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1993

CITY OF OAKLAND

DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA, SUITE 5301 • OAKLAND, CALIFORNIA 94612-2034

Public Works Agency
Environmental Services

FAX (510) 238-7286
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October 28, 2005

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: Groundwater Sampling and Remediation Update
Municipal Service Center
7101 Edgewater Drive
Oakland, CA 94612

Dear Mr. Chan:

Please find the attached "Semi-Annual Groundwater Monitoring Report" for the Oakland Municipal Service Center site. The City of Oakland, under the guidance of Alameda County Health Department, has been conducting remediation and monitoring activities at the subject site. Described below are updates of groundwater sampling and remedial actions conducted at the site during the last monitoring period.

Groundwater Sampling

The semi-annual groundwater sampling at the MSC site was conducted from August 31 through September 2, 2005. The results of this sampling event are presented in the attached report. The analytical results showed decreasing concentrations of petroleum hydrocarbons in groundwater. The sizes of the contaminant plumes appear to be decreasing, especially at plumes A, B and C. Plumes A, B, and C also showed a significant decrease in lateral extent of Separate Phase Hydrocarbons (SPH) as compared to the April 2004 sampling event. The lateral extent of Plume D appears similar to the previous sampling event.

Site Remediation

Groundwater remediation using hydrogen peroxide injection continued during this reporting period. Hydrogen peroxide was injected into the plume areas onsite in . As

described earlier, the peroxide injection appeared to show a significant impact on the plume size and SPH measurements during the latest groundwater sampling. In an effort to accelerate the remediation rate, additional injections of hydrogen peroxide, with more frequency of injections, are planned for the coming months.

Due to unfortunate circumstances that were beyond our control, the installation of the groundwater treatment system at the site was delayed. The delay was mostly because of the fact that the equipment required new gas and electric connections, and PG&E's process for new connection took lot longer time than what we expected. The City had to wait almost eight months, so that PG&E could complete the installation of the new utility lines. OTG Enviro Engineering (OTG), consultant to the City, is currently working on installing the groundwater treatment equipment. OTG has moved the trailer-mounted unit to Plume D area and has connected it to the electrical and gas units. As part of the groundwater pumping system, OTG is in the process of trenching and installing pipes that connect the extraction wells at Plume D area to the pumps and holding tanks. We are hoping to get this task done and have a trial run of the system soon. I will keep you updated on the progress.

Thank you very much for your understanding and guidance for this project. If you have any questions, or need additional information, please contact me at (510) 238-6361.

Sincerely,

Gopal Nair

Gopal Nair
Environmental Program Specialist

cc: Hernan Gomez, City of Oakland Fire Department (CUPA)

Groundwater Monitoring Report
Fall Semiannual 2005 Sampling Event
Municipal Service Center
7101 Edgewater Drive
Oakland, California

October 18, 2005
001-09225-20

Prepared for:
City of Oakland, Public Works Agency
Environmental Services Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California

LFR
LEVINE • FRICKE

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October 18, 2005

001-09225-20

Mr. Gopal Nair
City of Oakland, Public Works Department
Environmental Sciences Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California 94612

Subject: Groundwater Monitoring Report, Fall Semiannual 2005 Sampling Event, Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Dear Mr. Nair:

LFR Levine·Fricke (LFR) is pleased to present this report summarizing data collected during the fall 2005 semiannual groundwater monitoring event at the Municipal Service Center, located at 7101 Edgewater Drive in Oakland, California ("the Site"). These activities were performed in accordance with previous sampling events conducted at the Site.

If you have any questions regarding this report, please call either of the undersigned at (510) 652-4500.

Sincerely,

Larry Lapuyade vcH

Larry Lapuyade
Senior Project Geologist

Charles H. Pardini, P.G. #6444
Principal Geologist
Assistant Operations Manager

Attachment

CONTENTS

8.0 SELECTED REFERENCES

Ninyo & Moore. 2004. Groundwater Monitoring Report, Spring Semiannual, Municipal Service Center, 7101 Edgewater Drive, Oakland, California, Assignment No. G03-N&M-10. July 14.

Regional Water Quality Control Board (RWQCB). 2003. Screening for Environmental Concerned Sites with Contaminated Soil and Groundwater (Interim Final). July.

Uribe & Associates ("Uribe"). 2002. Test/Observation Well Installation Report U & A Project 291-03. April 2.

———. 2003. Final Report, Second Quarter 2003 Monitoring Report, City of Oakland Municipal Service Center. May.

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
MW-1														
10/4/089	10.20	---	---	8020		---	---	---	540	65	26	14	22	---
10/4/89	10.20	---	---	8240		---	---	---	---	120	46	43	78	---
4/27/93	10.20	---	---	8020		---	---	---	< 1,000	< 1.0	< 1.0	< 1.0	< 1.0	---
4/19/95	10.20	---	---	8020		---	---	---	3,200	880	15	23	21	---
7/27/95	10.20	4.62	5.58	8020		---	---	---	980	130	3.6	1.4	5.6	---
11/20/95	10.20	6.08	4.12	8020		---	---	---	400	99	2.8	1.1	4.6	---
2/21/96	10.20	4.62	5.58	8020		---	---	---	1,700	340	8.4	5.3	16	---
5/13/96	10.20	4.33	5.87	8020		---	---	---	7,300	2,000	30	42	38	---
8/27/96	10.20	5.25	4.95	8020		---	---	---	380	61	2.4	< 0.5	4.2	---
2/23/98	10.20	1.75	8.45	8020		< 50	< 500	< 50	820	160	4.9	3	9.7	---
8/19/98	10.20	4.78	5.42	8020	SGC	1,200	---	---	780	69	4.1	0.84	8.5	< 5.0
11/11/98	10.20	5.64	4.56	---		---	---	---	---	---	---	---	---	---
2/23/99	10.20	3.41	6.79	8020	SGC	1,200	1,600	< 50	1,100	190	5	3	12	< 5.0
5/27/99	10.20	3.96	6.24	---		---	---	---	---	---	---	---	---	---
8/24/99	10.20	4.92	5.28	8020	SGC	640	1,900	< 50	370	37	0.9	< 0.5	1.9	< 5.0
11/22/99	10.20	5.46	4.74	---		---								
1/18/00	10.05	5.41	4.64	---		---	---	---	---	---	---	---	---	---
1/19/00	---	---	---	8020	SGC	50	< 200	< 50	660	43	2.3	1.1	6	< 5.0
5/11/00	10.05	4.63	5.42	---		---	---	---	---	---	---	---	---	---
8/24/00	10.05	5.07	4.98	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	340	< 250	290	480	53	1.4	< 0.5	2.9	< 5.0
11/28/00	10.05	5.60	4.45	---		---	---	---	---	---	---	---	---	---
2/27/01	10.05	3.95	6.10	8020	Filtered+SGC	270	< 250	< 61	1,500	110	6.3	< 1.5	9.9	< 15
5/17/01	10.05	4.00	6.05	---		---	---	---	---	---	---	---	---	---
8/16/01	10.05	4.17	5.88		Filtered+SGC	280	< B200	< 100	4,000	640	9.7	5.7	13	< 5.0
12/15/01	10.05	5.52	4.53	---		---	---	---	---	---	---	---	---	---
4/9/02	10.05	3.78	6.27	8021	SGC	1,100	1,000	---	2,000	320	5.38	3.08	6.24	< 5
6/21/02	10.05	4.92	5.13	---		---	---	---	---	---	---	---	---	---
9/13/02	10.05	5.52	4.53	8021	SGC	88 b,c	< 300	88	260	9.6	< 0.5	< 0.5	1.0	< 2
4/22/03	10.05	4.41	5.64	8021B	SGC	570 L Y	< 300	660	1,900 Z	400.0	9.6	5.4	8.1	< 2.0
4/28/04	10.05	3.95	6.10	8260B	SGC	< 100	< 400	< 100	154	20	< 1.0	< 1.0	2.3	< 1.0
10/29/04	10.05	5.68	4.37	8260B	SGC	230 L Y	< 300	240	340 H Z	6.4	0.6	< 0.5	1.4	< 0.5
9/2/05 [1]	10.05	4.35	5.70	8260B	SGC	140 L Y	< 300	170	350	6.6	1.0	< 0.5	2.3	< 0.5
MW-2														
10/4/89	10.47	---	---	8020		---	---	---	< 30	< 0.3	< 0.3	< 0.3	< 0.3	---
10/4/89	10.47	---	---	8240		---	---	---	---	2	< 2.0	< 2.0	< 2.0	---
4/27/93	10.47	---	---	8020		---	---	---	< 1,000	< 1.0	< 1.0	< 1.0	< 1.0	---
4/19/95	10.47	---	---	8020		---	---	---	< 50	1.8	< 0.5	< 0.5	< 0.5	---
7/27/95	10.47	6.22	4.25	8020		---	---	---	< 50	2.3	< 0.5	< 0.5	< 0.5	---
11/20/95	10.47	7.49	2.98	8020		---	---	---	< 50	2.2	< 0.5	< 0.5	< 0.5	---
2/12/96	10.47	6.68	3.79	8020		---	---	---	< 50	1.7	< 0.5	< 0.5	0.5	---
5/13/96	10.47	6.32	4.15	8020		---	---	---	---	2	< 0.5	< 0.5	< 0.5	---
8/27/96	10.47	6.84	3.63	8020		---	---	---	---	2.4	< 0.5	< 0.5	< 0.5	---
2/24/98	10.47	5.44	5.03	8020		< 50	< 500	< 50	---	1.6	< 0.5	< 0.5	< 0.5	---
8/19/98	10.47	6.56	3.91	8020	SGC	330	---	---	< 50	4.1	3.4	0.8	2.6	< 5.0

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
11/11/98	10.47	7.37	3.10	---		---	---	---	---	---	---	---	---	---
2/23/99	10.47	8.68	1.79	8020	SGC	200	900	< 50	< 50	3.5	0.6	0.6	1.2	< 5.0
5/27/99	10.47	5.20	5.27	---		---	---	---	---	---	---	---	---	---
8/24/99	10.47	6.75	3.72	8020	SGC	140	700	< 50	< 50	2.6	< 0.5	< 0.5	< 0.5	< 5.0
11/22/99	10.47	7.58	2.89	---		---	---	---	---	---	---	---	---	---
1/18/00	10.47	7.41	3.06	8020	SGC	60 a	660	< 50	< 50	2.1	< 0.5	< 0.5	< 0.5	< 5.0
5/11/00	10.47	6.43	4.04	---		---	---	---	---	---	---	---	---	---
8/24/00	10.47	8.91	1.56	8020	SGC	170	440	130	< 50	2.4	< 0.5	< 0.5	< 0.5	< 5.0
11/28/00	10.47	7.35	3.12	---		---	---	---	---	---	---	---	---	---
2/27/01	10.47	6.70	3.77	8020	Filtered + SGC	< 59	< 240	< 59	< 50	3.6	< 0.5	< 0.5	< 0.5	< 5
5/17/01	10.47	6.90	3.57	---		---	---	---	---	---	---	---	---	---
8/16/01	10.47	6.95	3.52		Filtered + SGC	< 50	B200	< 100	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/15/01	10.47	7.21	3.26	---		---	---	---	---	---	---	---	---	---
4/5/02	10.47	6.02	4.45	8021	SGC	200	400	---	< 50	2.9	< 0.5	< 0.5	< 0.5	< 5
6/21/02	10.47	8.07	2.40	---		---	---	---	---	---	---	---	---	---
9/17/02	10.47	7.12	3.35	8021	SGC	< 50	< 300	< 50	< 50	2.1	< 0.5	< 0.5	< 0.5	< 2
4/23/03	10.47	6.36	4.11	8021B	SGC	< 50	< 300	< 50	< 50	1.6	< .50	< .50	< .50	< 2.0
4/28/04	10.47	5.99	4.48	8260B	SGC	< 100	< 400	< 100	< 100	< 0.5	< 1.0	< 1.0	1.3	< 1.0
9/1/05 [1]	10.47	6.08	4.39	8260B	SGC	< 50	< 300	< 50	< 50	2.8	< 0.5	< 0.5	< 0.5	0.8
MW-3														
10/4/89	---	---	---	8020		---	---	---	< 30	< 0.3	< 0.3	< 0.3	< 0.3	---
10/4/89	---	---	---	8240		---	---	---	---	< 2.0	< 2.0	< 2.0	< 2.0	---
2/23/98	---	---	---	---		< 50	< 500	< 50	---	---	---	---	---	---
11/11/98	---	5.83	---	---		---	---	---	---	---	---	---	---	---
2/23/99	---	---	---	---	Submerged	---	---	---	---	---	---	---	---	---
5/27/99	---	1.68	---	---		---	---	---	---	---	---	---	---	---
8/24/99	---	4.76	---	---		---	---	---	---	---	---	---	---	---
11/22/99	---	6.46	---	---		---	---	---	---	---	---	---	---	---
11/22/99	---	---	---	---	Destroyed	---	---	---	---	---	---	---	---	---
MW-4														
10/4/89	7.89	---	---	8020		---	---	---	< 30	< 0.3	< 0.3	< 0.3	< 0.3	---
10/4/89	7.89	---	---	8240		---	---	---	---	< 2.0	< 2.0	< 2.0	< 2.0	---
11/11/98	7.89	6.25	1.64	---		---	---	---	---	---	---	---	---	---
2/23/99	7.89	3.10	4.79	---		---	---	---	---	---	---	---	---	---
5/27/99	7.89	4.03	3.86	---		---	---	---	---	---	---	---	---	---
8/24/99	7.89	5.07	2.82	---		---	---	---	---	---	---	---	---	---
11/22/99	7.89	6.32	1.57	---		---	---	---	---	---	---	---	---	---
11/22/99	---	---	---	---	Destroyed	---	---	---	---	---	---	---	---	---
MW-5														
12/13/91	11.15	---	---	8020		1,900	---	---	13,000	1,500	190	970	2,500	---
12/13/91	---	---	---	8020	Dup	---	---	---	16,000	1,400	180	870	2,500	---
12/13/91	11.15	---	---	8240		---	---	---	---	1,800	< 250	1,000	3,800	---
12/13/91	---	---	---	8240	Dup	---	---	---	---	1,600	< 250	980	3,500	---
4/27/93	11.15	---	---	8240		12,000	---	---	35,000	2,100	< 1.0	1,800	2,700	---

