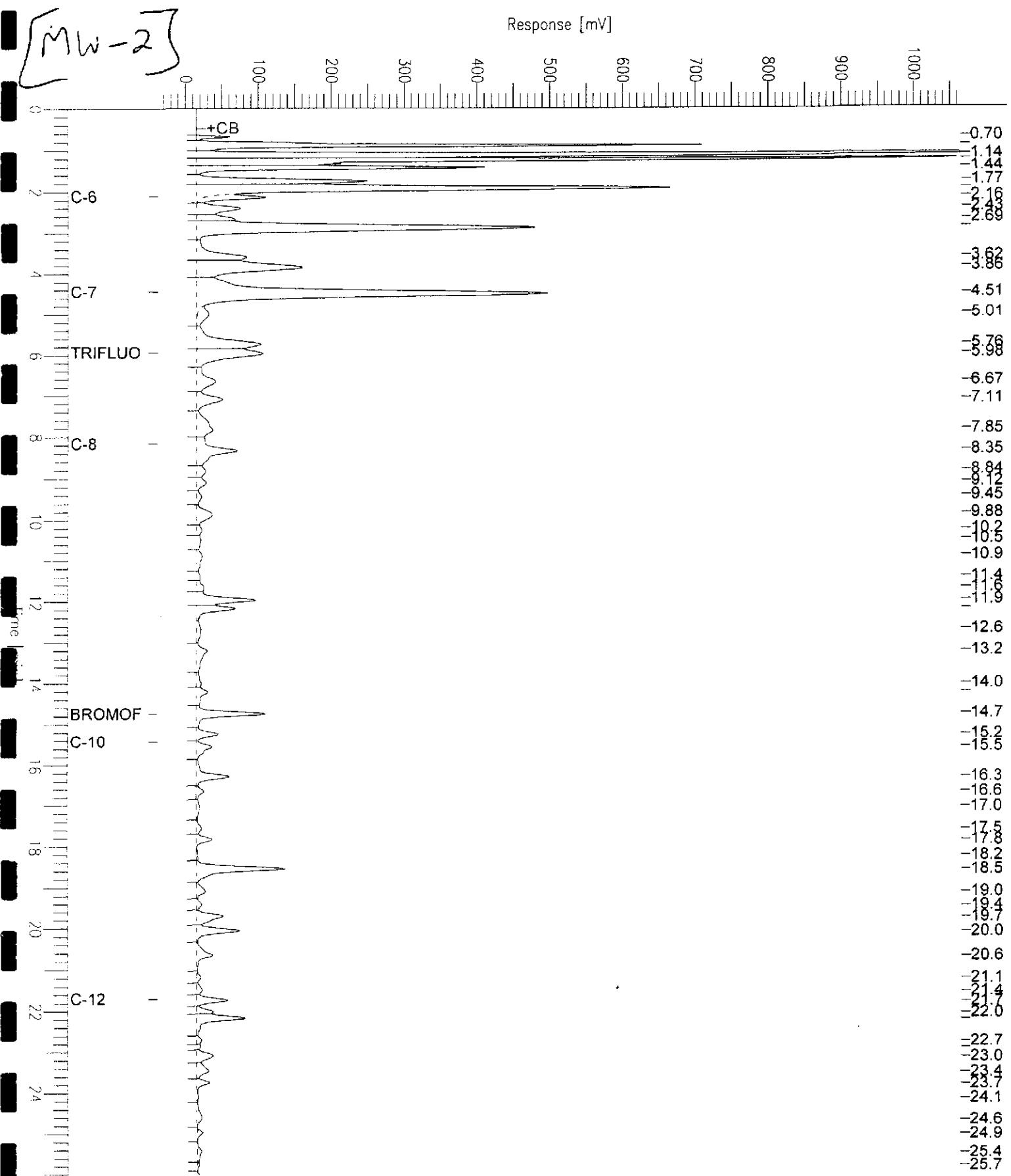
Sample #: B1 Page 1 of 1
Date : 7/8/02 05:28 PM
Time of Injection: 7/8/02 05:02 PM
Low Point : -5.42 mV High Point : 433.12 mV
Plot Scale: 438.5 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 159514-002,73513
FileName : G:\GC07\DATA\186A016.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -37 mV

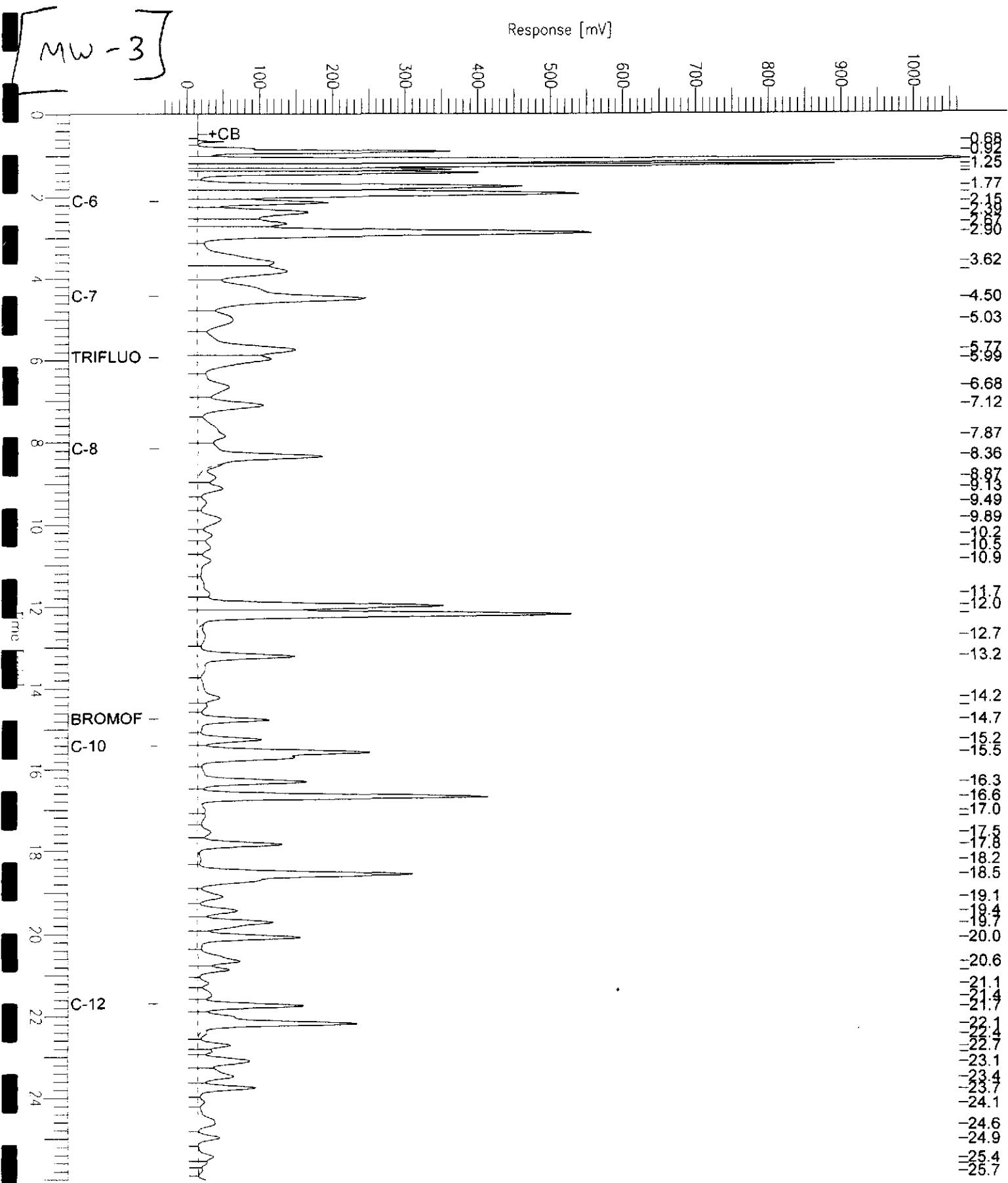
Sample #: A1 Page 1 of 1
Date : 7/5/02 07:31 PM
Time of Injection: 7/5/02 07:05 PM
Low Point : -37.38 mV High Point : 1064.46 mV
Plot Scale: 1101.8 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 159514-003,73536
 FileName : G:\GC07\DATA\187A027.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: -37 mV