Table 1
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Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/19/95	11.15	---	---	8240		880	4,700	---	14,000	490	51	610	1,200	---
7/27/95	11.15	6.29	4.86	8240		590	5,000	---	22,000	1,300	54	1,500	2,400	---
11/20/95	11.15	6.98	4.17	8020		< 50	< 50	< 50	8,900	430	31	610	880	---
2/21/96	11.15	5.97	5.18	8020		480	< 50	< 50	1,000	540	65	700	970	---
5/13/96	11.15	6.25	4.90	8020		< 50	< 50	< 50	5,900	430	26	580	760	---
5/13/96	---	---	---	8020	Dup	< 50	< 50	< 50	7,300	360	22	49	640	---
8/27/96	11.15	6.40	4.75	8020		2,000	< 51	< 51	6,600	430	27	600	650	---
8/27/96	---	---	---	8020	Dup	6,600	< 51	< 51	6,300	410	25	580	620	---
2/23/98	11.15	4.22	6.93	8020		< 50	< 500	< 50	740	19	1.4	41	34	---
8/19/98	11.15	6.14	5.01	8020		1,400	< 250	1700	5,800	500	25	730	300	5,900
8/19/98	11.15	6.14	5.01	8260	SGC	---	---	---	---	---	---	---	---	6,700
11/11/98	11.15	6.51	4.64	---		---	---	---	---	---	---	---	---	---
2/23/99	11.15	3.59	7.56	8020	SGC	2,000	700	< 50	6,700	300	26	800	690	1,600
5/27/99	11.15	5.71	5.44	---		---	---	---	---	---	---	---	---	---
8/24/99	11.15	6.02	5.13	8020	SGC	220	2,000	< 50	2,100 e	190 e	5.5	340 e	78	380 e
11/22/99	11.15	6.16	4.99	---		---	---	---	---	---	---	---	---	---
1/18/00	11.15	6.60	4.55	---		---	---	---	---	---	---	---	---	---
1/19/00	---	---	---	8020	SGC	100	320	< 50	3,000	66 e	6.3	400 e	90	300 E (1,300)
5/11/00	11.15	5.62	5.53	---		---	---	---	---	---	---	---	---	---
8/24/00	11.15	6.32	4.83	8020	SGC	4,800	560	6,600	12,000	220	21	430	91	1,200 (1,400)
11/28/00	11.15	6.47	4.68	---		---	---	---	---	---	---	---	---	---
2/27/01	11.15	4.40	6.75	8020	Filtered+SGC	230	< 250	< 61	6,300	150	7	350	55	830
5/17/01	11.15	5.77	5.38	8020	Filtered+SGC	190	< 200	< 50	7,500	140	7	580	101	170
8/16/01	11.15	4.87	6.28		Filtered+SGC	320	B500	< 100	2,300	46	< 5	110	24	850
12/15/01	11.15	5.50	5.65	---		---	---	---	---	---	---	---	---	---
4/9/02	11.15	5.15	6.00	8021	SGC	480	260	---	8,000	110	5.95	650	53.9	166
6/21/02	11.15	6.01	5.14	8021	SGC	200 a,b,c	< 300	190	4,600	130	33	380	56	440
9/12/02	11.15	6.40	4.75	8021	SGC	620 b,c	< 300	650	4,000 J	120	< 0.5	260	16	580
4/22/03	11.15	4.69	6.46	8021B	SGC	1600 L Y	< 300	1800	6000	91	< 1.0	870	59.4	150 C
4/28/04	11.15	5.70	5.45	8260B	SGC	< 650	< 400	< 810	4780	34	< 1.0	560	44	47
10/29/04	11.15	5.73	5.42	8260B	SGC	840 L Y	< 300	940	3000	18	2.1	280	16.1	94
9/2/05 [1]	11.15	6.08	5.07	8260B	SGC	510 L Y	< 300	640	1600	13	1.4	55	8.6	92
MW-6														
12/13/91	10.98	---	---	8020		520	---	---	780	110	2.7	< 2.5	5.5	---
12/13/91	10.98	---	---	8240		---	---	---	---	95	5	< 5	< 5	---
4/27/93	10.98	---	---	8020		< 1,000	---	---	< 1,000	430	4	5	10	---
4/19/95	10.98	---	---	8020		6,700	---	---	5,700	40	< 0.8	3.9	29	---
4/19/95	---	---	---	8020	Dup	3,700	---	---	3,000	310	3.1	2.7	100	---
7/27/95	10.98	7.09	3.89	8020		3,900	---	---	6,100	430	15	200	600	---
7/27/95	---	---	---	8020	Dup	2,600	---	---	6,300	420	15	200	600	---
11/20/95	10.98	7.89	3.09	8020		850	---	---	6,800	160	4.6	8	240	---
11/20/95	---	---	---	8020	Dup	---	---	---	3,600	130	11	4.4	200	---
2/21/96	10.98	7.40	3.58	8020	Filtered+SGC	1,700	---	---	2,800	230	2.8	3.8	44	---
2/21/96	---	---	---	8020	Dup	2,500	---	---	2,200	280	3	4	4.6	---
5/13/96	10.98	7.10	3.88	8020		400	< 50	< 50	3,100	430	12	5.2	67	---
8/27/96	10.98	7.42	3.56	8020		3,100	---	---	4,200	300	9.3	110	110	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
8/19/98	10.98	---	---	---	SPH: 0.125 ft.	---	---	---	---	---	---	---	---	---
11/11/98	10.98	7.09	3.93	---	SPH: 0.05 ft.	---	---	---	---	---	---	---	---	---
2/23/99	10.98	7.31	3.67	---	SPH: N M	---	---	---	---	---	---	---	---	---
5/27/99	10.98	6.91	4.25	---	SPH: 0.20 ft.	---	---	---	---	---	---	---	---	---
8/24/99	10.98	7.46	3.72	---	SPH: 0.03 ft.	---	---	---	---	---	---	---	---	---
11/22/99	10.98	7.96	3.15	---	SPH: 0.16 ft.	---	---	---	---	---	---	---	---	---
1/18/00	10.98	8.08	3.05	---	SPH: 0.19 ft.	---	---	---	---	---	---	---	---	---
5/11/00	10.98	7.52	4.47	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
8/24/00	10.98	7.50	3.53	---	SPH: 0.06 ft.	---	---	---	---	---	---	---	---	---
11/28/00	10.98	6.39	4.62	---	SPH: 0.04 ft.	---	---	---	---	---	---	---	---	---
2/26/01	10.98	7.80	3.50	8020	SPH: 0.40 ft., f	820	<240	<60	6,100	181	<5	14.2	<5	<50
2/26/01	---	---	---	8260B		---	---	---	---	270	3	9	3	(19)
5/17/01	10.98	7.57	3.66	---	SPH: 0.32 ft.	---	---	---	---	---	---	---	---	---
8/16/01	10.98	7.75	3.49		SPH: 0.32 ft., f	740	B200	<100	4,200	360	4.6	13	12	14
12/15/01	10.98	7.58	3.40	---	SPH: 0.07 ft.	---	---	---	---	---	---	---	---	---
4/3/02	10.98	6.92	4.06	---	SPH: 0.11 ft.	---	---	---	---	---	---	---	---	---
6/21/02	10.98	7.05	3.93	---	SPH: 0.19 ft.	---	---	---	---	---	---	---	---	---
9/12/02	10.98	7.22	4.02	---	SPH: 0.33 ft.	---	---	---	---	---	---	---	---	---
4/22/03	10.98	4.71	6.27	---	SPH: 0.16 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.98	5.09	5.89		SPH: 0.23 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.98	6.12	4.86	--	SPH: product on probe	---	---	---	---	---	---	---	---	---
8/31/05	10.98	6.11	4.87	--	SPH: 0.95 ft.	---	---	---	---	---	---	---	---	---
MW-7														
12/13/91	11.51	---	---	8020		<50	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
12/13/91	11.51	---	---	8240		---	---	---	---	<5	<5	<5	<5	---
4/27/93	11.51	---	---	8240		<1,000	---	---	<1,000	<1.0	<1.0	<1.0	<1.0	---
4/19/95	11.51	---	---	8240		<50	<1,000	---	<50	<2.0	<2.0	<2.0	<2.0	---
7/27/95	11.51	6.87	4.64	8240		<50	<1,000	---	<50	<2.0	<2.0	<2.0	<2.0	---
11/20/95	11.51	8.48	3.03	8020		<50	---	---	<50	<0.5	<0.5	<0.5	1.5	---
2/21/96	11.51	6.29	5.22	8020		<50	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
5/13/96	11.51	6.95	4.56	8020		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
8/27/96	11.51	6.80	4.71	8020		---	---	---	---	<0.5	<0.5	<0.5	<0.5	---
8/19/98	11.51	6.88	4.63	---		---	---	---	---	---	---	---	---	---
11/11/98	11.51	7.40	4.11	---		---	---	---	---	---	---	---	---	---
2/23/99	11.51	5.57	5.94	8020		<50	<200	<50	80	<0.5	<0.5	<0.5	1	<5.0
5/27/99	11.51	6.56	4.95	---		---	---	---	---	---	---	---	---	---
8/24/99	11.51	6.29	5.22	8020	SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	5
11/22/99	11.51	6.80	4.71	---		---	---	---	---	---	---	---	---	---
1/18/00	11.51	7.31	4.20	---		---	---	---	---	---	---	---	---	---
1/19/00	11.51	---	---	8020	SGC	<50	<200	<50	54	1.5	1.5	2.4	3.8	<5.0
5/11/00	11.51	6.41	5.10	---		---	---	---	---	---	---	---	---	---
8/24/00	11.51	7.11	4.40	8020		<50	<250	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	11.51	7.30	4.21	---		---	---	---	---	---	---	---	---	---
2/27/01	11.51	5.75	5.76	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5
5/17/01	11.51	6.65	4.86	---		---	---	---	---	---	---	---	---	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
8/16/01	11.51	5.97	5.54		Filtered+SGC	<50	B600	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/15/01	11.51	6.43	5.08	---		---	---	---	---	---	---	---	---	---
4/8/02	11.51	6.17	5.34	8021	SGC	80	<200	---	<50	<0.5	0.5	0.6	<0.5	<5
6/21/02	11.51	6.75	4.76	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	3.3
9/12/02	11.51	7.05	4.46	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	2.6
4/22/03	11.51	6.24	5.27	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	4 C
4/28/04	11.51	6.61	4.90	8260B	SGC	<100	<400	<100	<100	1.6	<1.0	<1.0	<1.0	<1.0
9/2/05 [1]	11.51	6.56	4.95	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	3.2
MW-8														
11/20/96	12.22	---	---	8020		880	---	---	<50	0.66	<0.5	<0.5	<0.5	---
11/20/97	12.22	9.59	2.63	8020		200	---	---	<50	<0.5	<0.5	<0.5	<0.5	2
2/24/98	12.22	8.42	3.80	8020		<50	<500	<50	<50	<0.5	<0.5	<0.5	<0.5	---
6/8/98	12.22	9.57	2.65	8020		1,200	1,000	<50	<50	<0.5	<0.5	<0.5	<0.5	---
8/19/98	12.22	9.49	2.73	8020	SGC	<50	<250	<50	<50	1.6	3.4	1	2.8	<5.0
11/11/98	12.22	9.64	2.58	8020	SGC	<50	<200	<50	<50	0.9	0.8	0.6	2.3	<5.0
2/23/99	12.22	11.53	0.69	8020		700	1,500	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/27/99	12.22	9.65	2.57	8020		<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/24/99	12.22	9.62	2.60	8020	SGC	70	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/22/99	12.22	9.64	2.58	8020	SGC	57	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/18/00	12.22	8.31	3.91	8020	SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	12.22	9.69	2.53	8020	SGC	<50	<200	<50	<50	<0.5	1.3	<0.5	2.1	<5.0
8/24/00	12.22	9.40	2.82	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	85	<250	<50	<50					
11/28/00	12.22	9.40	2.83	8020	SGC	<50	910	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
2/27/01	12.22	9.50	2.72	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	12.22	9.71	2.51	---		---	---	---	---	---	---	---	---	---
5/18/01	---	---	---	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	12.22	9.80	2.42		Filtered+SGC	<50	<200	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/15/01	12.22	9.28	2.94	8021	SGC	390	1,300	<50	<50	<0.5	<0.5	<0.5	<0.5	<5
4/8/02	12.22	9.55	2.67	8021	SGC	440	800	---	<50	<0.5	<0.5	<0.5	<0.5	<5
6/21/02	12.22	9.71	2.51	---		---	---	---	---	---	---	---	---	---
9/18/02	12.22	9.86	2.36	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/22/03	12.22	9.54	2.68	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/28/04	---	---	---	---		---	---	---	---	---	---	---	---	---
10/27/04	---	NM	---	---		---	---	---	---	---	---	---	---	---
MW-9														
11/20/96	10.77	---	---	8020		1,900	---	---	240	21	0.81	1.8	2.2	---
11/20/97	10.77	7.91	2.86	8020		---	---	---	300	20	<0.5	<0.5	1.8	<1.0
2/24/98	10.77	6.11	4.66	8020		<50	<500	<50	2,200	540	5.6	1.6	4.9	---
6/8/98	10.77	7.14	3.63	8020		1,800	890	<50	840	450	6.1	3.3	5.3	---
8/19/98	10.77	7.88	2.89	8020	SGC	190	<250	160	740	370	8.6	0.99	7.3	<5.0
11/11/98	10.77	8.23	2.54	8020	SGC	<50	230	<50	700	130	4.3	<0.5	3.9	<5.0
2/23/99	10.77	6.65	4.12	8020		1,100	3,700	<50	1,100	620	9.7	1.5	7.7	<5.0
5/27/99	10.77	7.70	3.07	8020	SGC	70	300	<50	950	470	11	1.5	9.2	<5.0
8/24/99	10.77	8.12	2.65	8020	SGC	890	1,700	<50	290	45	2.8	<0.5	3	<5.0

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Municipal Service Center
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Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
11/22/99	10.77	8.33	2.44	8020	SGC	1,000	6,000	< 50	170	12	1.8	< 0.5	2	< 5.0
1/18/00	10.77	8.63	2.14	8020	SGC	200 a	2,300	< 50	160	5.7	1.9	0.6	4.2	< 5.0
5/11/00	10.77	7.70	3.07	8020	SGC	180 a	980	< 100	1,050	280	7.0	< 2.5	5.9	< 25
8/24/00	10.77	8.31	2.46	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	580	2,200	170	180	23	2.4	< 0.5	2.7	< 5.0
11/28/00	10.77	8.45	2.32	8020	SGC	200	1,600	< 50	130	1.9	< 0.5	< 0.5	< 0.5	< 5.0
11/28/00	10.77	8.45	2.32	---	Filtered+SGC	< 50	< 200	< 50	---	---	---	---	---	---
2/26/01	10.77	6.40	4.37	8020	Filtered+SGC	120	< 200	< 50	142	33	1.8	< 0.5	< 0.5	< 5.0
5/17/01	10.77	9.88	0.89	---		---	---	---	---	---	---	---	---	---
5/18/01	---	---	---	8020	Filtered+SGC	< 50	< 200	< 50	74	4.6	< 0.5	< 0.5	< 0.5	< 5.0
8/16/01	10.77	8.05	2.72		Filtered+SGC	< 50	< 200	< 100	70	0.62	< 0.5	< 0.5	< 0.5	< 5
12/16/01	10.77	7.75	3.02	8021	SGC	1,400	4,100	< 50	210	15	1.6	< 0.5	2.2	< 5
4/5/02	10.77	7.50	3.27	8021	SGC	870	1,000	---	1,498	367	11	2.1	7.8	< 5
6/20/02	10.77	8.27	2.50	8021	SGC	< 50	< 300	< 50	430	180	5.7	2.4	4.15	< 2
9/18/02	10.77	8.25	2.52	8021	SGC	63 b,c	< 300	60	250	49	5.8	< 0.5	3.1	< 2
4/22/03	10.77	7.25	3.52	8021B	SGC	< 50	< 300	< 50	69	4.1 C	< 0.5	< 0.5	0.9	< 2
4/28/04	---	---	---	---		---	---	---	---	---	---	---	---	---
10/27/04	---	NM	---	---		---	---	---	---	---	---	---	---	---
MW-10														
11/20/96	10.59	---	---	8020		940	---	---	< 50	49	0.59	0.54	1.2	---
11/20/97	10.59	7.70	2.89	8020		---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	---
2/24/98	10.59	4.39	6.20	8020		< 50	< 500	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	---
6/8/98	10.59	6.94	3.65	8020		500	< 500	< 50	< 50	7.3	< 0.5	< 0.5	< 0.5	---
8/19/98	10.59	6.99	3.60	8020	SGC	240	520	110	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
11/11/98	10.59	7.57	3.02	8020	SGC	< 50	< 200	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
2/23/99	10.59	5.51	5.08	8020		170	1,200	< 50	< 50	1.3	< 0.5	< 0.5	< 0.5	< 5.0
5/27/99	10.59	6.72	3.87	8020	SGC	< 50	< 200	< 50	350	170	1.5	0.5	2.3	< 5.0
8/24/99	10.59	7.27	3.32	8020	SGC	140	300	< 50	380	160 e	< 0.5	< 0.5	2.6	< 5.0
11/22/99	10.59	7.71	2.88	8020	SGC	570	3,400	< 50	110	5.1	< 0.5	< 0.5	0.72	< 5.0
1/18/00	10.59	7.77	2.82	---		---	---	---	---	---	---	---	---	---
1/19/00	---	---	---	8020	SGC	120 a,b	1,200	< 50	100	< 0.5	< 0.5	0.8	< 0.5	< 5.0
5/11/00	10.59	7.00	3.59	8020	SGC	110 a	990	< 50	145	1.62	0.5	0.5	0.9	< 5.0
8/24/00	10.59	7.31	3.28	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	430	1,300	110	< 50	1.0	< 0.5	< 0.5	< 0.5	< 5.0
11/28/00	10.59	7.90	2.69	8020	SGC	220	1,500	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
2/27/01	10.59	5.80	4.79	8020	Filtered+SGC	85	< 230	< 57	< 50	1.3	< 0.5	< 0.5	< 0.5	< 5.0
5/17/01	10.59	6.27	4.32	---		---	---	---	---	---	---	---	---	---
5/18/01	---	---	---	8020	Filtered+SGC	< 50	< 200	< 50	< 50	0.7	< 0.5	< 0.5	< 0.5	< 5.0
8/16/01	10.59	8.75	1.84		Filtered+SGC	< 50	< 200	< 100	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
12/16/01	10.59	6.97	3.62	8021	SGC	410	2,100	< 50	< 50	2.4	< 0.5	< 0.5	< 0.5	< 5
4/8/02	10.59	6.51	4.08	8021	SGC	220	300	---	< 50	1.1	< 0.5	< 0.5	< 0.5	< 5
6/20/02	10.59	8.10	2.49	8021	SGC	1,100 a,c	6,200	< 50	120	34	< 0.5	< 0.5	< 0.5	< 2
9/17/02	10.59	7.66	2.93	8021	SGC	150 a,c	880	< 50	130 a,c,j	32	< 0.5	2.3	< 0.5	< 2
4/22/03	10.59	6.81	3.78	8021B	SGC	< 50	< 300	< 50	51	1.0 C	< .50	1.2	< .50	< 2
4/28/04	10.59	6.70	3.89	8260B	SGC	< 100	< 400	< 100	114	14	< 1.0	6.9	5.2	3.5
10/28/04	10.59	6.98	3.61	8260B	SGC	< 50	< 300	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

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Municipal Service Center
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Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
9/1/05 [1]	10.59	6.76	3.83	8260B	SGC	<50	<300	<50	110	2.4	<0.5	<0.5	0.7	<0.5
MW-11														
1/18/00	11.60	7.08	4.52	---		---	---	---	---	---	---	---	---	---
1/19/00	---	---	---	8020	SGC	<50	500	<50	220	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	11.60	5.95	5.65	8020	SGC	<50	430	<50	600	23	2.1	18	15	<5.0
8/24/00	11.60	6.58	5.02	8020		<50	<250	<50	110	5.9	<0.5	0.73	0.64	<5.0
11/28/00	11.60	6.91	4.69	8020	SGC	<50	<200	<50	180	4	<0.5	1.9	<0.5	<5.0
2/27/01	11.60	5.65	5.95	8020	Filtered+SGC	86	<240	<60	720	29	5.2	38	36	<5.0
5/17/01	11.60	6.85	4.75	8020	Filtered+SGC	<50	<200	<50	720	36	3.4	15	18	9.7
8/16/01	11.60	6.01	5.59		Filtered+SGC	<50	B500	<100	110	4.8	<0.5	1.4	<0.5	<5
12/15/01	11.60	6.26	5.34	8021	SGC	200	300	<50	170	1.7	0.6	2.4	1.8	<2
4/5/02	11.60	5.47	6.13	8021	SGC	160	<200	---	330	8.9	2.0	6.9	8.7	<5
6/21/02	11.60	6.17	5.43	8021	SGC	<50	<300	<50	280	16	1.8	8.7	9.6	3.6
9/12/02	11.60	6.60	5.00	8021	SGC	<50	<300	<50	93	<0.5	<0.5	1.1	<0.5	2.1
4/24/03	11.60	5.71	5.89	8021B	SGC	<50	<300	<50	320	21	2.1	12	6.13	8.9
4/28/04	11.60	5.92	5.68	8260B	SGC	<100	<400	<100	360	18	<1.0	6.5	4.5	4
10/27/04	11.60	6.59	5.01	8260B	SGC	---	---	---	---	---	---	---	---	---
9/2/05 [1]	11.60	6.22	5.38	8260B	SGC	<50	<300	<50	85	<0.5	<0.5	<0.5	<0.5	4.5
MW-12														
1/18/00	10.43	8.11	2.32	---		---	---	---	---	---	---	---	---	---
1/19/00	---	---	---	8020	SGC	1,800 a	11,000	<50	200	<0.5	3.4	1.5	8.4	<5.0
5/11/00	10.43	6.78	3.65	8020	SGC	2,400 a	4,900	<100	370	<0.5	<0.5	<0.5	0.9	<5.0
8/24/00	10.43	7.56	2.87	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	3,500	5,000	3,700	170	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	10.43	8.13	2.30	8020	SGC	2,100	14,000	<50	290	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	10.43	8.13	2.30	---	Filtered+SGC	50	<200	<50	---	---	---	---	---	---
2/27/01	10.43	6.00	4.43	8020	Filtered+SGC	320	<250	66	110	1.4	<0.5	<0.5	<0.5	<5.0
5/17/01	10.43	7.01	3.42	8020	Filtered+SGC	<50	<200	<50	220	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	10.43	8.47	1.96	8020	Filtered+SGC	200	B300	<100	160	<0.5	<0.5	<0.5	<0.5	<5
4/8/02	10.43	6.65	3.78	8021	SGC	500	500	---	180	<0.5	<0.5	0.7	<1.5	<5
6/21/02	10.43	7.10	3.33	8021	SGC	1,100 a,b,c	3,000 h	640	180	<0.5	<0.5	0.63	1.62	<2
9/17/02	10.43	7.75	2.68	8021	SGC	220 a,b,c	360	190	130	<0.5	<0.5	<0.5	<0.5	<2
4/22/03	10.43	6.60	3.83	8021B	SGC	140 L Y	<300	120	150	<0.5	<0.5	<0.5	<0.5	<2
4/28/04	10.43	6.60	3.83	8260B	SGC	<550	1,020	<100	<100	<0.5	<1.0	<1.0	<1.0	<1.0
10/29/04	10.43	7.87	2.56	8260B	SGC	240 H L Y	460	180	170 H	<0.5	<0.5	<0.5	<0.5	<0.5
9/2/05 [1]	10.43	7.04	3.39	8260B	SGC	<50	<300	<50	170	<0.5	<0.5	<0.5	<0.5	<0.5
9/2/05 [1]	10.43	7.04	3.39	8260B	SGC	110 L Y	<300	120	150	<0.5	<0.5	<0.5	<0.5	<0.5
MW-13														
1/18/00	11.34	9.63	1.71	8020	SGC	8,800 a	120,000	<50	<50	<0.5	0.8	<0.5	<0.5	<5.0
5/11/00	11.34	10.12	1.22	8020	SGC	11,000 a	110,000	<500	70	1.6	5.4	1.2	7.6	<5.0
8/24/00	11.34	10.22	1.12	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	3,100	13,000	1,200	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	11.34	10.50	0.84	8020	SGC	2,400	36,000	<1300	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	11.34	10.50	0.84	---	Filtered+SGC	280	1,100	<50	---	---	---	---	---	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
2/26/01	11.34	9.60	1.74	8020	Filtered+SGC	100	<260	<64	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	11.34	10.10	1.24	---		---	---	---	---	---	---	---	---	---
5/18/01	---	---	---	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	11.34	10.50	0.84		Filtered+SGC	<50	B300	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/16/01	11.34	9.43	1.91	8021	SGC	1,900	18,000	<250	<50	<0.5	<0.5	<0.5	<0.5	<5
4/8/02	11.34	10.24	1.10	8021	SGC	440	900	---	<50	<0.5	<0.5	<0.5	<0.5	<5
6/20/02	11.34	10.75	0.59	8021	SGC	270 a,c	1,500 h	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
9/18/02	11.34	10.60	0.74	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/22/03	11.34	10.46	0.88	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0
4/28/04	11.31	10.22	1.09	8260B	SGC	<100	799	<100	<100	<0.5	<1.0	<1.0	<1.0	<1.0
10/28/04	11.31	9.50	1.81	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/1/05 [1]	11.31	9.56	1.75	8260B	SGC	<50	320	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-14														
1/18/00	10.05	7.37	2.68	8020	SGC	1,700 a	22,000	<50	120	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	10.05	6.73	3.32	8020	SGC	360 a	4,300	<100	120	<0.5	<0.5	<0.5	0.5	<5.0
8/24/00	10.05	7.30	2.75	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	1,000	3,100	460	90	6.3	<0.5	<0.5	<0.5	<5.0
11/28/00	10.05	7.40	2.65	8020	SGC	380	6,400	<250	140	7.4	<0.5	<0.5	<0.5	<5.0
11/28/00	10.05	7.40	2.65	---	Filtered+SGC	<50	<200	<50	---	---	---	---	---	---
2/26/01	10.05	6.20	3.85	8020	Filtered+SGC	150	<230	<58	73	2.3	<0.5	<0.5	<0.5	<5.0
5/17/01	10.05	7.74	2.31	---		---	---	---	---	---	---	---	---	---
5/18/01	---	---	---	8020	Filtered+SGC	120	<200	<50	100	11	<0.5	<0.5	<0.5	<5.0
8/16/01	10.05	7.85	2.20		Filtered+SGC	<50	<200	<100	60	<0.5	<0.5	<0.5	<0.5	<5
12/16/01	10.05	6.60	3.45	8021	SGC	1,110	3,000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5
4/9/02	10.05	6.58	3.47	8021	SGC	870	1,100	---	250	<0.5	<0.5	<0.5	<0.5	<5
6/20/02	10.05	7.52	2.53	8021	SGC	<50	310 h	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
9/18/02	10.05	7.55	2.50	8021	SGC	<50	<300	<50	<50	1.3	<0.5	0.80	<0.5	<2
4/22/03	10.05	6.71	3.34	8021B	SGC	<50	<300	<50	61	4.2	<0.5	1.0	<0.5	12.0
4/28/04	10.05	6.81	3.24	8260B	SGC	<230	<400	<100	241	1.4	<1.0	<1.0	<1.0	<1.0
10/28/04	10.05	6.99	3.06	8260B	SGC	<50	<300	<50	56	3.5	<0.5	<0.5	<0.5	0.5
10/28/04	10.05	---	---	8260B	dup	<50	<300	<50	53	1.9	<0.5	<0.5	<0.5	<0.5
9/1/05 [1]	10.05	7.60	2.45	8260B	SGC	<50	<300	<50	79	6.7	<0.5	<0.5	<0.5	0.7
MW-15														
1/18/00	12.36	10.56	1.80	8020	SGC	12,000 a	89,000	<50	110	3.8	2.1	1	4.6	<5.0
5/11/00	12.36	10.03	2.33	8020	SGC	120 a	590	<50	90	0.9	0.9	<0.5	3.3	<5.0
8/24/00	12.36	10.22	2.14	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	1,900	8,600	1,000	<50	1.9	<0.5	<0.5	1.5	<5.0
11/28/00	12.36	10.30	2.06	8020	SGC	2,500	36,000	<1300	80	1.7	<0.5	<0.5	1.6	<5.0
11/28/00	12.36	10.30	2.06	---	Filtered+SGC	73	<200	<50	---	---	---	---	---	---
2/26/01	12.36	9.30	3.06	8020	Filtered+SGC	190	<240	<60	55	0.6	<0.5	<0.5	0.5	<5.0
5/17/01	12.36	10.09	2.27	---		---	---	---	---	---	---	---	---	---
5/18/01	---	---	---	8020	Filtered+SGC	210	<230	<57	66	1.5	<0.5	<0.5	2.1	<5.0
8/16/01	12.36	10.20	2.16		Filtered+SGC	<50	B500	<100	<50	<0.5	<0.5	<0.5	2.4	<5
12/16/01	12.36	9.80	2.56	8021	SGC	3,800	15,000	<250	<50	<0.5	<0.5	<0.5	2	<5
4/5/02	12.36	9.58	2.78	8021	SGC	1,000	1,400	---	<50	<0.5	<0.5	<0.5	2.3	<5