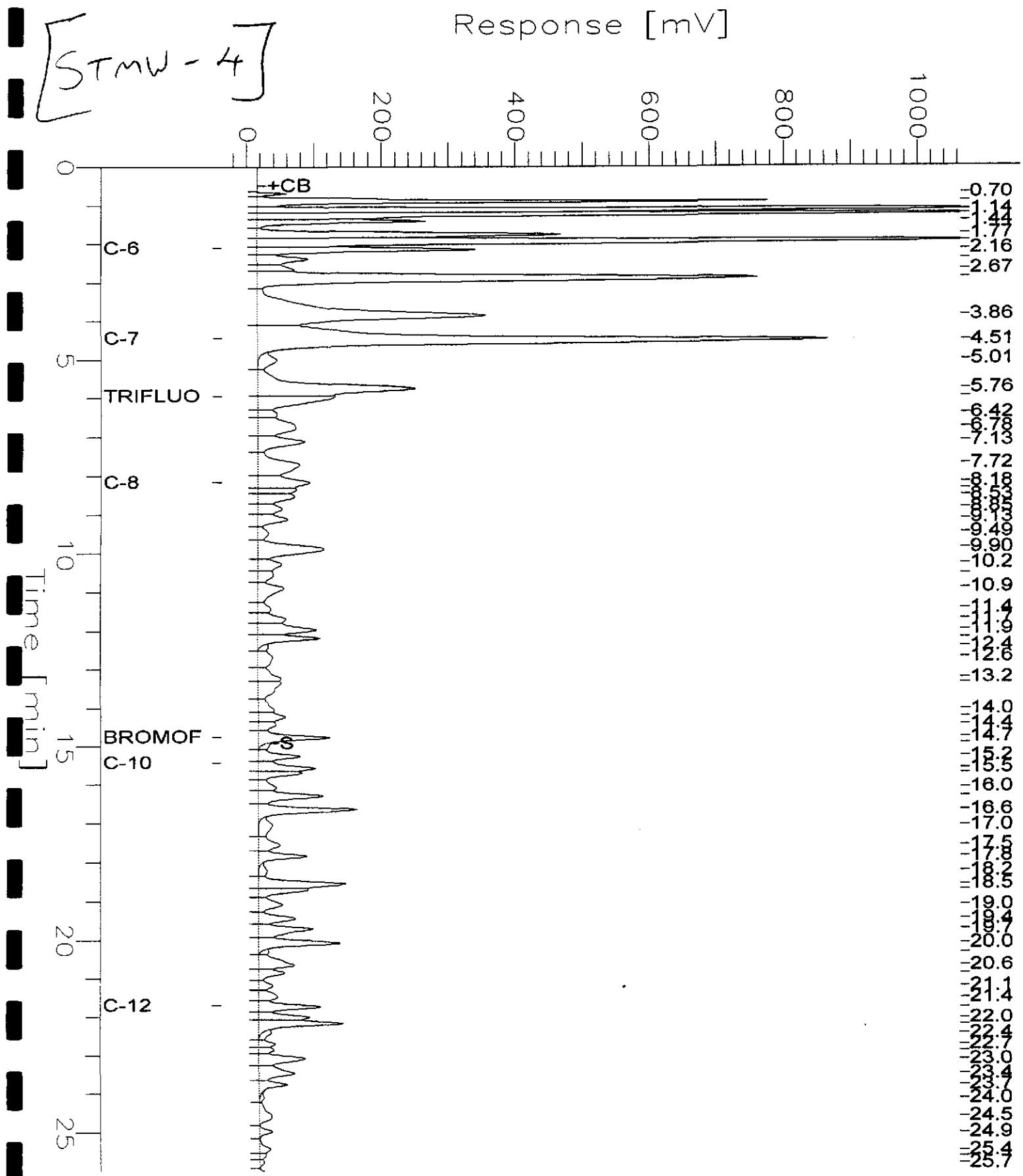
Sample #: B1 Page 1 of 1
 Date : 7/8/02 04:54 PM
 Time of Injection: 7/8/02 04:28 PM
 Low Point : -37.35 mV High Point : 1064.63 mV
 Plot Scale: 1102.0 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 159514-004,73513
FileName : G:\GC07\DATA\186A020.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -37 mV

Sample #: A1 Page 1 of 1
Date : 7/6/02 04:02 PM
Time of Injection: 7/5/02 09:21 PM
Low Point : -36.79 mV High Point : 1064.74 mV
Plot Scale: 1101.5 mV



Total Volatile Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	8015B(M)
Matrix:	Water	Sampled:	07/01/02
Units:	ug/L	Received:	07/03/02

Field ID: STMW-5 Diln Fac: 1.000
 Type: SAMPLE Batch#: 73536
 Lab ID: 159514-005 Analyzed: 07/08/02

Analyte	Result	RL
Gasoline C7-C12	4,300	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	149 *	68-145
Bromofluorobenzene (FID)	174 *	66-143

Type: BLANK Batch#: 73513
 Lab ID: QC183139 Analyzed: 07/05/02
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	68-145
Bromofluorobenzene (FID)	100	66-143

Type: BLANK Batch#: 73536
 Lab ID: QC183226 Analyzed: 07/06/02
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	90	68-145
Bromofluorobenzene (FID)	100	66-143

* = Value outside of QC limits; see narrative

ND = Not Detected

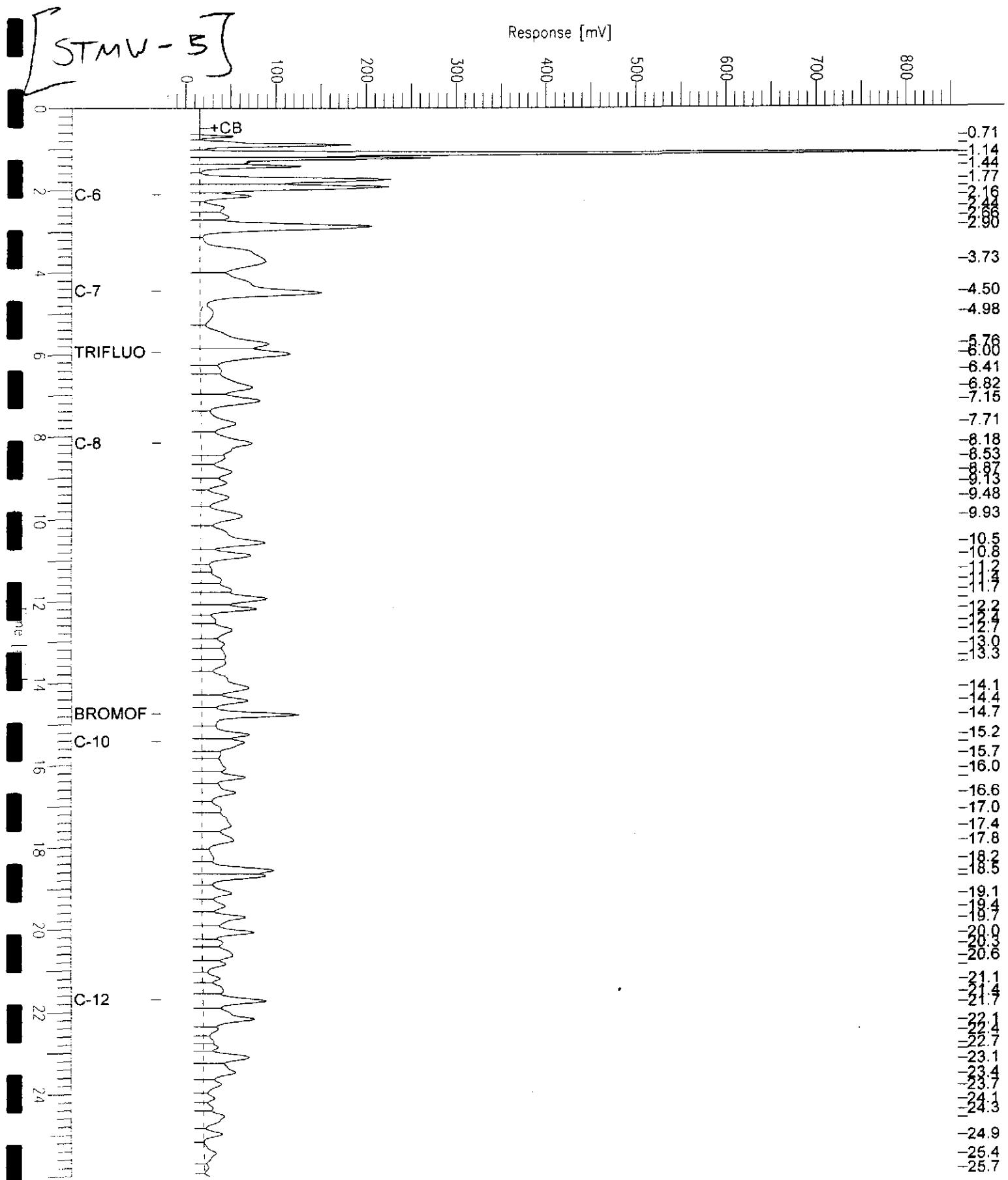
RL = Reporting Limit

Page 2 of 2

GC07 TVH 'A' Data File RTX 502

Sample Name : 159514-005,73536
FileName : G:\GC07\DATA\187A029.raw
Method : TVHSTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -27 mV

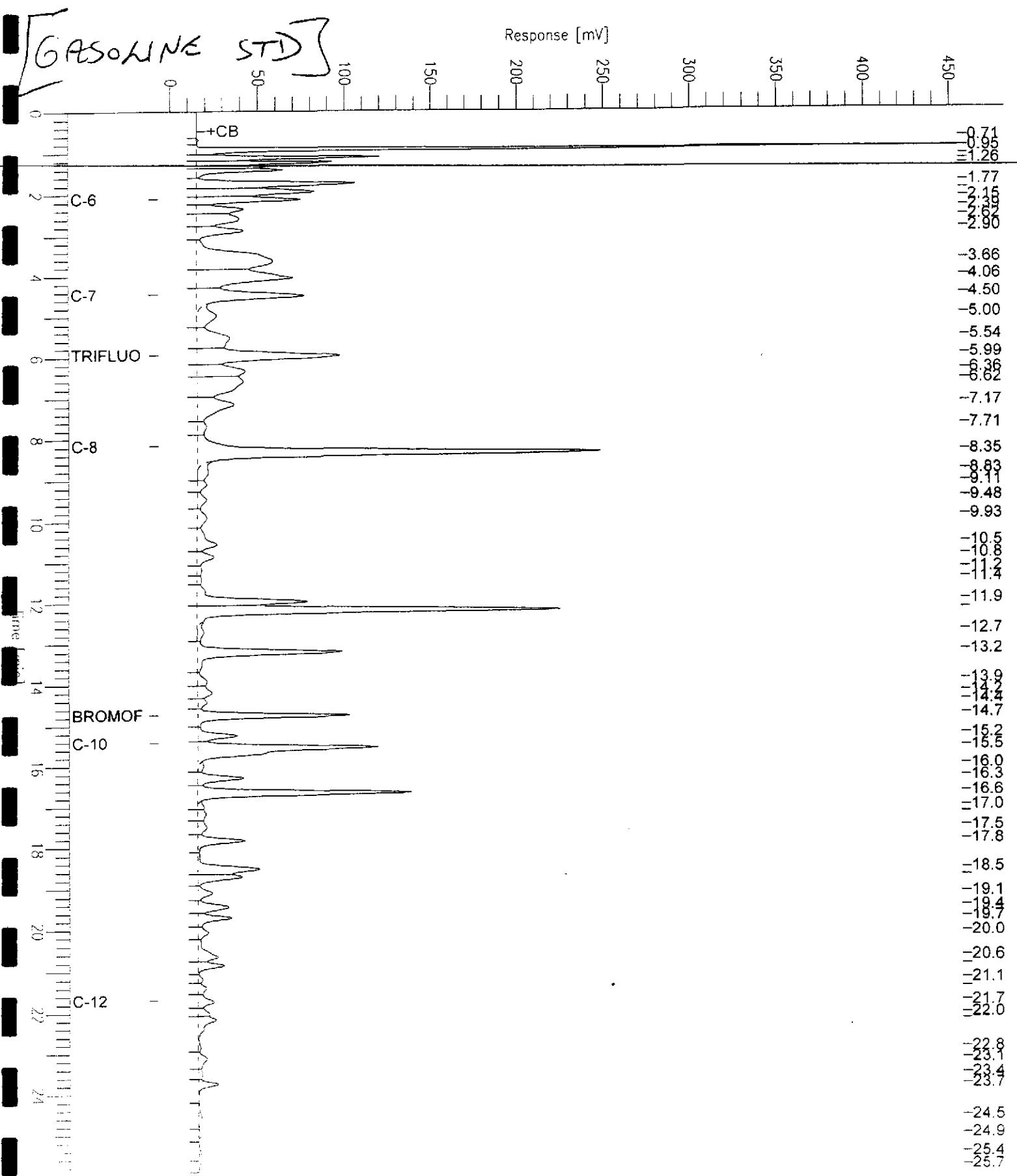
Sample #: B1 Page 1 of 1
Date : 7/8/02 06:02 PM
Time of Injection: 7/8/02 05:36 PM
Low Point : -26.80 mV High Point : 858.15 mV
Plot Scale: 885.0 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : CCV/LCS/QC183140,73513,02WS1033,5/5000
 File Name : G:\GC07\DATA\186A007.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: -7 mV

Sample #: Page 1 of 1
 Date : 7/5/02 02:26 PM
 Time of Injection: 7/5/02 01:59 PM
 Low Point : -6.88 mV High Point : 454.64 mV
 Plot Scale: 461.5 mV



Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC183529	Batch#:	73609
Matrix:	Water	Analyzed:	07/10/02
Units:	ug/L		

Analyte	Result	RL
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
MTBE	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

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC183529	Batch#:	73609
Matrix:	Water	Analyzed:	07/10/02
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
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	#REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	108	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC183694	Batch#:	73646
Matrix:	Water	Analyzed:	07/11/02
Units:	ug/L		

Analyte	Result	RL
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
MTBE	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

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC183694	Batch#:	73646
Matrix:	Water	Analyzed:	07/11/02
Units:	ug/L		

Analyte	Result	RP
1,2-Dibromoethane	ND	5.0
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	%REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	107	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	73609
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	1.000		

Type: BS Lab ID: QC183527

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	50.81	102	71-131
Benzene	50.00	50.50	101	76-120
Trichloroethene	50.00	51.54	103	78-120
Toluene	50.00	51.49	103	79-120
Chlorobenzene	50.00	50.22	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC183528

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	48.46	97	71-131	5	20
Benzene	50.00	49.36	99	76-120	2	20
Trichloroethene	50.00	49.57	99	78-120	4	20
Toluene	50.00	49.72	99	79-120	3	20
Chlorobenzene	50.00	48.92	98	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

Page 1 of 1

13.0

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	73646
Units:	ug/L	Analyzed:	07/11/02
Diln Fac:	1.000		

Type: BS Lab ID: QC183692

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	49.18	98	71-131
Benzene	50.00	49.55	99	76-120
Trichloroethene	50.00	51.82	104	78-120
Toluene	50.00	49.63	99	79-120
Chlorobenzene	50.00	49.36	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-121
1,2-Dichloroethane-d4	104	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC183693

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	47.71	95	71-131	3	20
Benzene	50.00	48.01	96	76-120	3	20
Trichloroethene	50.00	49.56	99	78-120	4	20
Toluene	50.00	48.71	97	79-120	2	20
Chlorobenzene	50.00	47.94	96	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-121
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference
Page 1 of 1

Total Volatile Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC183140	Batch#:	73513
Matrix:	Water	Analyzed:	07/05/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,131	107	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	68-145
Bromofluorobenzene (FID)	107	66-143

Total Volatile Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC183227	Batch#:	73536
Matrix:	Water	Analyzed:	07/06/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,982	99	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	68-145
Bromofluorobenzene (FID)	106	66-143

Total Volatile Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Batch#:	73513
MSS Lab ID:	159513-002	Sampled:	07/02/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/05/02
Diln Fac:	1.000		

Type: MS Lab ID: QC183141

Analyte	MSS Result	Spiked	Result	tREC	Limits
Gasoline C7-C12	22.40	2,000	2,136	106	67-120

Surrogate	TREC	Limits
Trifluorotoluene (FID)	110	68-145
Bromofluorobenzene (FID)	116	66-143

Type: **MSD** Lab ID: **QC183142**

Analyte	Spiked	Result	SREC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,095	104	67-120	2	20

Surrogate	#REC	Limits
Trifluorotoluene (FID)	109	68-145
Bromofluorobenzene (FID)	118	66-143

RPD= Relative Percent Difference

Page 1 of 1

Total Volatile Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	8015B (M)
Field ID:	ZZZZZZZZZZ	Batch#:	73536
MSS Lab ID:	159481-001	Sampled:	07/02/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/06/02
Diln Fac:	1.000		

Type: MS Lab ID: QC183228

Analyte	MS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	26.44	2,000	2,241	111	67-120
Surrogate					
Trifluorotoluene (FID)	109	68-145			
Bromofluorobenzene (FID)	119	66-143			

Type: MSD Lab ID: QC183229

Analyte	Spiked	Result	%REC	Limits	RPD	Limits
Gasoline C7-C12	2,000	2,281	113	67-120	2	20
Surrogate						
Trifluorotoluene (FID)	110	68-145				
Bromofluorobenzene (FID)	117	66-143				

RPD= Relative Percent Difference

Page 1 of 1

Total Extractable Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 3520C
Project#:	8-90-420-GI	Analysis:	EPA 8015B(M)
Matrix:	Water	Sampled:	07/01/02
Units:	ug/L	Received:	07/03/02
Diln Fac:	1.000	Prepared:	07/09/02
Batch#:	73602	Analyzed:	07/10/02

Field ID: MW-1 Lab ID: 159514-001
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	280 L Y	50

Surrogate	SREC	Limits
Hexacosane	95	39-137

Field ID: MW-2 Lab ID: 159514-002
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	940 L Y	50

Surrogate	SREC	Limits
Hexacosane	98	39-137

Field ID: MW-3 Lab ID: 159514-003
Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	5,200 L Y	50

Surrogate	SREC	Limits
Hexacosane	102	39-137

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

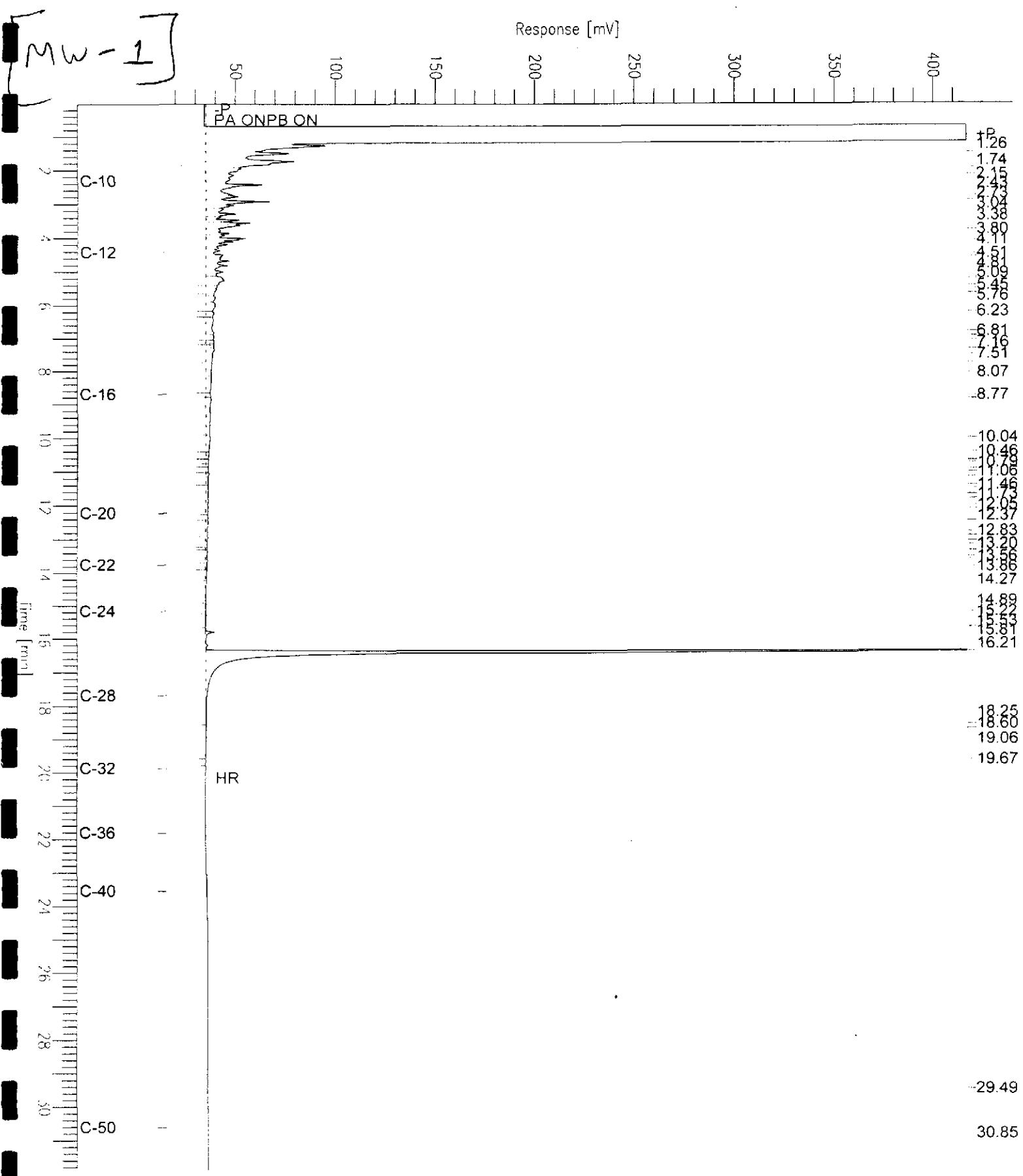
L= Reporting Limit

Page 1 of 2

Chromatogram

Sample Name : 159514-001,73602
FileName : G:\GC13\CHB\191B006.RAW
Method : BTEH190.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 16 mV