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Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
6/20/02	12.36	10.24	2.12	8021	SGC	670 a,c	2,700 h	95 c,i	<50	0.83	<0.5	<0.5	2.20	<2
9/18/02	12.36	9.89	2.47	8021	SGC	70 a,c	<300	<50	<50	<0.5	<0.5	1.5	1.71	<2
4/22/03	12.36	9.55	2.81	8021B	SGC	<50	<300	<50	<50	1 C	<.50	1.4	1.9	<2
4/28/04	12.36	9.68	2.68	8260B	SGC	<250	567	<100	<100	<0.5	<1.0	<1.0	<1.0	2.8
10/28/04	12.36	9.58	2.78	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	2.2	<0.5
9/1/05 [1]	12.36	9.56	2.80	8260B	SGC	420 Y	<300	120 H Y	55	<0.5	<0.5	<0.5	2.0	<0.5
MW-16														
1/18/00	13.57	10.22	3.43	---	SPH: 0.1 ft.	---	---	---	---	---	---	---	---	---
5/11/00	13.57	13.31	0.27	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
8/24/00	13.57	8.91	4.66	---	SPH: N M	---	---	---	---	---	---	---	---	---
11/28/00	13.57	13.05	0.86	---	SPH: 0.42 ft.	---	---	---	---	---	---	---	---	---
2/26/01	13.57	13.10	0.79	---	SPH: 0.40 ft.	---	---	---	---	---	---	---	---	---
5/17/01	13.57	12.62G	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
8/16/01	13.57	11.94G	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
12/15/01	13.57	N M	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
4/3/02	13.57	12.88	0.69	---		---	---	---	---	---	---	---	---	---
6/21/02	12.22	N M	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
4/22/03					Well cap stuck									
4/28/04	12.22	12.48	-0.26	8260B	SGC	<230	1030	<260	2000	150	<1.0	46	<1.0	<1.0
10/28/04	12.22	11.97	0.25	8260B	SGC	450 L Y	<300	480	1100	18	1.7	29	1.7	<0.5
8/31/05	12.22	12.09	0.13	---	SPH: None	---	---	---	---	---	---	---	---	---
MW-17														
1/18/00	9.86	5.35	4.51	8020	SGC	850 a	21,000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	9.86	9.85	0.01	8020	SGC	150 a	2,900	<100	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/24/00	9.86	8.59	1.27	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	190	610	71	<50	0.58	<0.5	<0.5	<0.5	<5.0
11/28/00	9.86	9.25	0.61	8020	SGC	<250	2,400	<250	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	9.86	9.25	0.61	---	Filtered+SGC	<50	<200	<50	---	---	---	---	---	---
2/26/01	9.86	9.40	0.46	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	9.86	8.32	1.54	---		---	---	---	---	---	---	---	---	---
5/18/01	---	---	---	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	9.86	10.35	-0.49		Filtered+SGC	<50	B400	<100	<50	<0.5	<0.5	<0.5	<0.5	<5.0
12/16/01	9.86	8.01	1.85	8021	SGC	940	1,000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
4/9/02	9.86	9.76	0.10	8021	SGC	590	880	---	60	<0.5	<0.5	1.6	<0.5	<5.0
6/21/02	9.86	9.79	0.07	8021	SGC	99 a,c	650 h	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
9/18/02	9.86	8.25	1.61	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/23/03	9.86	9.75	0.11	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/28/04	9.86	8.90	0.96	8260B	SGC	<100	<400	<100	<100	<0.5	<1.0	2.4	<1.0	<1.0
10/28/04	9.86	8.32	1.54	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/1/05 [1]	9.86	8.38	1.48	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-18														
4/24/03		6.49		8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	2.4	<0.5	<2

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Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/28/04					Developed to monitor a utility trench. not sampled									
8/31/05	---	NM	---	---		---	---	---	---	---	---	---	---	---
TBW-1														
2/23/99	---	6.25	---	---	SPH: 0.10 ft.	---	---	---	---	---	---	---	---	---
5/27/99	---	5.29	---	---	SPH: 0.01 ft	---	---	---	---	---	---	---	---	---
8/24/99	---	6.99	---	---	SPH: 0.18 ft.	---	---	---	---	---	---	---	---	---
11/22/99	---	---	---	---	Inaccessible	---	---	---	---	---	---	---	---	---
1/18/00	---	---	---	---	Inaccessible	---	---	---	---	---	---	---	---	---
5/11/00	---	6.90	---	---	SPH: 0.10 ft.	---	---	---	---	---	---	---	---	---
8/24/00	---	7.12	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
11/28/00	---	7.75	---	---	SPH: 0.36 ft.	---	---	---	---	---	---	---	---	---
2/27/01	---	9.06	---	---	SPH: 0.51 ft.	---	---	---	---	---	---	---	---	---
5/17/01	---	6.98	---	---	SPH: 0.28 ft.	---	---	---	---	---	---	---	---	---
8/16/01	---	6.62	---	---	SPH: 0.66 ft.. f	1,100	B700	< 100	17,000	2,100	75	730	850	< 1
12/15/01	---	6.86	---	---	SPH 0.35 ft.	---	---	---	---	---	---	---	---	---
4/3/02	---	6.14	---	---	SPH: None	---	---	---	---	---	---	---	---	---
9/12/02	---	7.52	---	---	SPH: None	---	---	---	---	---	---	---	---	---
4/22/03	---	6.41	---	---	SPH: None	---	---	---	---	---	---	---	---	---
4/28/04	---	6.33	---	---	SPH: None	---	---	---	---	---	---	---	---	---
10/28/04	---	NM	---	---		---	---	---	---	---	---	---	---	---
8/31/05	---	6.50	---	—	Well cap smashed 6"	---	---	---	---	---	---	---	---	---
TBW-2														
6/21/02	---	8.28	---	---		---	---	---	—	—	---	---	---	—
4/22/03	---	6.70	---	---	SPH globules	---	---	---	---	---	---	---	---	---
4/28/04	---	6.61	---	---	SPH: None	---	---	---	---	---	---	---	---	---
10/28/04	---	7.31	---	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	NM	---	---		---	---	---	---	---	---	---	---	---
TBW-3														
8/19/98	---	2.67	---	8020	SGC	810,000	---	---	920	3.2	<0.5	<0.5	0.77	< 10
8/19/98	---	2.67	---	8260		---	---	---	---	---	---	---	---	< 5.0
2/23/98	---	1.25	---	8020		3,800	3,000	< 50	110	1.6	<0.5	<0.5	<0.5	< 5.0
5/27/99	---	---	---	---	DTW: N M	---	---	---	---	---	---	---	---	---
8/24/99	---	3.25	---	---	SPH globules	---	---	---	---	---	---	---	---	---
11/22/99	---	3.68	---	---		---	---	---	---	---	---	---	---	---
1/18/00	9.92	3.73	6.19	---	SPH globules	---	---	---	---	---	---	---	---	---
5/11/00	9.92	2.07	7.85	---		---	---	---	---	---	---	---	---	---
8/24/00	9.92	2.82	7.10	---	SPH: sheen	44,000	13,000	34,000	570	4.7	<0.5	<0.5	<0.5	< 5.0
11/28/00	---	---	---	---		---	---	---	---	---	---	---	---	---
2/27/01	9.92	1.29	8.63	8020	Filtered+SGC	560	<230	< 57	120	1.5	<0.5	<0.5	<0.5	< 5.0
5/17/01	9.92	2.47	7.45	---		---	---	---	---	---	---	---	---	---
8/16/01	9.92	1.81	8.11		Filtered+SGC	1,500	B400	< 100	180	<0.5	<0.5	<0.5	<0.5	< 1
12/15/01	---	2.52	---	---	SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/3/02	---	1.50	---	---	SPH: None	---	---	---	---	---	---	---	---	---
6/21/02	9.92	2.37	7.55	---	SPH: None	---	---	---	---	---	---	---	---	---
9/12/02	9.92	3.48	6.44	---	SPH: None	---	---	---	---	---	---	---	---	---
4/22/03	9.92	1.45	8.47	---	Sheen	---	---	---	---	---	---	---	---	---
4/28/04	9.92	2.26	7.66	---	SPH: None	---	---	---	---	---	---	---	---	---
10/28/04	9.92	3.42	6.50	---	Sheen	---	---	---	---	---	---	---	---	---
8/31/05	9.92	2.99	6.93	---	SPH: None	---	---	---	---	---	---	---	---	---
TBW-4														
2/27/01	---	1.35	---	8020	Filtered+SGC	410	<230	<57	250	1.9	<0.5	<0.5	<0.5	<5.0
5/17/01	---	2.52	---	---		---	---	---	---	---	---	---	---	---
8/16/01	---	1.88	---	---	Filtered+SGC	2,600	B700	<100	390	<0.5	<0.5	<0.5	<0.5	<5
6/21/02	---	2.32	---	---		---	---	---	---	---	---	---	---	---
4/22/03	---	1.41	---	---	Sheen	---	---	---	---	---	---	---	---	---
4/28/04	---	2.21	---	---		---	---	---	---	---	---	---	---	---
10/27/04	---	3.37	---	---	Sheen	---	---	---	---	---	---	---	---	---
8/31/05	---	2.92	---	---		---	---	---	---	---	---	---	---	---
TBW-5														
2/23/99	---	9.72	---	---	SPH: 1.45 ft.	---	---	---	---	---	---	---	---	---
5/27/99	---	7.03	---	---	SPH: 1.13 ft.	---	---	---	---	---	---	---	---	---
8/24/99	---	6.52	---	---	SPH: 1.33 ft.	---	---	---	---	---	---	---	---	---
11/22/99	---	8.31	---	---	SPH: 1.29 ft.	---	---	---	---	---	---	---	---	---
1/18/00	10.22	6.20	4.74	---	SPH: 0.90 ft.	---	---	---	---	---	---	---	---	---
5/11/00	10.22	9.41	1.05	---	SPH: 0.30 ft.	---	---	---	---	---	---	---	---	---
8/24/00	10.22	9.62	0.81	---	SPH: 0.26 ft.	---	---	---	---	---	---	---	---	---
11/28/00	10.22	10.25	0.34	---	SPH: 0.46 ft.	---	---	---	---	---	---	---	---	---
2/27/01	10.22	9.06	1.45	---	SPH: 0.36 ft.	---	---	---	---	---	---	---	---	---
5/17/01	10.22	8.75	1.47	---	SPH: 0.67 ft.	---	---	---	---	---	---	---	---	---
8/16/01	10.22	8.32	2.51	8020	SPH: 0.76 ft., f	550	B400	<100	30,000	2,900	100	1,500	5,100	<1
12/15/01	10.22	9.09	1.13	---	SPH: 0.36 ft.	---	---	---	---	---	---	---	---	---
4/3/02	Well has active remediation unit/recovery													
6/21/02	10.22	7.87	2.35	---	SPH: 0.03 ft.	---	---	---	---	---	---	---	---	---
9/12/01	10.22	7.26	2.97	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/22/03	10.22	6.22	4.00	---	SPH: 0.06 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.22	6.26	3.96	---	SPH: 0.21 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.22	3.62	6.60	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	6.41	---	---	SPH: 0.30 ft.	---	---	---	---	---	---	---	---	---
TBW-6														
2/23/99	---	2.09	---	8020		160	600	<50	60	<0.5	<0.5	<0.5	<0.5	<5.0
5/27/99	---	3.31	---	---		---	---	---	---	---	---	---	---	---
8/24/99	---	7.29	---	8020	SGC	180	400	<50	130	<0.5	<0.5	<0.5	<0.5	<5.0
11/22/99	---	4.37	---	---		---	---	---	---	---	---	---	---	---
1/18/00	9.49	3.83	5.66	---		---	---	---	---	---	---	---	---	---
1/19/00	---	---	---	8020	SGC	55 C	<200	<50	170	0.6	<0.5	<0.5	<0.5	<5.0
5/11/00	9.49	2.51	6.98	---		---	---	---	---	---	---	---	---	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
8/24/00	9.49	4.34	5.15	---		---	---	---	---	---	---	---	---	---
8/25/00	---	---	---	8020	SGC	320	<250	200	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	9.49	4.74	4.75	---		---	---	---	---	---	---	---	---	---
2/27/01	9.49	2.30	7.19	8020	Filtered+SGC	<57	<230	<57	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	9.49	3.35	6.14	---		---	---	---	---	---	---	---	---	---
8/16/01	9.49	3.85	5.64		Filtered+SGC	<50	<200	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/15/01	9.49	3.96	5.53	---		---	---	---	---	---	---	---	---	---
4/3/02	9.49	2.51	6.98	---		---	---	---	---	---	---	---	---	---
6/21/02	9.49	3.58	5.91	---		---	---	---	---	---	---	---	---	---
9/12/02	9.49	6.07	4.56	---	SPH: 1.42 ft.	---	---	---	---	---	---	---	---	---
4/23/03	9.49	2.42	7.07	---		---	---	---	---	---	---	---	---	---
4/28/04	9.49	3.21	6.28	---		---	---	---	---	---	---	---	---	---
10/27/04	9.49	4.49	5.00	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	4.43	---	---	SPH: 0.52 ft.	---	---	---	---	---	---	---	---	---
RW-A1														
4/22/03		1.81				---	---	---	---	---	---	---	---	---
4/28/04	10.09	2.52	7.57	---		---	---	---	---	---	---	---	---	---
10/27/04	10.09	3.03	7.06	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	3.31	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-A2														
4/22/03		1.22			Sheen	---	---	---	---	---	---	---	---	---
4/28/04	9.67	2.01	7.66	---		---	---	---	---	---	---	---	---	---
10/27/04	9.67	3.20	6.47	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	2.75	---	---	SPH: None	---	---	---	---	---	---	---	---	---
OB-A1														
4/22/03		2.24			SPH: .01 ft.	---	---	---	---	---	---	---	---	---
4/28/04		3.01		---	SPH: None	---	---	---	---	---	---	---	---	---
10/27/04		5.11		---	SPH: None (strong odor)	---	---	---	---	---	---	---	---	---
8/31/05	---	4.10	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B1														
4/22/03		7.26			Sheen	---	---	---	---	---	---	---	---	---
4/28/04	11.22	7.20	4.02	---		---	---	---	---	---	---	---	---	---
10/27/04	11.22	7.80	3.42	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	7.14	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B2														
4/22/03		7.29			Sheen, Odor	---	---	---	---	---	---	---	---	---
4/28/04	11.23	7.20	4.03	---		---	---	---	---	---	---	---	---	---
10/27/04	11.23	7.81	3.42	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	7.14	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B3														