Sample #: 73602 Page 1 of 1
Date : 7/11/02 09:12 AM
Time of Injection: 7/10/02 05:40 PM
Low Point : 16.24 mV High Point : 417.03 mV
Plot Scale: 400.8 mV

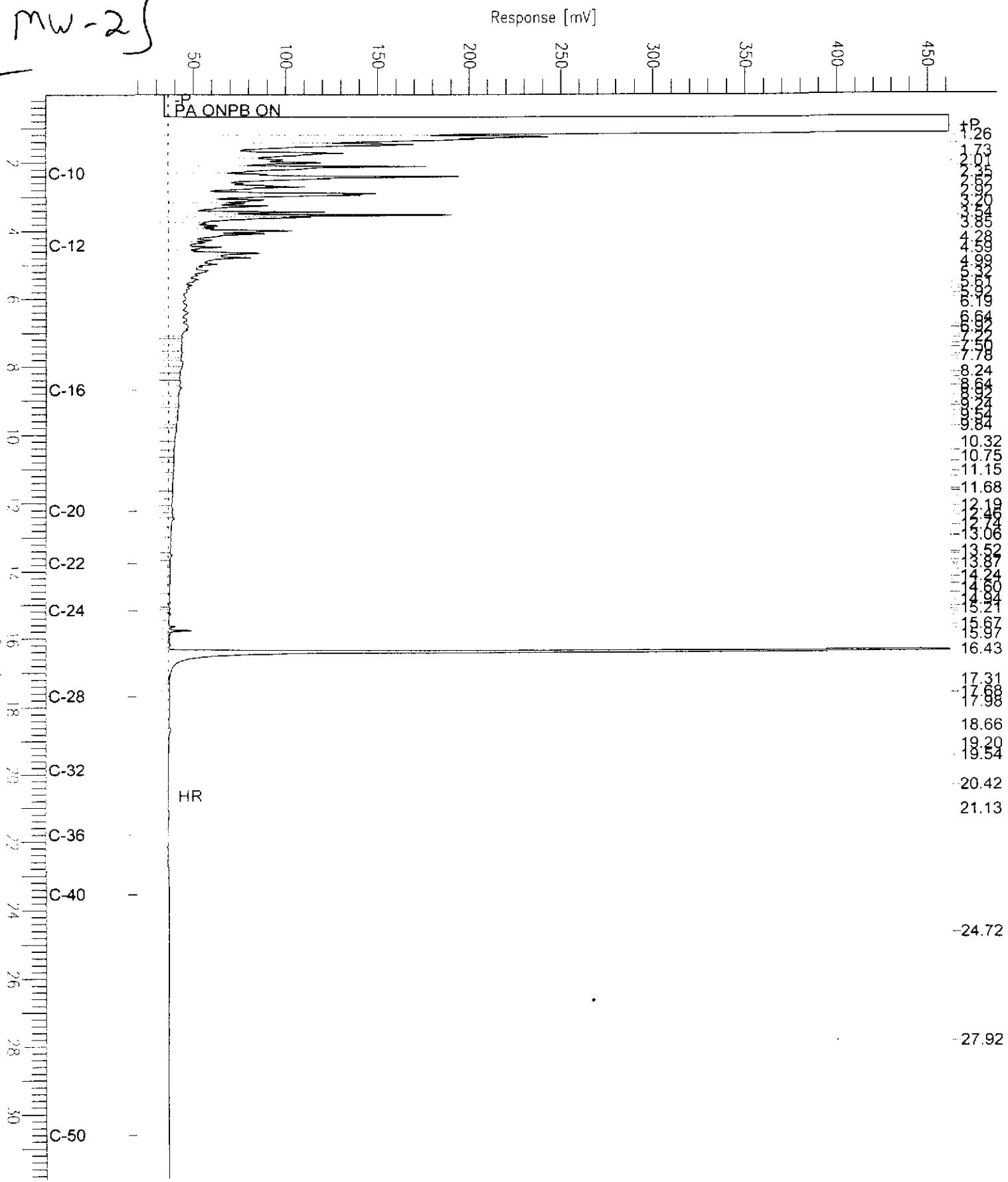


Chromatogram

Sample Name : 159514-002,73602
FileName : G:\GC13\CHB\191B007.RAW
Method : BTEH190.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 20 mV

Sample #: 73602 Page 1 of 1
Date : 7/11/02 09:12 AM
Time of Injection: 7/10/02 06:19 PM
Low Point : 19.67 mV High Point : 461.76 mV
Plot Scale: 442.1 mV

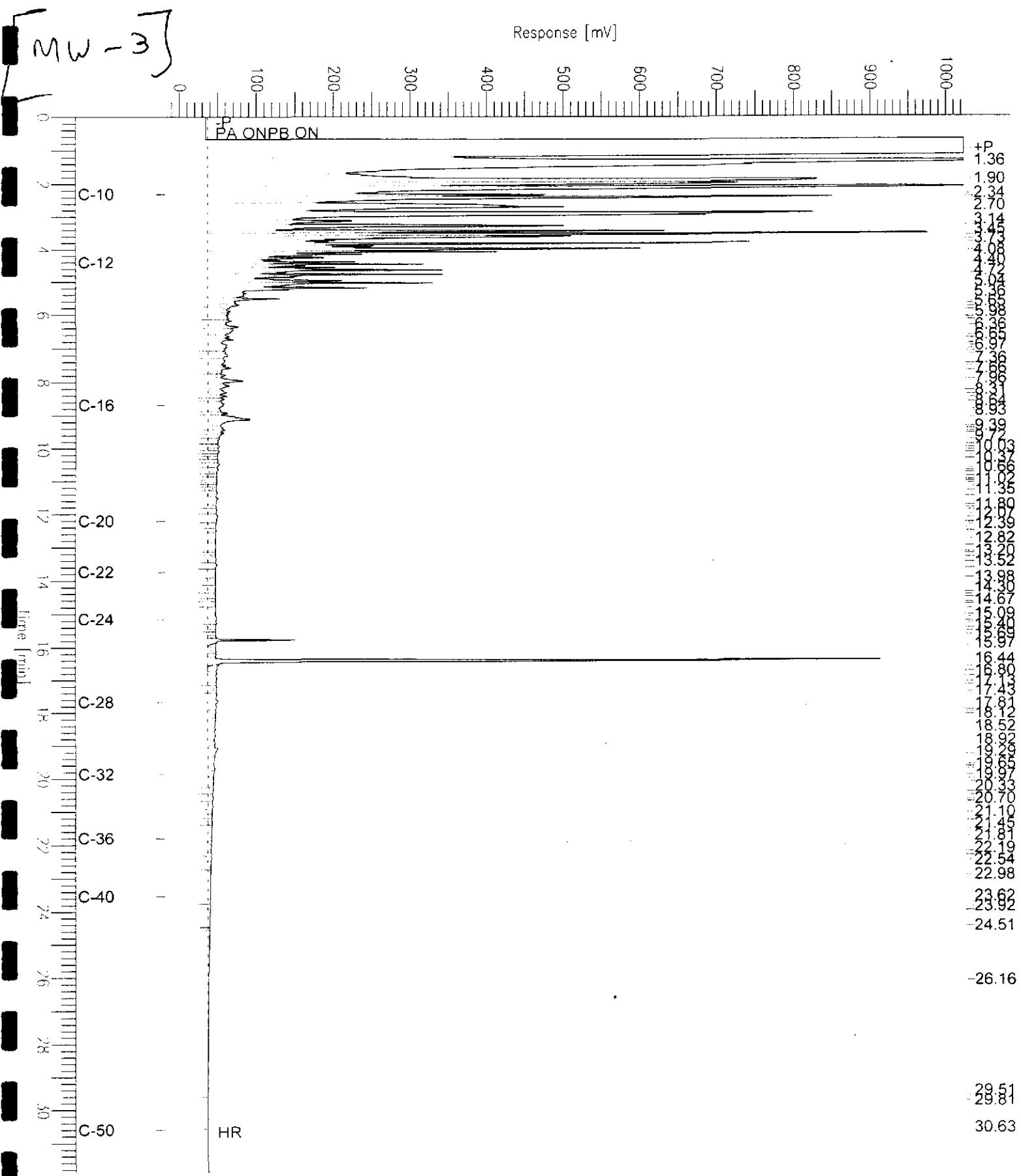
[MW - 2]



Chromatogram

Sample Name : 159514-003,73602
FileName : G:\GC13\CHB\191B008.RAW
Method : BTEH190.MTH
Start Time : 0.00 min End Time : 31.90 min
Scale Factor: 0.0 Plot Offset: -18 mV

Sample #: 73602 Page 1 of 1
Date : 7/11/02 09:13 AM
Time of Injection: 7/10/02 06:59 PM
Low Point : -17.94 mV High Point : 1024.00 mV
Plot Scale: 1041.9 mV



Total Extractable Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 3520C
Project#:	8-90-420-GI	Analysis:	EPA 8015B(M)
Matrix:	Water	Sampled:	07/01/02
Units:	ug/L	Received:	07/03/02
Diln Fac:	1.000	Prepared:	07/09/02
Batch#:	73602	Analyzed:	07/10/02

Field ID: STMW-4 Lab ID: 159514-004
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	6,700 L Y	50

Surrogate	SREC	Limits
Hexacosane	98	39-137

Field ID: STMW-5 Lab ID: 159514-005
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	1,500 L Y	50

Surrogate	SREC	Limits
Hexacosane	91	39-137

Type: BLANK Cleanup Method: EPA 3630C
 Lab ID: QC183499

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	SREC	Limits
Hexacosane	68	39-137

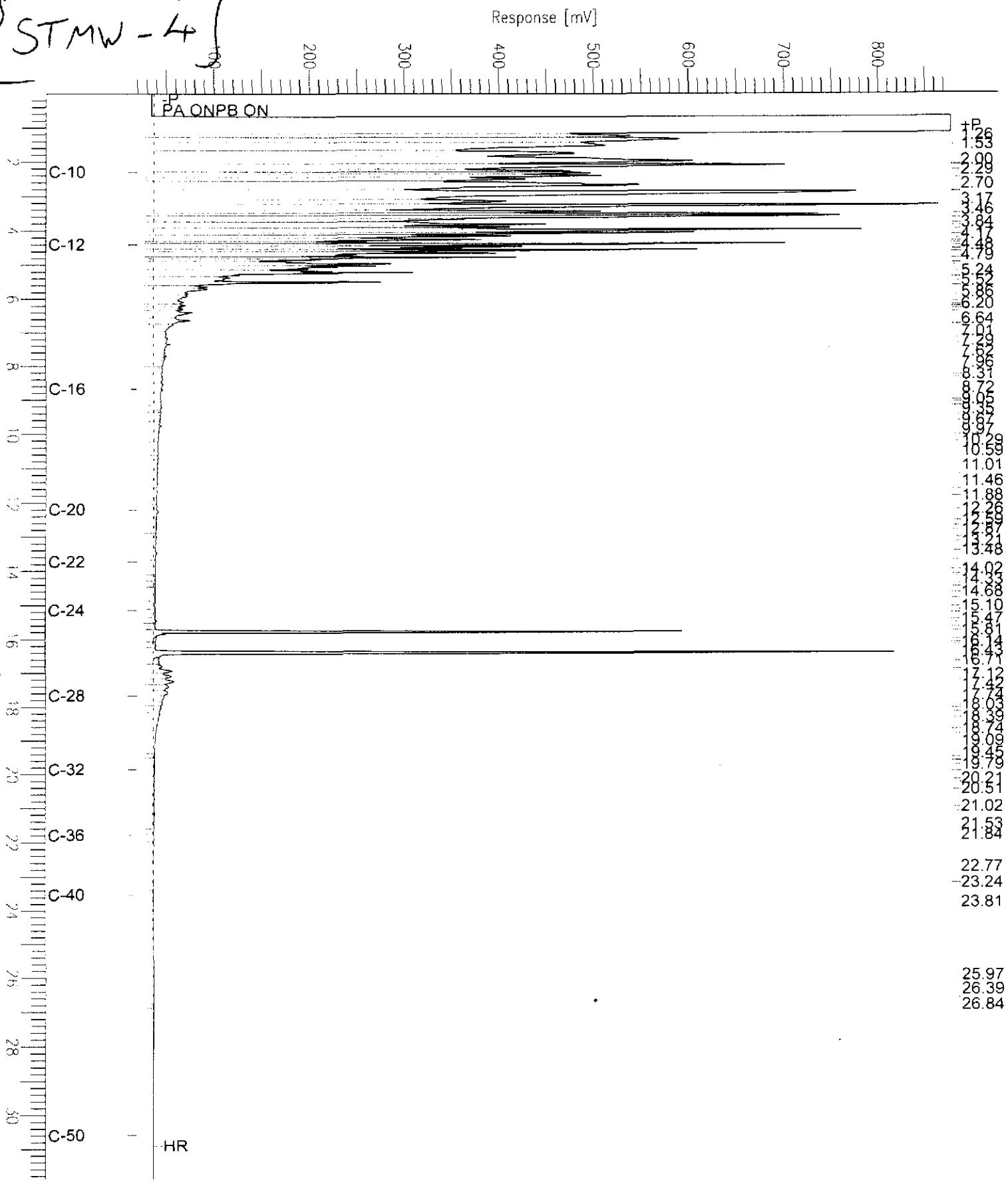
L= Lighter hydrocarbons contributed to the quantitation
 Y= Sample exhibits fuel pattern which does not resemble standard
 ND= Not Detected
 L= Reporting Limit
 Page 2 of 2

Chromatogram

Sample Name : 159514-004,73602
FileName : G:\GC13\CHB\191B009.RAW
Method : BTEH190.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 20 mV

Sample #: 73602 Page 1 of 1
Date : 7/11/02 09:14 AM
Time of Injection: 7/10/02 07:39 PM
Low Point : 19.79 mV High Point : 877.88 mV
Plot Scale: 858.1 mV

[STMW - 4]

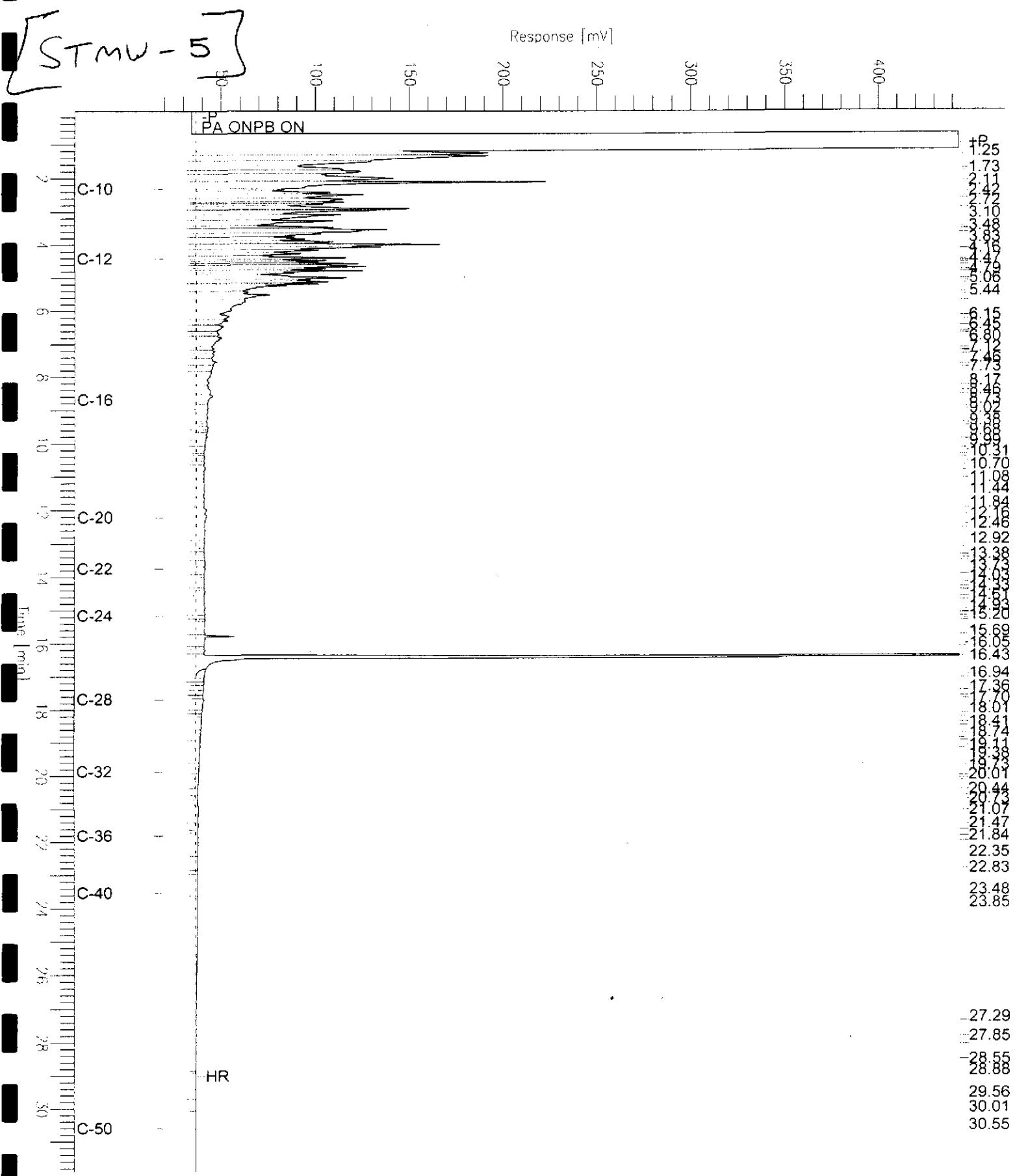


Chromatogram

Sample Name : 159514-005,73602
FileName : G:\GC13\CHB\191B010.RAW
Method : BTEH190.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 20 mV

Sample #: 73602 Date : 7/11/02 09:14 AM
Time of Injection: 7/10/02 08:18 PM
Low Point : 19.77 mV High Point : 443.11 mV
Plot Scale: 423.3 mV