Table 1
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Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/22/03		9.90			visible Product	---	---	---	---	---	---	---	---	---
4/28/04	11.14	13.20	-2.06	---	SPH: 3.09	---	---	---	---	---	---	---	---	---
10/27/04	11.14	9.33	1.81	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	9.60	---	---	SPH: 0.01	---	---	---	---	---	---	---	---	---
RW-B4														
4/22/03		10.55			SPH: .55 ft.	---	---	---	---	---	---	---	---	---
4/28/04	11.29	10.22	1.07	---	SPH: None	---	---	---	---	---	---	---	---	---
10/27/04	11.29	9.55	1.74	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	9.70	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C1														
4/24/03		8.34				---	---	---	---	---	---	---	---	---
4/28/04	10.44	8.00	2.44	---		---	---	---	---	---	---	---	---	---
10/27/04	10.44	7.59	2.85	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	5.81	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C2														
4/24/03		6.22			SPH: .03 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.58	6.19	4.39	---	SPH: 0.06 ft	---	---	---	---	---	---	---	---	---
10/27/04	10.58	7.00	3.58	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	---	6.30	---	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
RW-C3														
4/24/03		6.36		---		---	---	---	---	---	---	---	---	---
4/28/04	10.71	6.25	4.46	---		---	---	---	---	---	---	---	---	---
10/27/04	10.71	7.10	3.61	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	6.39	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C4														
4/22/03		7.15			Strong odor	---	---	---	---	---	---	---	---	---
4/28/04	11.32	6.95	4.37	---	SPH: 0.01 ft	---	---	---	---	---	---	---	---	---
10/27/04	11.32	7.45	3.87	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	6.71	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C5														
4/22/03		6.46				---	---	---	---	---	---	---	---	---
4/28/04	10.79	6.39	4.40	---		---	---	---	---	---	---	---	---	---
10/27/04	10.79	7.21	3.58	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	---	6.51	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C6														
4/22/03		6.05			SPH: 0.07 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.31	6.30	4.01	---	SPH: 0.05 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.31	NM	---	---	---	---	---	---	---	---	---	---	---	---
8/31/05	---	6.81	---	---	SPH: 0.93 ft.	---	---	---	---	---	---	---	---	---

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Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
RW-C7														
4/22/03		6.51			visible Product	---	---	---	---	---	---	---	---	---
4/28/04	10.12	6.60	3.52		SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.12	NM	---	---	---	---	---	---	---	---	---	---	---	---
8/31/05	---	NM	---	---	---	---	---	---	---	---	---	---	---	---
RW-C8														
10/27/04		6.85			SPH: 0.15 ft.	---	---	---	---	---	---	---	---	---
OB-C1														
4/22/03		6.26				---	---	---	---	---	---	---	---	---
4/28/04	10.39	7.39	3.00		SPH: 1.27 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.39	8.06	2.33	---	SPH: 1.08 ft.	---	---	---	---	---	---	---	---	---
8/31/05	---	7.84	---	---	SPH: 1.55 ft.	---	---	---	---	---	---	---	---	---
RW-D1														
4/22/03		6.97				---	---	---	---	---	---	---	---	---
4/28/04	10.18	5.62	4.56	---		---	---	---	---	---	---	---	---	---
10/27/04	10.18	6.67	3.51	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	---	5.75	---	---	SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---
RW-D2														
4/22/03		7.15			SPH 1.25 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.33	7.45	2.88		SPH: 0.1 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.33	6.41	3.92	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	---	8.44	---	---	SPH: 3.12 ft.	---	---	---	---	---	---	---	---	---
RW-D3														
4/22/03		6.89			SPH: 1.58 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.07	8.18	1.89		SPH: 3.25 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.07	6.37	3.70	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	---	7.72	---	---	SPH: 2.46	---	---	---	---	---	---	---	---	---
RW-D4														
4/22/03		8.11			SPH: 1.98 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.22	7.99	2.23		SPH: 2.09 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.22	6.49	3.73	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	---	8.09	---	---	SPH: 2.12 ft.	---	---	---	---	---	---	---	---	---
RW-D5														
4/22/03		6.04			SPH: 0.07 ft.	---	---	---	---	---	---	---	---	---
4/28/04	9.99	5.96	4.03		SPH: None	---	---	---	---	---	---	---	---	---
10/27/04	9.99	6.48	3.51	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	---	7.02*	---	---	SPH: 1.01 ft.	---	---	---	---	---	---	---	---	---
OB-D1														
4/22/03		5.41			Strong Odor	---	---	---	---	---	---	---	---	---

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Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/28/04	9.46	5.31	4.15		Strong Odor	---	---	---	---	---	---	---	---	---
10/27/04	9.46	5.89	3.57	---	---	---	---	---	---	---	---	---	---	---
8/31/05	---	5.42	---	---	SPH: None	---	---	---	---	---	---	---	---	---
OB-D2														
4/22/03		5.14				---	---	---	---	---	---	---	---	---
4/28/04	9.95	5.25	4.70	---		---	---	---	---	---	---	---	---	---
10/27/04	9.95	6.42	3.53	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	5.71	---	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
RW-1														
4/22/03		6.43				---	---	---	---	---	---	---	---	---
4/28/04		5.73		---		---	---	---	---	---	---	---	---	---
10/27/04		6.34		---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	5.83	---	---	SPH: None	---	---	---	---	---	---	---	---	---
Field Blank														
10/28/04				8260B		---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
9/1/05				8260B		< 50	< 300	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
9/2/05				8260B		---	---	---	< 50	---	---	---	---	---
Trip Blank														
8/19/98	---	---	---	8020		---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
11/22/99	---	---	---	8020		---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
11/28/00	---	---	---	8020		---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
2/27/01	---	---	---	8020	Filtered + SGC	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
5/17/01	---	---	---	8020	SGC	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/16/01	---	---	---	8021		---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
4/5/02	---	---	---	8021	Trip Blank 1	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
4/5/02	---	---	---	8021	Trip Blank 2	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
6/21/02	---	---	---	8021	Trip Blank 1	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
9/12/02	---	---	---	8021	Trip Blank 1	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2
9/13/02	---	---	---	8021	Trip Blank 2	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2
4/23/03	---	---	---	8021B	Trip Blank 1	---	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2
4/28/04	---	---	---	8260B	Trip Blank 1	---	---	---	< 100	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0
10/29/04	---	---	---	8260B	Trip Blank 2	---	---	---	< 50	---	---	---	---	---

Notes:

Groundwater elevations corrected for the presence of free product according to the calculation: GW Elevation = TOC - DTW + (0.8 x SPH thickness)

(1) = Depth to groundwater measured on August 31, 2005.

--- = Not measured/analyzed
* = Product was thick; difficult to measure thickness.

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)

BTEX = Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020 or 8240/8260.
DTW = Depth to water
Dup = Duplicate sample
Filtered = Groundwater samples were filtered through a 0.45-micron glass membrane filter.
ID = Identification
MTBE = Methyl tertiary-butyl ether by EPA Method 8020 or 8260. Confirmation 8260 results shown in parentheses.
NM = Not measured. Well obstructed or could not be located.
SPH = Separate-phase hydrocarbons; measured thickness
SGC = Silica gel cleanup based on Method 3630B prior to TPH-d, TPH-k, or TPH-mo analysis, following California Regional Water Quality Control Board February 16, 1999 memorandum
TBW = Tank backfill well
TOC = Top of casing
TPH-d = Total petroleum hydrocarbons quantitated as diesel - analyzed by EPA Method 8015B
TPH-g = Total petroleum hydrocarbons quantitated as gasoline - analyzed by EPA Method 8015B
TPH-k = Total petroleum hydrocarbons quantitated as kerosene - analyzed by EPA Method 8015B
TPH-mo = Total petroleum hydrocarbons quantitated as motor oil - analyzed by EPA Method 8015B

a = The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the diesel range actually resemble heavier fuels at the front end of the motor oil pattern.
b = The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the diesel range actually resemble lighter fuels; the response looks like lower carbon chain compounds close to the gasoline range.
c = The analytical laboratory reviewed the data and noted that the sample exhibits a fuel pattern that does not resemble the standard.
e = Results are estimated due to concentrations exceeding the calibration range
f = Filtration with 0.45-micron glass membrane filter and silica gel treatment
g = Depth to product, depth to water could not be determined.
h = The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the motor oil range are actually from the front end of the kerosene oil pattern.
i = The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the motor oil range are actually from the back end of the kerosene oil pattern.
j = The analytical laboratory reviewed the data and noted that the sample exhibited an unknown peak or peaks.
J = Value qualified as "estimated"
L = Lighter hydrocarbons contributed to the quantitation.
Y = Sample exhibits chromatographic pattern that does not resemble standard.
B = Results flagged with "B" indicate motor oil was detected in the method blank.
Z = Sample exhibits unknown single peak or peaks
H = Heavier hydrocarbons contributed to the quantitation.

Table 2
Summary of Groundwater Analytical Data, VOCs
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	Benzene (µg/l)	n-Butyl-benzene (µg/l)	sec-Butyl-benzene (µg/l)	tert-Butyl-benzene (µg/l)	Chloro-ethane (µg/l)	Chloro-form (µg/l)	Methyl Chloride (µg/l)	1,2-DCA (µg/l)	cis-1,2-DCE (µg/l)	1,2-DCP (µg/l)	Ethyl-benzene (µg/l)	Isopropyl-benzene (µg/l)	p-Isopropyl-toluene (µg/l)	MTBE (µg/l)	Napthalene (µg/l)	n-Propyl-benzene (µg/l)	Toluene (µg/l)	1,2,4-TMB (µg/l)	1,3,5-TMB (µg/l)	Xylenes (µg/l)
MW-5																				
2/27/01	180	9	4	ND	3	ND	ND	7	ND	3	260	23	6	1,100	43	68	7	1	11	53
MW-6																				
2/27/01	270	11	3	ND	<1	ND	ND	7	ND	<1	9	6.0	1.0	19.0	62	21	3	1	<1	3
8/20/01	E280	14	<1	<1	<1	3	2	<1	<1	<1	11	4.0	<1	14.0	E82	14	4	<1	<1	9
TBW-1																				
8/20/01	E530	30	<1	54	<1	4	10	<1	2	<1	E540	36	54	<1	E300	E120	79	E430	<1	E790
TBW-3																				
8/20/01	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	6	<1	<1	<1	5	<1	<1	<1	<1	3
TBW-5																				
8/20/01	E620	<1	<1	E160	<1	3	<1	<1	<1	<1	E730	40	E160	<1	E450	E140	E110	<1	<1	E3100

Notes:

cis-1,2-DCE = cis-1,2-dichloroethene
E = estimated concentration
MTBE = methyl tertiary-butyl ether
ND = Not detected.
VOCs = Volatile organic compounds by EPA Method 8260. Sample not subject to silica gel cleanup or filtration prior to analysis.
1,2-DCA = 1,2-dichloroethane
1,2-DCP = 1,2-dichloropropane
1,2,4-TMB = 1,2,4-trimethylbenzene
1,3,5-TMB = 1,3,5-trimethylbenzene

Table 3
Summary of Groundwater Analytical Data, SVOCs
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	Napthalene (µg/l)	Pyrene (µg/l)	Other SVOCs (µg/l)
MW-6			
2/27/01	19	ND	ND
8/20/01	52	<5	39
MW-9			
11/28/00	ND	ND	ND
MW-13			
11/28/00	ND	10	ND
MW-17			
11/28/00	ND	ND	ND
TBW-1			
8/20/01	140	8	387
TBW-3			
8/20/01	<5	<5	5
TBW-5			
8/20/01	220	<5	73

Notes:

SVOCs = Semivolatile organic compounds by EPA Method 8270
ND = Not detected

Samples not subject to silica gel cleanup or filtration before analysis.

Table 4
Summary of Groundwater Analytical Data, LUFT Metals
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in milligrams per liter (mg/l)

Well ID/ Date	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Nickel (mg/l)	Zinc (mg/l)	Notes
MW-2						
8/19/98	---	---	<100	---	---	a
MW-6						
2/28/01	<0.001	0.035	0.23	0.046	0.19	non-filtered
8/16/01	<0.001	0.020	0.12	0.032	0.11	
TBW-1						
8/16/01	<0.001	0.017	0.042	0.034	0.10	0.1
TBW-3						
8/16/01	<0.001	0.008	0.01	0.019	<0.02	
TBW-5						
8/16/01	<0.001	<0.005	0.01	0.008	0.03	

Notes:

LUFT metals by EPA Method 6010. Samples filtered in lab before analysis, unless noted otherwise.