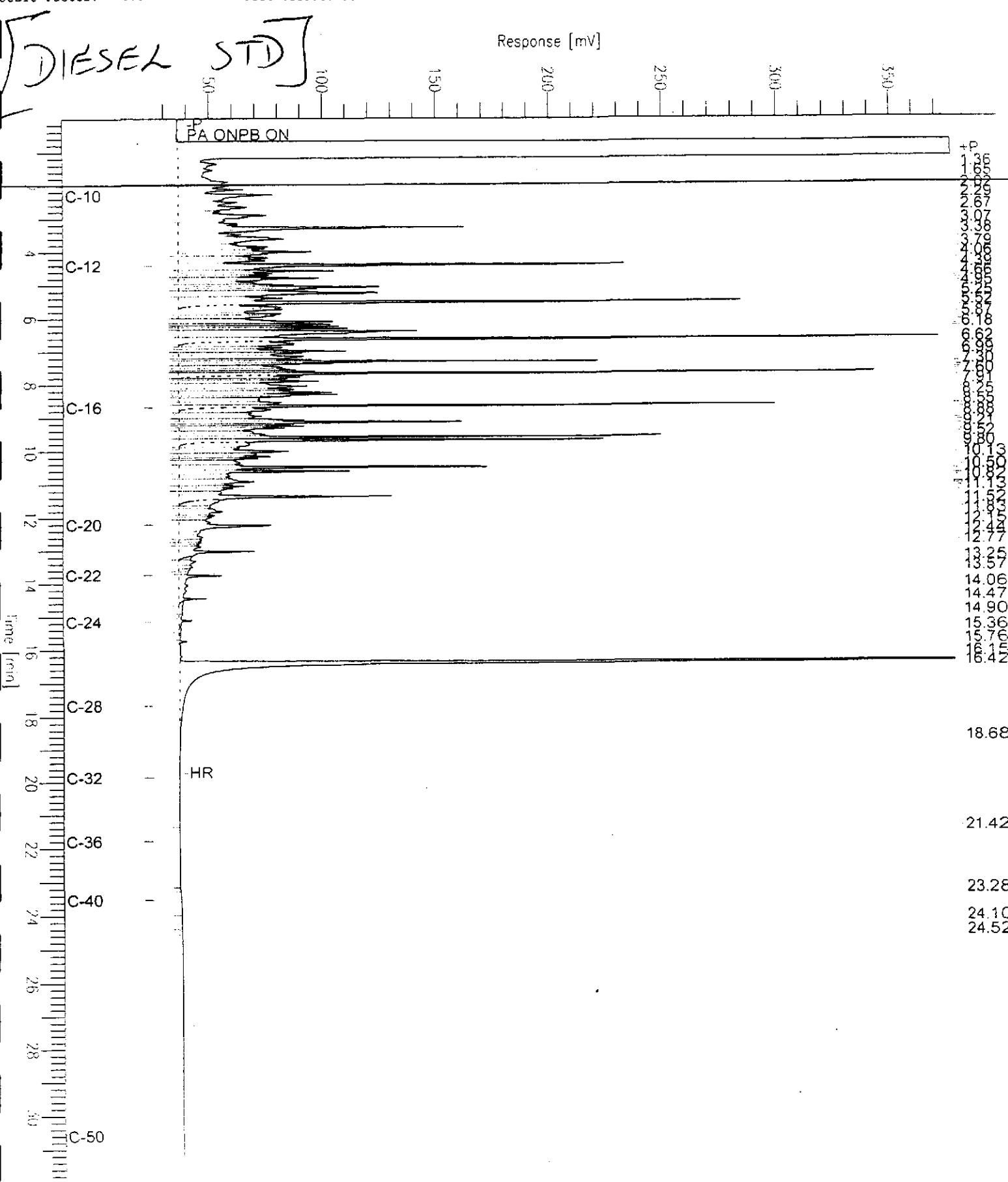
Page 1 of 1



Chromatogram

Sample Name : ccv_02ws0995.dsl
FileName : G:\GC13\CHB\192B002.RAW
Method : STEH190.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 25 mV

Sample #: 500mg/L Page 1 of 1
Date : 7/11/02 11:45 AM
Time of Injection: 7/11/02 09:47 AM
Low Point : 25.23 mV High Point : 376.87 mV
Plot Scale: 351.6 mV





Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 3520C
Project#:	8-90-420-GI	Analysis:	EPA 8015B (M)
Matrix:	Water	Batch#:	73602
Units:	ug/L	Prepared:	07/09/02
Diln Fac:	1.000	Analyzed:	07/11/02

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC183500

Analyte	Spiked	Result	REC	Limits
Diesel C10-C24	2,500	1,719	69	37-120

Surrogate	REC	Limits
Hexacosane	72	39-137

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC183501

Analyte	Spiked	Result	REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,652	66	37-120	4	26

Surrogate	REC	Limits
Hexacosane	66	39-137

purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	73609
Lab ID:	159514-001	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	1.000		

Analyte	Result	RL
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
MTBE	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	25	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

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	73609
Lab ID:	159514-001	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
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	%REC	Limits
Dibromofluoromethane	99	80-121
1,2-Dichloroethane-d4	104	77-130
Toluene-d8	106	80-120
Bromofluorobenzene	109	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	73609
Lab ID:	159514-002	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	2.000		

Analyte	Result	RL
Freon 12	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	10
Acetone	ND	40
Freon 113	ND	10
1,1-Dichloroethene	ND	10
Methylene Chloride	ND	40
Carbon Disulfide	ND	10
MTBE	ND	10
trans-1,2-Dichloroethene	ND	10
Vinyl Acetate	ND	100
1,1-Dichloroethane	ND	10
2-Butanone	ND	20
cis-1,2-Dichloroethene	ND	10
2,2-Dichloropropane	ND	10
Chloroform	ND	10
Bromochloromethane	ND	20
1,1,1-Trichloroethane	ND	10
1,1-Dichloropropene	ND	10
Carbon Tetrachloride	ND	10
1,2-Dichloroethane	ND	10
Benzene	300	10
Trichloroethene	ND	10
1,2-Dichloropropane	ND	10
Bromodichloromethane	ND	10
Dibromomethane	ND	10
4-Methyl-2-Pentanone	ND	20
cis-1,3-Dichloropropene	ND	10
Toluene	29	10
trans-1,3-Dichloropropene	ND	10
1,1,2-Trichloroethane	ND	10
2-Hexanone	ND	20
1,3-Dichloropropane	ND	10
Tetrachloroethene	ND	10

ND= Not Detected

L= Reporting Limit

Page 1 of 2



Curtis & Tompkins, Ltd.

purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	73609
Lab ID:	159514-002	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	2.000		

Analyte	Result	RL
Dibromochloromethane	ND	10
1,2-Dibromoethane	ND	10
Chlorobenzene	ND	10
1,1,1,2-Tetrachloroethane	ND	10
Ethylbenzene	45	10
m,p-Xylenes	27	10
o-Xylene	ND	10
Styrene	ND	10
Bromoform	ND	10
Isopropylbenzene	ND	10
1,1,2,2-Tetrachloroethane	ND	10
1,2,3-Trichloropropane	ND	10
Propylbenzene	13	10
Bromobenzene	ND	10
1,3,5-Trimethylbenzene	ND	10
2-Chlorotoluene	ND	10
4-Chlorotoluene	ND	10
tert-Butylbenzene	ND	10
1,2,4-Trimethylbenzene	ND	10
sec-Butylbenzene	ND	10
para-Isopropyl Toluene	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
n-Butylbenzene	ND	10
1,2-Dichlorobenzene	ND	10
1,2-Dibromo-3-Chloropropane	ND	10
1,2,4-Trichlorobenzene	ND	10
Hexachlorobutadiene	ND	10
Naphthalene	ND	10
1,2,3-Trichlorobenzene	ND	10

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-121
1,2-Dichloroethane-d4	97	77-130
Toluene-d8	106	80-120
Bromofluorobenzene	110	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-3	Units:	ug/L
Lab ID:	159514-003	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	25	2.500	73609	07/10/02
Chloromethane	ND	25	2.500	73609	07/10/02
Vinyl Chloride	ND	25	2.500	73609	07/10/02
Bromomethane	ND	25	2.500	73609	07/10/02
Chloroethane	ND	25	2.500	73609	07/10/02
Trichlorofluoromethane	ND	13	2.500	73609	07/10/02
Acetone	ND	50	2.500	73609	07/10/02
Freon 113	ND	13	2.500	73609	07/10/02
1,1-Dichloroethene	ND	13	2.500	73609	07/10/02
Methylene Chloride	ND	50	2.500	73609	07/10/02
Carbon Disulfide	ND	13	2.500	73609	07/10/02
MTBE	ND	13	2.500	73609	07/10/02
trans-1,2-Dichloroethene	ND	13	2.500	73609	07/10/02
Vinyl Acetate	ND	130	2.500	73609	07/10/02
1,1-Dichloroethane	ND	13	2.500	73609	07/10/02
2-Butanone	ND	25	2.500	73609	07/10/02
cis-1,2-Dichloroethene	ND	13	2.500	73609	07/10/02
2,2-Dichloropropane	ND	13	2.500	73609	07/10/02
Chloroform	ND	13	2.500	73609	07/10/02
Bromochloromethane	ND	25	2.500	73609	07/10/02
1,1,1-Trichloroethane	ND	13	2.500	73609	07/10/02
1,1-Dichloropropene	ND	13	2.500	73609	07/10/02
Carbon Tetrachloride	ND	13	2.500	73609	07/10/02
1,2-Dichloroethane	ND	13	2.500	73609	07/10/02
Benzene	230	13	2.500	73609	07/10/02
Trichloroethene	ND	13	2.500	73609	07/10/02
1,2-Dichloropropane	ND	13	2.500	73609	07/10/02
Bromodichloromethane	ND	13	2.500	73609	07/10/02
Dibromomethane	ND	13	2.500	73609	07/10/02
4-Methyl-2-Pentanone	ND	25	2.500	73609	07/10/02
cis-1,3-Dichloropropene	ND	13	2.500	73609	07/10/02
Toluene	220	13	2.500	73609	07/10/02
trans-1,3-Dichloropropene	ND	13	2.500	73609	07/10/02
1,1,2-Trichloroethane	ND	13	2.500	73609	07/10/02
2-Hexanone	ND	25	2.500	73609	07/10/02
1,3-Dichloropropane	ND	13	2.500	73609	07/10/02
Tetrachloroethene	ND	13	2.500	73609	07/10/02
Dibromochloromethane	ND	13	2.500	73609	07/10/02
1,2-Dibromoethane	ND	13	2.500	73609	07/10/02

ND= Not Detected

L= Reporting Limit

Page 1 of 2



Curtis & Tompkins, Ltd.

purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-3	Units:	ug/L
Lab ID:	159514-003	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chlorobenzene	ND	13	2.500	73609	07/10/02
1,1,1,2-Tetrachloroethane	ND	13	2.500	73609	07/10/02
Ethylbenzene	450	13	2.500	73609	07/10/02
m,p-Xylenes	720	13	2.500	73609	07/10/02
o-Xylene	170	13	2.500	73609	07/10/02
Styrene	ND	13	2.500	73609	07/10/02
Bromoform	ND	13	2.500	73609	07/10/02
Isopropylbenzene	35	13	2.500	73609	07/10/02
1,1,2,2-Tetrachloroethane	ND	13	2.500	73609	07/10/02
1,2,3-Trichloropropane	ND	13	2.500	73609	07/10/02
Propylbenzene	120	13	2.500	73609	07/10/02
Bromobenzene	ND	13	2.500	73609	07/10/02
1,3,5-Trimethylbenzene	180	13	2.500	73609	07/10/02
2-Chlorotoluene	ND	13	2.500	73609	07/10/02
4-Chlorotoluene	ND	13	2.500	73609	07/10/02
tert-Butylbenzene	ND	13	2.500	73609	07/10/02
1,2,4-Trimethylbenzene	490	25	5.000	73646	07/11/02
sec-Butylbenzene	ND	13	2.500	73609	07/10/02
para-Isopropyl Toluene	ND	13	2.500	73609	07/10/02
1,3-Dichlorobenzene	ND	13	2.500	73609	07/10/02
1,4-Dichlorobenzene	ND	13	2.500	73609	07/10/02
n-Butylbenzene	57	13	2.500	73609	07/10/02
1,2-Dichlorobenzene	ND	13	2.500	73609	07/10/02
1,2-Dibromo-3-Chloropropane	ND	13	2.500	73609	07/10/02
1,2,4-Trichlorobenzene	ND	13	2.500	73609	07/10/02
Hexachlorobutadiene	ND	13	2.500	73609	07/10/02
Naphthalene	140	13	2.500	73609	07/10/02
1,2,3-Trichlorobenzene	ND	13	2.500	73609	07/10/02

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	87	80-121	2.500	73609	07/10/02
1,2-Dichloroethane-d4	92	77-130	2.500	73609	07/10/02
Toluene-d8	103	80-120	2.500	73609	07/10/02
Bromofluorobenzene	95	80-120	2.500	73609	07/10/02

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-4	Batch#:	73609
Lab ID:	159514-004	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	2.500		

Analyte	Result	RL
Freon 12	ND	25
Chloromethane	ND	25
Vinyl Chloride	ND	25
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	13
Acetone	ND	50
Freon 113	ND	13
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	50
Carbon Disulfide	ND	13
MTBE	ND	13
trans-1,2-Dichloroethene	ND	13
Vinyl Acetate	ND	130
1,1-Dichloroethane	ND	13
2-Butanone	ND	25
cis-1,2-Dichloroethene	ND	13
2,2-Dichloropropane	ND	13
Chloroform	ND	13
Bromochloromethane	ND	25
1,1,1-Trichloroethane	ND	13
1,1-Dichloropropene	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Benzene	470	13
Trichloroethene	ND	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
Dibromomethane	ND	13
4-Methyl-2-Pentanone	ND	25
cis-1,3-Dichloropropene	ND	13
Toluene	18	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
2-Hexanone	ND	25
1,3-Dichloropropane	ND	13
Tetrachloroethene	ND	13

ND= Not Detected

L= Reporting Limit

Page 1 of 2



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-4	Batch#:	73609
Lab ID:	159514-004	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	2.500		

Analyte	Result	RL
Dibromochloromethane	ND	13
1,2-Dibromoethane	ND	13
Chlorobenzene	ND	13
1,1,1,2-Tetrachloroethane	ND	13
Ethylbenzene	32	13
m,p-Xylenes	45	13
n-Xylene	ND	13
Styrene	ND	13
Bromoform	ND	13
Isopropylbenzene	20	13
1,1,2,2-Tetrachloroethane	ND	13
1,2,3-Trichloropropane	ND	13
Propylbenzene	31	13
Bromobenzene	ND	13
1,3,5-Trimethylbenzene	41	13
2-Chlorotoluene	ND	13
4-Chlorotoluene	ND	13
tert-Butylbenzene	ND	13
1,2,4-Trimethylbenzene	75	13
sec-Butylbenzene	ND	13
para-Isopropyl Toluene	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
n-Butylbenzene	16	13
1,2-Dichlorobenzene	ND	13
1,2-Dibromo-3-Chloropropane	ND	13
1,2,4-Trichlorobenzene	ND	13
Hexachlorobutadiene	ND	13
Naphthalene	20	13
1,2,3-Trichlorobenzene	ND	13

Surrogate	%RBC	Limits
Dibromofluoromethane	90	80-121
1,2-Dichloroethane-d4	94	77-130
Toluene-d8	105	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-5	Batch#:	73609
Lab ID:	159514-005	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	1.000		

Analyte	Result	RL
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
MTBE	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	71	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	14	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

ND= Not Detected

L= Reporting Limit

Page 1 of 2



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	159514	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-5	Batch#:	73609
Lab ID:	159514-005	Sampled:	07/01/02
Matrix:	Water	Received:	07/03/02
Units:	ug/L	Analyzed:	07/10/02
Diln Fac:	1.000		

Analyte	Result	RI
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	14	5.0
m,p-Xylenes	36	5.0
p-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	5.9	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	22	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	6.8	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	15	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	18	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	5.6	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-121
1,2-Dichloroethane-d4	97	77-130
Toluene-d8	106	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

155-14

CHAIN OF CUSTODY RECORD

07-03-2002 10:32 AM FROM

PROJ. NO. 840-420-GI	NAME 5175 Broadway St, Oakland		CON- AINER	ANALYSES REQUESTED (2) TPH DTPH TPA DTPA S210B	REMARKS		
SAMPLERS: (Signature) Richard Murphy							
NO.	DATE	TIME	SOIL WATER	LOCATION			
-1	7/3/02	11:46	✓	MW-1	8	✓ ✓ ✓	
-2		9:00	✓	MW-2	8	✓ ✓ ✓	
-3		12:45	✓	MW-3	8	✓ ✓ ✓	
-4		10:21	✓	STMW-4	8	✓ ✓ ✓	
-5	✓	13:52	✓	STMW-5	8	✓ ✓ ✓	
						<i>Preservation Correct?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
						<i>Received</i> <input checked="" type="checkbox"/> Cold <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> On Ice <input type="checkbox"/> Intact	
Relinquished by: (Signature) Richard Murphy		Date / Time	Received by: (Signature)		Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)		Date / Time	Received by: (Signature)		Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)		Date / Time	Received for Laboratory by: (Signature) Tom E.		Date / Time	Remarks	
					7/3/02 13:20		



ENVIRO SOIL TECH CONSULTANTS

Environmental & Geotechnical Consultants

131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111

Tel: (408) 297-1500

Fax: (408) 292-2116



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

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

Prepared for:

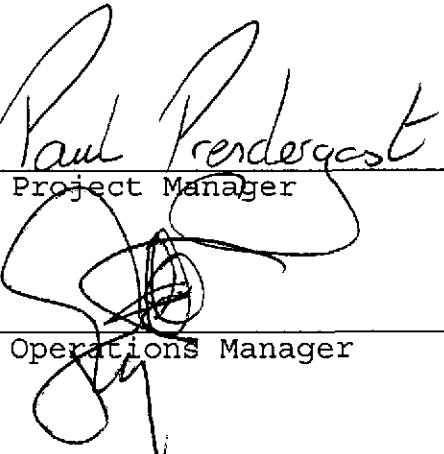
Enviro Soil Tech Consultants
131 Tully Road
San Jose, CA 95111

Date: 29-JUL-02
Lab Job Number: 159749
Project ID: 8-90-420-GI
Location: 5175 Broadway, Oakland

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

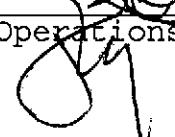
Reviewed by:

Paul Prendergast
Project Manager



Reviewed by:

Operations Manager



This package may be reproduced only in its entirety.

NELAP # 01107CA

Page 1 of 18

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	73910
Lab ID:	159749-001	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/22/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	3.3	0.5
Benzene	12	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	0.8	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	73910
Lab ID:	159749-001	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/22/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	3.3	0.5
m,p-Xylenes	1.9	0.5
o-Xylene	0.6	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	3.6	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	5.6	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	2.7	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	1.0	0.5
1,2,4-Trimethylbenzene	3.1	0.5
sec-Butylbenzene	1.4	0.5
para-Isopropyl Toluene	1.7	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	3.6	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	2.5	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-121
1,2-Dichloroethane-d4	102	77-130
Toluene-d8	104	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	73910
Lab ID:	159749-002	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/22/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	20	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	0.8	0.5
Benzene	170	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	30	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	73910
Lab ID:	159749-002	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/22/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	21	0.5
m,p-Xylenes	68	0.5
o-Xylene	34	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	1.3	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	1.5	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	18	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	1.1	0.5
1,2,4-Trimethylbenzene	22	0.5
sec-Butylbenzene	1.0	0.5
para-Isopropyl Toluene	4.0	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	6.4	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-121
1,2-Dichloroethane-d4	98	77-130
Toluene-d8	107	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected

RL= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	73932
Lab ID:	159749-003	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/23/02
Diln Fac:	8.333		