--- = not measured/analyzed

a = analyzed for organic lead

LUFT = Leaking Underground Fuel Tank

Table 5
Summary of Groundwater Analytical Data, Additional Metals
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Sample ID/ Date	Antimony (mg/l)	Arsenic (mg/l)	Beryllium (mg/l)	Copper (mg/l)	Selenium (mg/l)	Silver (mg/l)	Thallium (mg/l)
MW-6							
8/16/01	<0.01	0.033	<0.001	0.025	<0.01	<0.003	<0.01
TBW-1							
8/16/01	<0.01	0.015	<0.001	0.017	<0.01	<0.003	<0.01
TBW-3							
8/16/01	<0.01	0.009	<0.001	0.008	<0.01	<0.003	<0.01
TBW-5							
8/16/01	<0.01	0.020	<0.001	<0.005	<0.01	<0.003	<0.01

Notes:

Metals by EPA Method 6010. Samples filtered in lab before analysis, unless noted otherwise.
mg/l = milligrams per liter

N

0 2400 4800

APPROXIMATE SCALE IN FEET

SOURCE: 2002 THOMAS GUIDE FOR ALAMEDA AND CONTRA COSTA COUNTIES

DESIGN\09225\11\000\09225 SiteVicinity CDR

Site Vicinity Map

Municipal Service Center, 7101 Edgewater Drive, Oakland, California

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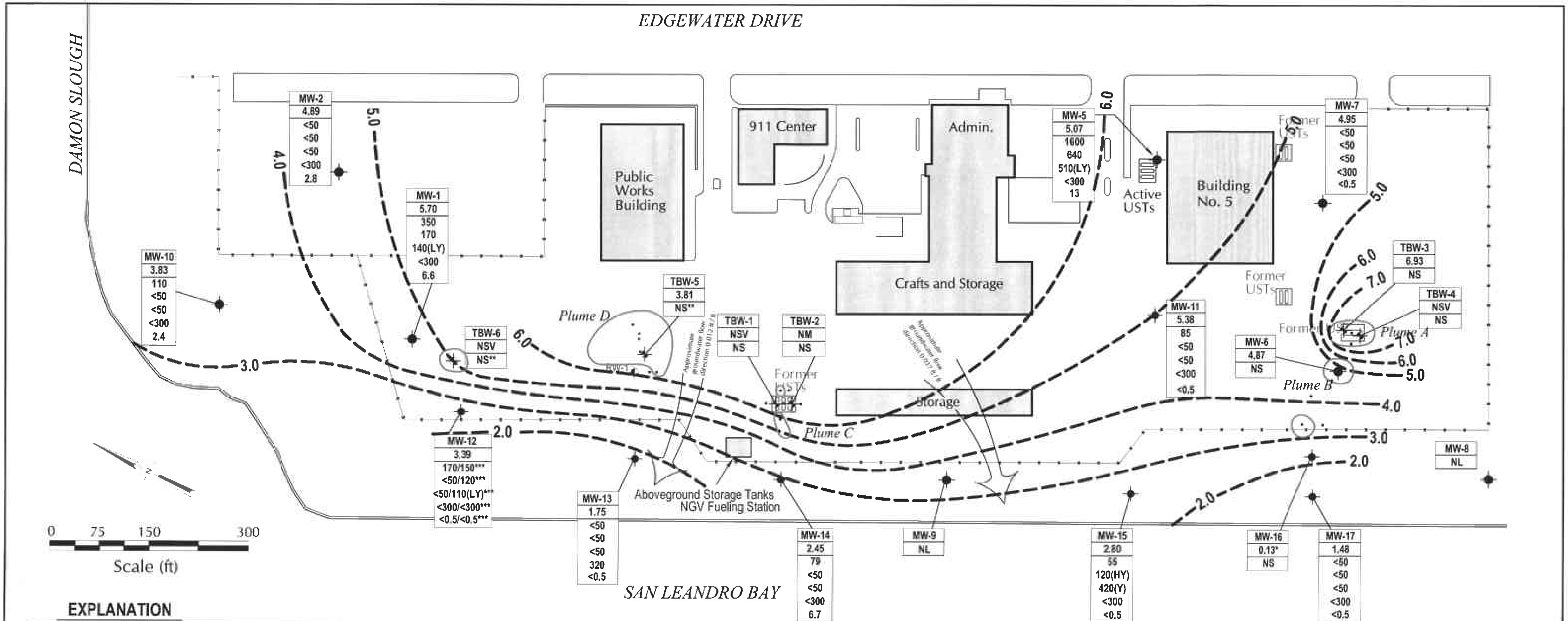
Figure 1



EXPLANATION

MW-1	Monitoring well location
RW-1	Remediation well location
TBW-1	Tank Backfill Well
MW-3	Abandoned Well
NL	Unable to locate
NS	Not Sampled
NM	Not Measured / Inaccessible
NSV	Not Surveyed
*	Anomalous groundwater elevation, not used in contouring
**	Sheen present
***	Duplicate Sample
L	Lighter hydrocarbons contributed to the quantitation
Y	Sample exhibits chromatographic pattern that does not resemble standard
H	Heavier hydrocarbons contributed to the quantitation

Well	Monitoring Well ID
ELEV	Groundwater elevation, feet above mean sea level (msl)
TPHg, TPHk, TPHd, TPHmo, B	TPHg, TPHk TPHd, TPHmo, and benzene concentrations in Micrograms per Liter (ug/L)
TPHg	Total Petroleum Hydrocarbons as Gasoline
TPHk	Total Petroleum Hydrocarbons as Kerosene
TPHd	Total Petroleum Hydrocarbons as Diesel
TPHmo	Total Petroleum Hydrocarbons as Motor Oil
B	Benzene
ft/ft	Foot per foot
UST	Underground storage tank
(oval)	Approximate plume boundary
(dotted line)	Fence
3.0 (dashed line)	Groundwater elevation contour; dashed where inferred

Source: CAMBRIA

Groundwater Elevation Contour Map and Hydrocarbon Concentrations in Shallow Groundwater

Municipal Service Center, Oakland, California

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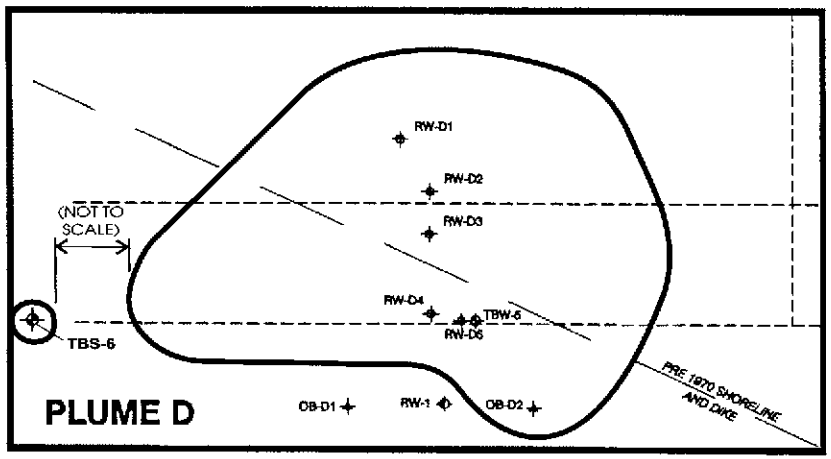
Figure 2

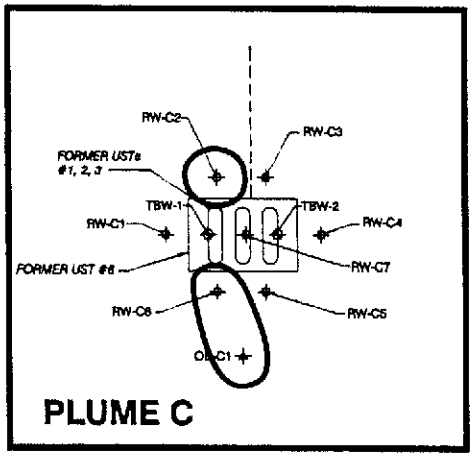
10/14/2005 3:14:57 PM

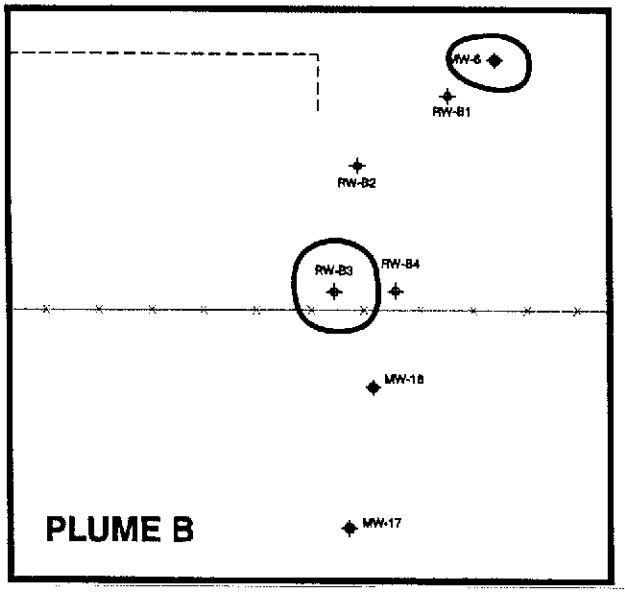
DESIGN\001\09225\11\000\09225 Plume Detail rev1.CDR

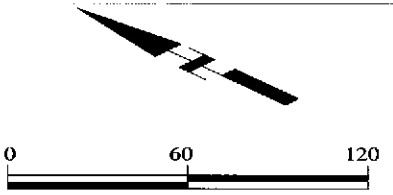


EXPLANATION

- RW-A1 — TEST/OBSERVATION WELL LOCATION
- OB-A1 — OBSERVATION WELL LOCATION
- MW-A1 — MONITORING WELL LOCATION
- RW-1 — REMEDIATION WELL LOCATION
- TBW-1 — TANK BACKFILL WELL
- FENCE
- FORMER UNDERGROUND PIPING
- AREA OF FREE PRODUCT ON GROUNDWATER







NOTE: ALL DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE
SOURCE: NINYO & MOORE - JULY 2004

Detail Plume Map

Municipal Service Center, 7101 Edgewater Drive, Oakland, California

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Figure 3

APPENDIX A

City of Oakland MSC Schedule and Protocol

Table A: Revised Well Sampling Schedule and Protocol

City of Oakland Municipal Service Center

Well ID	Monitoring Schedule		Parameters to Be Monitored							
	March	September	Elevation	Floating Product Thickness	PH	Dissolved Oxygen	Temperature	Specific Conductivity	TPH-gas BTEX & MTBE	TPH d/k/mo
MW-1	X	X	X	X	X	X	X	X	X	X
MW-2	X	gauge only	X	X	X	X	X	X	X	X
MW-3	Closed/ Destroyed									
MW-4	Closed/ Destroyed									
MW-5	X	X	X	X	X	X	X	X	X	X
MW-6	X	X	X	X	X	X	X	X	X	X
MW-7	X	gauge only	X	X	X	X	X	X	X	X
MW-8	X	X	X	X	X	X	X	X	X	X
MW-9	X	X	X	X	X	X	X	X	X	X
MW-10	X	X	X	X	X	X	X	X	X	X
MW-11	X	gauge only	X	X	X	X	X	X	X	X
MW-12	X	X	X	X	X	X	X	X	X	X
MW-13	X	X	X	X	X	X	X	X	X	X
MW-14	X	X	X	X	X	X	X	X	X	X
MW-15	X	X	X	X	X	X	X	X	X	X
MW-16	X	X	X	X	X	X	X	X	X	X
MW-17	X	X	X	X	X	X	X	X	X	X
MW-18	gauge only	gauge only	X	X						
TBW-1	gauge only	gauge only	X	X						
TBW-2	gauge only	gauge only	X	X						
TBW-3	gauge only	gauge only	X	X						
TBW-4	gauge only	gauge only	X	X						
TBW-5	gauge only	gauge only	X	X						
TBW-6	gauge only	gauge only	X	X						
RW-1	gauge only	gauge only	X	X						
RW-A1	gauge only	gauge only	X	X						
RW-A2	gauge only	gauge only	X	X						
OB-A1	gauge only	gauge only	X	X						
RW-B1	gauge only	gauge only	X	X						
RW-B2	gauge only	gauge only	X	X						
RW-B3	gauge only	gauge only	X	X						
RW-B4	gauge only	gauge only	X	X						
RW-C1	gauge only	gauge only	X	X						
RW-C2	gauge only	gauge only	X	X						
RW-C3	gauge only	gauge only	X	X						
RW-C4	gauge only	gauge only	X	X						
RW-C5	gauge only	gauge only	X	X						
RW-C6	gauge only	gauge only	X	X						
RW-C7	gauge only	gauge only	X	X						
OB-C1	gauge only	gauge only	X	X						
RW-D1	gauge only	gauge only	X	X						
RW-D2	gauge only	gauge only	X	X						
RW-D3	gauge only	gauge only	X	X						
RW-D4	gauge only	gauge only	X	X						
RW-D5	gauge only	gauge only	X	X						
OB-D1	gauge only	gauge only	X	X						
OB-D2	gauge only	gauge only	X	X						

Notes:

gauge only = measure groundwater elevation and floating product thickness only

TPH d/k/mo = total petroleum hydrocarbons as diesel, kerosene, and motor oil after silica gel cleanup

APPENDIX B

Groundwater Sampling Field Data Sheets

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WATER-LEVEL MEASUREMENTS LOG

Project No. 001-09225 Date 8-31-05 Page 1 of 2

Project Name MSC - 7101 EDGEWATER DR Day: ☐ Sun ☐ Mon ☐ Tues ☒ Weds ☐ Thurs ☐ Fri ☐ Sat

Field Personnel Michael Sullivan

General Observations clear Sunny, warm

WELL NO.	Time Opened ~~WELL ELEVATION~~	DEPTH TO WATER 1	DEPTH TO WATER 2	DEPTH TO PRODUCT	WELL SECURE? Y	WELL SECURE? N	Time measured	REMARKS (UNITS = FEET)
MW-1	1035	4.35	4.35	-			1510	water over cap
2	1015	6.08	6.08	-			1505	
3		ABANDONED						
4								
5	1205	6.08	6.08	-			1745	water over cap
6	1214	6.11	6.11	SHEEN	5.16?		1716*	water at capline
7	1220	6.56	6.56	-			1740	
8								can't find
9								can't find
10	955	6.76	6.76	-			1420	water above cap
11	1206	6.22	6.22	-			1521*	
12	1045	7.04	7.04	-			1515	water below cap
13	0918	9.56	9.56	-			1430	water above cap
14	0928	7.60	7.60	-			1433	(faint)
15	938	9.56	9.56	-			1436	
16	943	12.09	12.09	-			1440	No cap 2"
17	945	8.38	8.38	-			1445*	
18								can't find
TBW-1	1179	6.50	6.50				1657	well cap smashed 6"
2								couldn't find
3	1219	2.99	2.99				1737	
4	1217	2.97	2.92	-			1735	
5	1056	6.41	6.41	6.11			1610	
6	1040	4.43	4.43	3.91			1510	water above cap
RW-A1	1218	3.31	3.31	-			1732	
A2	1216	2.75	2.75	-			1737	water over cap
OB-A1	1215	4.10	4.10	-			1730	
RW-B1	1213	7.14	7.14	-			1728	
B2	1212	7.14	7.14	-			1725	
B3	1211	9.60	9.60	9.59	0.01		1715	
B4	1210	9.70	9.70	-			1720	
RW-C1	1148	5.81	5.81	-			1655	

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WATER-LEVEL MEASUREMENTS LOG

Project No. 001-0 Date 8-31-05 Page 2 of 2

Project Name _____ Day: ☐ Sun ☐ Mon ☐ Tues ☒ Weds ☐ Thurs ☐ Fri ☐ Sat

Field Personnel _____

General Observations _____

WELL NO.	~~Time of Read~~ WELL ELEVATION	DEPTH TO WATER 1	DEPTH TO WATER 2	DEPTH TO PRODUCT	WELL SECURE? Y	WELL SECURE? N	Time Measured	REMARKS (UNITS = FEET)
RW-C2	1155	6.30	6.30	6.29			1659	
C3	1154	6.39	6.39	—			1705	
C4	1155	6.71	6.71	—			1710	
C5	1154	6.51	6.51	—			1645	
C6	1151	6.81	6.81	6.38			64-	
C7	1150							covered
OB-C1	1130	7.84	7.84	6.29			1635	
RW-D1	1050	5.75	5.75	5.73			1580	
D2	1051	8.44	8.44	5.32			1535	1 1 strong odor
D3	1062	7.72	7.72	5.26			1592	Very Strong odor (cap not on)
D4	1053	8.09	8.09	5.97			1550	" " " (cap not on)
D5	1054	*7.02	*7.02	6.01				*Product Thick difficult to tell thickness
OB-D1	1058	5.42	5.42	—			1627	cap not on
OB-D2	1059	5.71	5.71	5.70			1612	water at cap
RW-1	1057	5.83	5.83	—			1620.	