Analyte	Result	RL
Freon 12	ND	8.3
Chloromethane	ND	8.3
Vinyl Chloride	ND	4.2
Bromomethane	ND	8.3
Chloroethane	ND	8.3
Trichlorofluoromethane	ND	8.3
Acetone	ND	83
Freon 113	ND	42
1,1-Dichloroethene	ND	4.2
Methylene Chloride	ND	83
Carbon Disulfide	ND	4.2
MTBE	ND	4.2
trans-1,2-Dichloroethene	ND	4.2
Vinyl Acetate	ND	83
1,1-Dichloroethane	ND	4.2
2-Butanone	ND	83
cis-1,2-Dichloroethene	ND	4.2
2,2-Dichloropropane	ND	4.2
Chloroform	ND	4.2
Bromochloromethane	ND	4.2
1,1,1-Trichloroethane	ND	4.2
1,1-Dichloropropene	ND	4.2
Carbon Tetrachloride	ND	4.2
1,2-Dichloroethane	5.1	4.2
Benzene	200	4.2
Trichloroethene	ND	4.2
1,2-Dichloropropane	ND	4.2
Bromodichloromethane	ND	4.2
Dibromomethane	ND	4.2
4-Methyl-2-Pentanone	ND	83
cis-1,3-Dichloropropene	ND	4.2
Toluene	140	4.2
trans-1,3-Dichloropropene	ND	4.2
1,1,2-Trichloroethane	ND	4.2
2-Hexanone	ND	83
1,3-Dichloropropane	ND	4.2
Tetrachloroethene	ND	4.2

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	73932
Lab ID:	159749-003	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/23/02
Diln Fac:	8.333		

Analyte	Result	RL
Dibromochloromethane	ND	4.2
1,2-Dibromoethane	ND	4.2
Chlorobenzene	ND	4.2
1,1,1,2-Tetrachloroethane	ND	4.2
Ethylbenzene	400	4.2
m,p-Xylenes	510	4.2
o-Xylene	110	4.2
Styrene	ND	4.2
Bromoform	ND	8.3
Isopropylbenzene	28	4.2
1,1,2,2-Tetrachloroethane	ND	4.2
1,2,3-Trichloropropane	ND	4.2
Propylbenzene	95	4.2
Bromobenzene	ND	4.2
1,3,5-Trimethylbenzene	270	4.2
2-Chlorotoluene	ND	4.2
4-Chlorotoluene	ND	4.2
tert-Butylbenzene	ND	4.2
1,2,4-Trimethylbenzene	750	4.2
sec-Butylbenzene	12	4.2
para-Isopropyl Toluene	15	4.2
1,3-Dichlorobenzene	ND	4.2
1,4-Dichlorobenzene	ND	4.2
n-Butylbenzene	79	4.2
1,2-Dichlorobenzene	ND	4.2
1,2-Dibromo-3-Chloropropane	ND	4.2
1,2,4-Trichlorobenzene	ND	4.2
Hexachlorobutadiene	ND	4.2
Naphthalene	160	17
1,2,3-Trichlorobenzene	ND	4.2

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	101	77-130
Toluene-d8	104	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-4	Batch#:	73910
Lab ID:	159749-004	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/23/02
Diln Fac:	5.000		

Analyte	Result	RL
Freon 12	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Acetone	ND	50
Freon 113	ND	25
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	50
Carbon Disulfide	ND	2.5
MTBE	ND	2.5
trans-1,2-Dichloroethene	ND	2.5
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	2.5
2-Butanone	ND	50
cis-1,2-Dichloroethene	ND	2.5
2,2-Dichloropropane	ND	2.5
Chloroform	ND	2.5
Bromochloromethane	ND	2.5
1,1,1-Trichloroethane	ND	2.5
1,1-Dichloropropene	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Benzene	870	2.5
Trichloroethene	ND	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
Dibromomethane	ND	2.5
4-Methyl-2-Pentanone	ND	50
cis-1,3-Dichloropropene	ND	2.5
Toluene	27	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
2-Hexanone	ND	50
1,3-Dichloropropane	ND	2.5
Tetrachloroethene	ND	2.5

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-4	Batch#:	73910
Lab ID:	159749-004	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/23/02
Diln Fac:	5.000		

Analyte	Result	RL
Dibromochloromethane	ND	2.5
1,2-Dibromoethane	ND	2.5
Chlorobenzene	ND	2.5
1,1,1,2-Tetrachloroethane	ND	2.5
Ethylbenzene	54	2.5
m,p-Xylenes	67	2.5
o-Xylene	16	2.5
Styrene	ND	2.5
Bromoform	ND	5.0
Isopropylbenzene	29	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,2,3-Trichloropropane	ND	2.5
Propylbenzene	45	2.5
Bromobenzene	ND	2.5
1,3,5-Trimethylbenzene	55	2.5
2-Chlorotoluene	ND	2.5
4-Chlorotoluene	ND	2.5
tert-Butylbenzene	4.9	2.5
1,2,4-Trimethylbenzene	110	2.5
sec-Butylbenzene	7.3	2.5
para-Isopropyl Toluene	12	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
n-Butylbenzene	23	2.5
1,2-Dichlorobenzene	ND	2.5
1,2-Dibromo-3-Chloropropane	ND	2.5
1,2,4-Trichlorobenzene	ND	2.5
Hexachlorobutadiene	ND	2.5
Naphthalene	63	10
1,2,3-Trichlorobenzene	ND	2.5

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-121
1,2-Dichloroethane-d4	101	77-130
Toluene-d8	106	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-5	Batch#:	73910
Lab ID:	159749-005	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/22/02
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromoform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	1.1	0.5
Benzene	110	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	29	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Field ID:	STMW-5	Batch#:	73910
Lab ID:	159749-005	Sampled:	07/18/02
Matrix:	Water	Received:	07/18/02
Units:	ug/L	Analyzed:	07/22/02
Diln Fac:	1.000		

Analyte	Result	RL
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	34	0.5
m,p-Xylenes	53	0.5
o-Xylene	4.1	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	3.4	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	13	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	8.2	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	25	0.5
sec-Butylbenzene	2.1	0.5
para-Isopropyl Toluene	2.2	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	16	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	4.8	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	% REC	Limits
Dibromofluoromethane	93	80-121
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	104	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC184730	Batch#:	73910
Matrix:	Water	Analyzed:	07/22/02
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5

ND= Not Detected

L= Reporting Limit

Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC184730	Batch#:	73910
Matrix:	Water	Analyzed:	07/22/02
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
c-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	#REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	114	77-130
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC184815	Batch#:	73932
Matrix:	Water	Analyzed:	07/23/02
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	5.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5

ND= Not Detected

L= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC184815	Batch#:	73932
Matrix:	Water	Analyzed:	07/23/02
Units:	ug/L		

Analyte	Result	RL
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	0.5
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	0.5
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-121
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected

L= Reporting Limit

Page 2 of 2



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	73910
Units:	ug/L	Analyzed:	07/22/02
Diln Fac:	1.000		

Type: BS Lab ID: QC184727

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	54.14	108	71-131
Benzene	50.00	48.58	97	76-120
Trichloroethene	50.00	50.17	100	78-120
Toluene	50.00	49.50	99	79-120
Chlorobenzene	50.00	50.96	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	98	77-130
Toluene-d8	95	80-120
Bromofluorobenzene	92	80-120

Type: BSD Lab ID: QC184728

Analyte	Spiked	Result	%REC	Limits	RPD	lim
1,1-Dichloroethene	50.00	51.73	103	71-131	5	20
Benzene	50.00	49.28	99	76-120	1	20
Trichloroethene	50.00	51.09	102	78-120	2	20
Toluene	50.00	49.97	100	79-120	1	20
Chlorobenzene	50.00	48.79	98	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	109	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

Purgeable Organics by GC/MS

Lab #:	159749	Location:	5175 Broadway, Oakland
Client:	Enviro Soil Tech Consultants	Prep:	EPA 5030B
Project#:	8-90-420-GI	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	73932
Units:	ug/L	Analyzed:	07/23/02
Diln Fac:	1.000		

Type: BS Lab ID: QC184812

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	51.79	104	71-131
Benzene	50.00	49.86	100	76-120
Trichloroethene	50.00	51.01	102	78-120
Toluene	50.00	50.98	102	79-120
Chlorobenzene	50.00	51.23	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-121
1,2-Dichloroethane-d4	106	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	92	80-120

Type: BSD Lab ID: QC184813

Analyte	Spiked	Result	%REC	Limits	RPD	Lim.
1,1-Dichloroethene	50.00	49.29	99	71-131	5	20
Benzene	50.00	48.69	97	76-120	2	20
Trichloroethene	50.00	50.09	100	78-120	2	20
Toluene	50.00	50.30	101	79-120	1	20
Chlorobenzene	50.00	49.77	100	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-121
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-120

PD= Relative Percent Difference

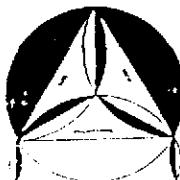
Page 1 of 1

11.0

159749

CHAIN OF CUSTODY RECORD

PROJ NO.	NAME S-90-12060 5175 Broadway, Oakland					CONTAINER	ANALYSES REQUESTED (2) Soil (Full Block)	REMARKS
SAMPLERS: (Signature)								
NO.	DATE	TIME	SOIL TYPE	LOCATION				
1	7/18/02		✓	MW-1	3	✓		
2			✓	MW-2	3	✓		
3			✓	MW-3	3	✓		
4			✓	SIMW-4	3	✓		
5	✓		✓	SIMW-5	3	✓		
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Received <input checked="" type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cold <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Intact </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Preservation Correct? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A </div>								
Relinquished by: (Signature) <i>Rubai Mamey</i>		Date / Time	Received by: (Signature)		Relinquished by: (Signature)		Date / Time	Received by: (Signature)
Relinquished by: (Signature)		Date / Time	Received by: (Signature)		Relinquished by: (Signature)		Date / Time	Received by: (Signature)
Relinquished by: (Signature)		Date / Time	Received for Laboratory by (Signature)		Date / Time	Remarks	Please send lab report Frank Hamedi.	



ENVIRO SOIL TECH CONSULTANTS
 Environmental & Geotechnical Consultants
 131 TULLY ROAD, SAN JOSE, CALIFORNIA 95111
 Tel: (408) 297-1500 Fax: (408) 292-2116