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Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09225

Project Name: Oakland Edgewater

Sample Location: _____

Samplers Name: MWS

Sampling Plan Prepared By: _____

Sampling Method: _____

Date: 9-2-05

Sample No.: MW-1

☐ FB: _____

☒ ~~DUP~~: MW-1D

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☐ Teflon Bailer

☐ Hand Bail ☐ _____ (Other)

☐ Extraction Well Port

Analyses Requested

Number and Types of Bottle used

15.79
4.56
11.23
16
6736
1123
7859

Method of Shipment

_____ (Lab Name) ☐ Courier _____

☒ Hand Deliver:

Well Number: MW-1

Depth to Water: 4.56

Well Depth: 15.79

Height of Water Column: 11.23

Volume in Well: 1.80

Well Diameter: 2"

☒ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet)

80% DTW _____

TIME	Depth to Water	Volume Purged (Gallons)	~~Totalizer Reading~~	Temperature °C	pH (SU)	Cond (mohs)	~~Turbidity~~ (NTU)	Remarks
1200		2.0	71.2/4.0M	22.19	6.86	9.61	154.8	Turbid Brown
1205		4.0	403/3.90	22.22	6.89	1.1119	-154.7	Turbid Brown
1210		6.0	2.5/3.7	21.73	6.91	1.1646	-154.4	Turbid Brown
1210								Stopped Purge at 2 Gal.
1215	7.81						✓	Return and Sample

Inlet Depth: _____

Comments: _____

(Recommended Method For Purging Well)

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WATER-QUALITY SAMPLING INFORMATION

Project No.: 001 . 09225

Project Name:

Sample Location: Edgewater

Samplers Name: MWS

Sampling Plan Prepared By:

Sampling Method:

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☒ Hand Bail
- ☐ Extraction Well Port
- ☐ Disposable Bailer
- ☐ Teflon Bailer
- ☐ _____ (Other)

Date: 9-2-05

Sample No.: MW-5

☒ FB: MW5-FR-2

☐ DUP:

Analyses Requested

Number and Types of Bottle used

Method of Shipment

_____ (Lab Name)

☐ Courier _____

☒ Hand Deliver:

Well Number: MW-5

Depth to Water: 6.11

Well Depth: 14.39

Height of Water Column: 8.28

Volume in Well: 1.32 DO

Well Diameter: 2"

- ☒ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet)
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

14.39
6.11
8.28
0.16
4.65

80% DTW _____

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temperature °C	pH (SU)	Cond (mohs)	Turbidity (NTU) ORP	Remarks
1335	6.11							start Purge
1345							3	FB-2
1350		1.5	227/191	23.90	7.15	1641	-11.8	Slightly turbid / grey
1400		3.0	209/171	23.92	6.95	12.08	-64.4	" " "
1410		4.5	199/156	23.89	6.94	3.49	-58.9	" " "
								Sample

Inlet Depth: _____

Comments: _____

Recommended Method For Purging Well)

LEVINE•FRICKE

Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09225

Project Name: Edgewater

Sample Location: _____

Samplers Name: MWJ

Sampling Plan Prepared By: _____

Sampling Method: _____

Date: 9-2-05

Sample No.: MW-7

☐ FB: _____

☐ DUP: _____

☐ Centrifugal Pump ☐ Disposable Bailer

☐ Submersible Pump ☐ Teflon Bailer

☐ Hand Bail ☐ _____ (Other)

☐ Extraction Well Port

Analyses Requested

Number and Types of Bottle used

Method of Shipment

_____ (Lab Name) ☐ Courier _____

☒ Hand Deliver:

Well Number: MW-7

Depth to Water: 6.61

Well Depth: 14.29

Height of Water Column: 7.68

Volume in Well: 1.33 DO

Well Diameter: 2"

☒ 2" (0.16 Gallon/Feet)

☐ 4" (0.65 Gallon/Feet

☐ 5" (1.02 Gallon/Feet)

☐ 6" (1.47 Gallon/Feet) ORP

80% DTW _____

14.29
6.61
7.68
0.16
1.33
3
3.99

TIME	Depth to Water	Volume Purged (Gallons)	~~Totalizer~~ Reading	Temperature °C	pH (SU)	Cond (mohs)	~~Turbidity~~ (NTU)	Remarks
1245	6.61							Start
1250		1.5	19.0/1.19	23.36	7.38	2716	25.7	Slightly Turbid Brown
1255		3.0	31.9/2.62	23.18	7.01	2607	24.9	" " "
1300		4.5	30.9/2.62	22.83	6.77	2790	26.4	" " "
1305		6.0	49.1/4.16	22.95	6.78	2743	13.1	" " "
1310								Sample

Inlet Depth: _____

Comments: _____

(Recommended Method For Purging Well)

WATER QUALITY SAMPLING INFO 2NOV94.PY1

LEVINE•FRICKE

Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09275

Project Name: _____

Sample Location: Edgewater

Samplers Name: MWS

Sampling Plan Prepared By: _____

Sampling Method: _____

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☐ Hand Bail
- ☐ Extraction Well Port
- ☐ Disposable Bailer
- ☐ Teflon Bailer
- ☐ _____ (Other)

Date: 11-1-05

Sample No.: MW-10

- ☐ FB: _____
- ☐ DUP: _____

14.85
6.76
8.09
0.16

48 54
809

1.29 49

Analyses Requested

Number and Types of Bottle used

Method of Shipment

_____ (Lab Name)

- ☐ Courier _____
- ☐ Hand Deliver:

Well Number: MW-12

Depth to Water: 6.76

Well Depth: 14.85

Height of Water Column: 8.09

Volume in Well: 1.29

Well Diameter: 2"

- ☑ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

80% DTW _____

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temperature °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1514								start
1520		1.3	15.7/1.32	22.56	7.74	4372	-15.2	Slightly Tan, b.k
1525		2.6	57/1.19	21.39	7.49	4336	-15.3	"
1530		3.9	143/1.21	21.01	7.43	4319	-15.3	
635		5.2	192/1.17	21.14	7.42	4320	-15.2	
1540								stop

Inlet Depth: _____

Comments: _____

(Recommended Method For Purging Well)

WTR-PURG.DYMART

LEVINE•FRICKE

Page ____ of ____

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09225

Project Name: Edgewood

Sample Location:

Samplers Name: MLS

Sampling Plan Prepared By:

Sampling Method:

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☐ Hand Bail
- ☐ Extraction Well Port
- ☐ Disposable Bailer
- ☐ Teflon Bailer
- ☐ _____ (Other)

Date: 9-7-05

Sample No.: MW-11

- ☐ FB:
- ☐ DUP:

19.26
6.24
13.02
6.16
78 12
13

Analyses Requested

Number and Types of Bottle used

Method of Shipment

_____ (Lab Name)

- ☐ Courier
- ☐ Hand Deliver:

Well Number: MW-11

Depth to Water: 6.24

Well Depth: 19.26

Height of Water Column: 13.02

Volume in Well: 2.08

Well Diameter: ~~4~~ 2

- ☒ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

80% DTW _____

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temperature °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1425	—							Start
1430		2.25	284/302	22.09	6.60	17930	79.9	Turbid Grey
1435		4.5	2.01	22.90			-82%	
1440			19.5/166	21.93	6.61	11782		
1445								Sampled

Inlet Depth: _____

Comments: _____
(Recommended Method For Purging Well)

LEVINE•FRICKE

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09225

Project Name:

Sample Location: Edgewater

Samplers Name: MWS

Sampling Plan Prepared By:

Sampling Method:

- [ ] Centrifugal Pump
- [ ] Submersible Pump
- [ ] Hand Bail
- [x] Extraction Well Port
- [ ] Disposable Bailer
- [ ] Teflon Bailer
- [ ] _____ (Other)

Date: ~~MW-14~~ 9-1-05

Sample No.: MW-14

- [ ] FB:
- [ ] DUP:

Analyses Requested

Number and Types of Bottle used

Method of Shipment

(Lab Name)

- [ ] Courier
- [x] Hand Deliver:

Well Number: MW-14

Depth to Water:

Well Depth:

Height of Water Column:

Volume in Well:

Well Diameter:

- [x] 2" (0.16 Gallon/Feet)
- [ ] 4" (0.65 Gallon/Feet
- [ ] 5" (1.02 Gallon/Feet)
- [ ] 6" (1.47 Gallon/Feet)

80% DTW

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temperature °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1420								Start
1425		1.25	14.6 / 1.24	21.52	7.63	10890	-171.0	very Turbid
1430		2.50	14.8 / 1.27	20.90	7.57	10282	-173.2	" "
1435		3.75	15.0 / 1.33	20.94	7.50	10357	-170.9	" "
1440								Sampl

Inlet Depth:

Comments:

(Recommended Method For Purging Well)

LEVINE•FRICKE

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09775

Date: 9-1-05

Project Name: Edgewater

Sample No.: MW-15

Sample Location: ______

☐ FB: ______

Samplers Name: MWS

☐ DUP: ______

Sampling Plan Prepared By: ______

Sampling Method: ______

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☑ Hand Bail
- ☐ Extraction Well Port
- ☐ Disposable Bailer
- ☐ Teflon Bailer
- ☐ ______ (Other)

Analyses Requested

Number and Types of Bottle used

20.19
9.59
10.60
.16
6360
1.06
0.[illegible]306

80% DTW ______

Method of Shipment

______ (Lab Name)

☐ Courier ______

☐ Hand Deliver:

Well Number: MW-15

Depth to Water: 9.59

Well Depth: 20.19

Height of Water Column: 10.60

Volume in Well: 0.73

Well Diameter: 2"

- ☑ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temperature °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
1235	9.59	—	—	—	—	[illegible]	[illegible]	Start
1240		0.75	83[illegible]/7.01	21.40	7.71	9587	-200	Turbid (grey) some odor
12[illegible]		1.56	516/11.40	20.97	7.01	9454	495.7	Turbid
12[illegible]		2.25	360/3.21	[illegible]	7.27	[illegible]	-196.5	Turbid
1300		3.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]				[illegible]		[illegible]

Inlet Depth: ______

Comments: ______
(Recommended Method For Purging Well)

LEVINE•FRICKE

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09225

Date: 9-1-05

Project Name: Oakland Edgwater

Sample No.: MW-16

Sample Location: MLK Park

☐ FB:

Samplers Name: MWS

☐ DUP:

Sampling Plan Prepared By:

Sampling Method:

☐ Centrifugal Pump ☐ Disposable Bailer
☐ Submersible Pump ☐ Teflon Bailer
☒ Hand Bail ☐ ______ (Other)
☐ Extraction Well Port

13.58
12.55
1.03
0.16
618
1.03 x

Analyses Requested: [illegible]; TPH-d, TPH-mo, TPH-g

Number and Types of Bottle used: [illegible]

Method of Shipment

(Lab Name)

☐ Courier

☒ Hand Deliver:

Well Number: MW-16

Well Diameter: 2"

Depth to Water: 12.55

☒ 2" (0.16 Gallon/Feet)

Well Depth: 13.58

☐ 4" (0.65 Gallon/Feet

Height of Water Column: 1.03

☐ 5" (1.02 Gallon/Feet)

Volume in Well: 0.16

☐ 6" (1.47 Gallon/Feet)

80% DTW

TIME	Depth to Water	Volume Purged (Gallons)	~~Totalizer Reading~~ DO	Temperature °C	pH (SU)	Cond (mohs)	Turbidity ~~(NTU)~~ ORP	Remarks
1145	12.55	—						start
1130		0.20	54.4/2.93	21.10	6.44	7046	-42.0	very turbid
								[illegible]

Inlet Depth:

Comments:
(Recommended Method For Purging Well)

LEVINE•FRICKE

WATER-QUALITY SAMPLING INFORMATION

Project No.: 001-09225

Date: 9-1-05

Project Name: Edgewater

Sample No.: MW-17

Sample Location: ____

☐ FB: ____

Samplers Name: MWS

☐ DUP: ____

Sampling Plan Prepared By: ____

Sampling Method: ____

- ☐ Centrifugal Pump
- ☐ Submersible Pump
- ☒ Hand Bail
- ☐ Extraction Well Port
- ☐ Disposable Bailer
- ☐ Teflon Bailer
- ☐ ____ (Other)

17.62
8.21
9.41
0.16
[illegible] .46
[illegible]

Analyses Requested

Number and Types of Bottle used

Method of Shipment

____ (Lab Name)

☐ Courier ____

☒ Hand Deliver:

Well Number: MW-17

Depth to Water: 8.21

Well Depth: 17.62

Height of Water Column: 9.41

Volume in Well: 1.5

Well Diameter: 2"

- ☒ 2" (0.16 Gallon/Feet)
- ☐ 4" (0.65 Gallon/Feet
- ☐ 5" (1.02 Gallon/Feet)
- ☐ 6" (1.47 Gallon/Feet)

80% DTW ____

TIME	Depth to Water	Volume Purged (Gallons)	Totalizer Reading	Temperature °C	pH (SU)	Cond (mohs)	Turbidity (NTU)	Remarks
[illegible]	8.21							
1140		1.5	24.0/195	20.92	7.32	20324	-237.6	very turbid (black) sulfur [illegible]
1145		3.0	23.0/188	20.[illegible]	[illegible]	22063	[illegible]	
1150		4.5	[illegible]/[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-[illegible]96.6	

Inlet Depth: ____

Comments: ____

(Recommended Method For Purging Well)

WTR.QLTY SMPLING INFO 7/6/04.ARY1

APPENDIX C

Laboratory Results and Chain-of-Custody Documentation

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

ANALYTICAL REPORT

Prepared for:

LFR Levine Fricke
1900 Powell Street
12th Floor
Emeryville, CA 94608

Date: 26-SEP-05
Lab Job Number: 181691
Project ID: 001-09225-14
Location: Oakland Edgewater

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: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	181691
Client:	LFR Levine Fricke
Project:	001-09225-14
Location:	Oakland Edgewater
Request Date:	09/06/05
Samples Received:	09/02/05

This hardcopy data package contains sample and QC results for thirteen water samples, requested for the above referenced project on 09/06/05. The samples were received cold and intact. All data were e-mailed to Larry Lapuyade on 09/16/05.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High recoveries were observed for a number of analytes in the MS/MSD for batch 105818; the parent sample was not a project sample, the LCS was within limits, and the associated RPDs were within limits. Low recovery was observed for benzene in the MSD for batch 105818; the parent sample was not a project sample, the LCS was within limits, and the low recovery was not associated with any reported results. Response exceeding the instrument's linear range was observed for benzene in the MS for batch 105818; affected data was qualified with "b". No other analytical problems were encountered.

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

CHAIN OF CUSTODY

C & T LOGIN #: 181691

Sampler: MWS

Project No.: 001-09225-14

Report To: Larry Lapyna

Project Name: Oakland Edgewater

Company: LPR

Project P.O.:

Telephone: (510)596 9638

Turnaround Time: Standard

Fax:

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analysis: TPH-g (8015)	Analysis: BTEX/MTBE (8260B)	Analysis: TPH-d	Analysis: TPH-k	Analysis: TPH-mo
-1	Trip Blank 090105	1130 9-1-05		X		2	X								
-2	MW-17	1200		X		7	X				X	X	X	X	X
-3	MW-15	1305		X		7	X								
-4	MW-14	1440		X		7	X								
-5	MW-13	1355		X		7	X								
-6	MW-10	1540		X		7	X								
-7	MW-2	1645		X		7	X								
-8	MW-2 FB-1	1700 9-1-05		X		2	X								
-9	MW-12	1050 9-2-05		X		7	X								
-10	MW-12D	1055		X		7	X								
-11	MW-1	1215		X		7	X								
-12	* MW-7	1310		X		7	X								
-13	* MW-5	1355		X		7	X								

Notes:
Silica Gel cleanup for TPH
* MW-5 and 7 reacted w/ HCl will need more Preservative

SAMPLE RECEIPT
☑ Intact ☐ Cold
☑ On Ice ☐ Ambient
Preservative Correct?
☐ Yes ☐ No ☐ N/A

RELINQUISHED BY:
9-2-05 1750 — DATE / TIME
DATE / TIME
DATE / TIME

RECEIVED BY:
Lawrence Lapyna 9/2/05 5:50 — DATE / TIME
DATE / TIME
DATE / TIME

SIGNATURE

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

CHAIN OF CUSTODY

C & T LOGIN #: 181691

Sampler: MWS

Project No.: 001 - 09725-14 | Report To: Larry Lafyne

Project Name: Oakland Edgewater | Company: LPR

Project P.O.: | Telephone: (510) 596-9638

Turnaround Time: Standard | Fax:

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analysis: TPH-g (8015)	BTEX/MTBE (8260B)	TPH-mo	TPH-k	TPH-d
-14	MW-5-FB	1325 9-2-05		X		7	X				X	X	X	X	X
-15 *	MW-11	1445 9-2-05		X		2	X				X	X	X	X	X
															X
-16	Trip Blank 2	1000 9-2-05	&	X		2	X					X			

Notes:
Silica Gel Cleanup for TPH
* MW-11 reacted w/ HCl will need more preservative

SAMPLE RECEIPT
☒ Intact ☐ Cold
☒ On Ice ☐ Ambient
Preservative Correct?
☐ Yes ☐ No ☐ N/A

RELINQUISHED BY:	RECEIVED BY:
9-2-05 1730 DATE / TIME	9/2/05 5:50 DATE / TIME
DATE / TIME	DATE / TIME
DATE / TIME	DATE / TIME

SIGNATURE

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 181691 Date Received: 9-2-05 Number of Coolers: 2
Client: LFR Project: 001-09285-14

A. Preliminary Examination Phase
Date Opened: 9-2-05 By (print): Troy Windsor (sign) Troy Windsor

1. Did cooler come with a shipping slip (airbill, etc.)? YES (NO)
   If YES, enter carrier name and airbill number:
2. Were custody seals on outside of cooler? YES (NO)
   How many and where: Seal date: Seal name: N/A
3. Were custody seals unbroken and intact at the date and time of arrival? YES NO
4. Were custody papers dry and intact when received? (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? (YES) NO
6. Did you sign the custody papers in the appropriate place? (YES) NO
7. Was project identifiable from custody papers? (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO
   Type of ice: Wet Temperature: Cold - no temp blank

B. Login Phase
Date Logged In: 9-2-95 By (print): Troy Windsor (sign) Troy Windsor

1. Describe type of packing in cooler: In ziploc type bags
2. Did all bottles arrive unbroken? (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? (YES) NO
4. Did bottle labels agree with custody papers? YES (NO)
5. Were appropriate containers used for the tests indicated? (YES) NO
6. Were correct preservatives added to samples? (YES) NO
7. Was sufficient amount of sample sent for tests indicated? (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below. (YES) NO
9. Was the client contacted concerning this sample delivery? YES NO
   If YES, give details below.
   Who was called? By whom? Date:

Additional Comments:
B4 - Sample -001 ID on COC = Trip Blank 090105 Labels = Trip Blank -1
↓ -914 ↓ ↓ ↓ ↓ MW-5-FB ↓ ↓ MW-5-FB-2

Tracy Babjar

From: "Lapuyade, Larry" <Larry.Lapuyade@lfr.com>
To: "'Tracy Babjar'" <tracy@ctberk.com>
Sent: Wednesday, September 07, 2005 12:54 PM
Subject: RE: 001-09225-14 - C&T Login Summary (181691)

Tracy,

Please hold the following:

Trip Blank 2 and MW-5-FB.

Thanks

From: Tracy Babjar [mailto:tracy@ctberk.com]
Sent: Wednesday, September 07, 2005 10:59 AM
To: larry.lapuyade@lfr.com
Subject: 001-09225-14 - C&T Login Summary (181691)

C&T Login Summary for 181691

Project:

#14
& #15

Silica Gel
8020ms
TVH
TEHM

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	105467
Units:	ug/L	Received:	09/02/05
Diln Fac:	1.000		

Field ID: MW-17 Sampled: 09/01/05
Type: SAMPLE Analyzed: 09/06/05
Lab ID: 181691-002

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	63-141
Bromofluorobenzene (FID)	97	79-139

Field ID: MW-15 Sampled: 09/01/05
Type: SAMPLE Analyzed: 09/06/05
Lab ID: 181691-003

Analyte	Result	RL
Gasoline C7-C12	55	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	63-141
Bromofluorobenzene (FID)	95	79-139

Field ID: MW-14 Sampled: 09/01/05
Type: SAMPLE Analyzed: 09/07/05
Lab ID: 181691-004

Analyte	Result	RL
Gasoline C7-C12	79	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	63-141
Bromofluorobenzene (FID)	95	79-139

Field ID: MW-13 Sampled: 09/01/05
Type: SAMPLE Analyzed: 09/07/05
Lab ID: 181691-005

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	63-141
Bromofluorobenzene (FID)	94	79-139

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	105467
Units:	ug/L	Received:	09/02/05
Diln Fac:	1.000		

Field ID:	MW-10	Sampled:	09/01/05
Type:	SAMPLE	Analyzed:	09/07/05
Lab ID:	181691-006		

Analyte	Result	RL
Gasoline C7-C12	110	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	63-141
Bromofluorobenzene (FID)	96	79-139

Field ID:	MW-2	Sampled:	09/01/05
Type:	SAMPLE	Analyzed:	09/07/05
Lab ID:	181691-007		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	63-141
Bromofluorobenzene (FID)	94	79-139

Field ID:	MW-2FB-1	Sampled:	09/01/05
Type:	SAMPLE	Analyzed:	09/07/05
Lab ID:	181691-008		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	93	63-141
Bromofluorobenzene (FID)	92	79-139

Field ID:	MW-12	Sampled:	09/02/05
Type:	SAMPLE	Analyzed:	09/07/05
Lab ID:	181691-009		

Analyte	Result	RL
Gasoline C7-C12	170	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	63-141
Bromofluorobenzene (FID)	97	79-139

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	105467
Units:	ug/L	Received:	09/02/05
Diln Fac:	1.000		

Field ID: MW-12D
Type: SAMPLE
Lab ID: 181691-010
Sampled: 09/02/05
Analyzed: 09/07/05

Analyte	Result	RL
Gasoline C7-C12	150	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	63-141
Bromofluorobenzene (FID)	97	79-139

Field ID: MW-1
Type: SAMPLE
Lab ID: 181691-011
Sampled: 09/02/05
Analyzed: 09/07/05

Analyte	Result	RL
Gasoline C7-C12	350	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	63-141
Bromofluorobenzene (FID)	95	79-139

Field ID: MW-7
Type: SAMPLE
Lab ID: 181691-012
Sampled: 09/02/05
Analyzed: 09/07/05

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	92	63-141
Bromofluorobenzene (FID)	91	79-139

Field ID: MW-5
Type: SAMPLE
Lab ID: 181691-013
Sampled: 09/02/05
Analyzed: 09/07/05

Analyte	Result	RL
Gasoline C7-C12	1,600	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	63-141
Bromofluorobenzene (FID)	99	79-139

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	105467
Units:	ug/L	Received:	09/02/05
Diln Fac:	1.000		

Field ID:	MW-11	Sampled:	09/02/05
Type:	SAMPLE	Analyzed:	09/07/05
Lab ID:	181691-015		

Analyte	Result	RL
Gasoline C7-C12	85	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	63-141
Bromofluorobenzene (FID)	95	79-139

Type:	BLANK	Analyzed:	09/06/05
Lab ID:	QC307648		

Analyte	Result	RL
Gasoline C7-C12	ND	50

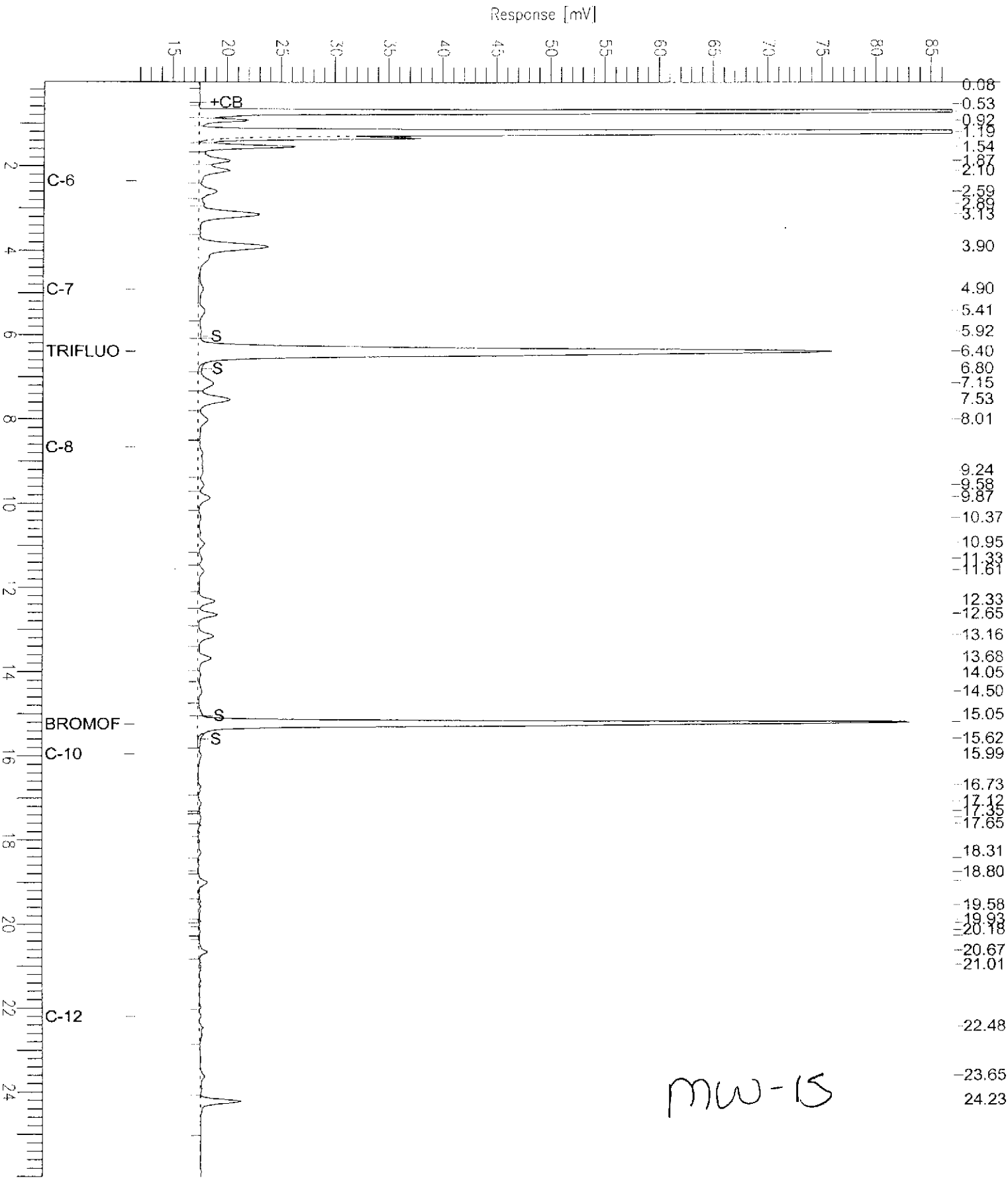
Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	63-141
Bromofluorobenzene (FID)	93	79-139

ND= Not Detected
RL= Reporting Limit

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-003,105467,tvh
FileName : G:\GC07\DATA\249A018.RAW
Method :
Start Time : 0.02 min End Time : 26.00 min
Scale Factor: 0.0 Plot Offset: 12 mV

Sample #: a1.0 Page 1 of 1
Date : 9/7/05 09:21 AM
Time of Injection: 9/6/05 11:40 PM
Low Point : 11.66 mV High Point : 86.94 mV
Plot Scale: 75.3 mV

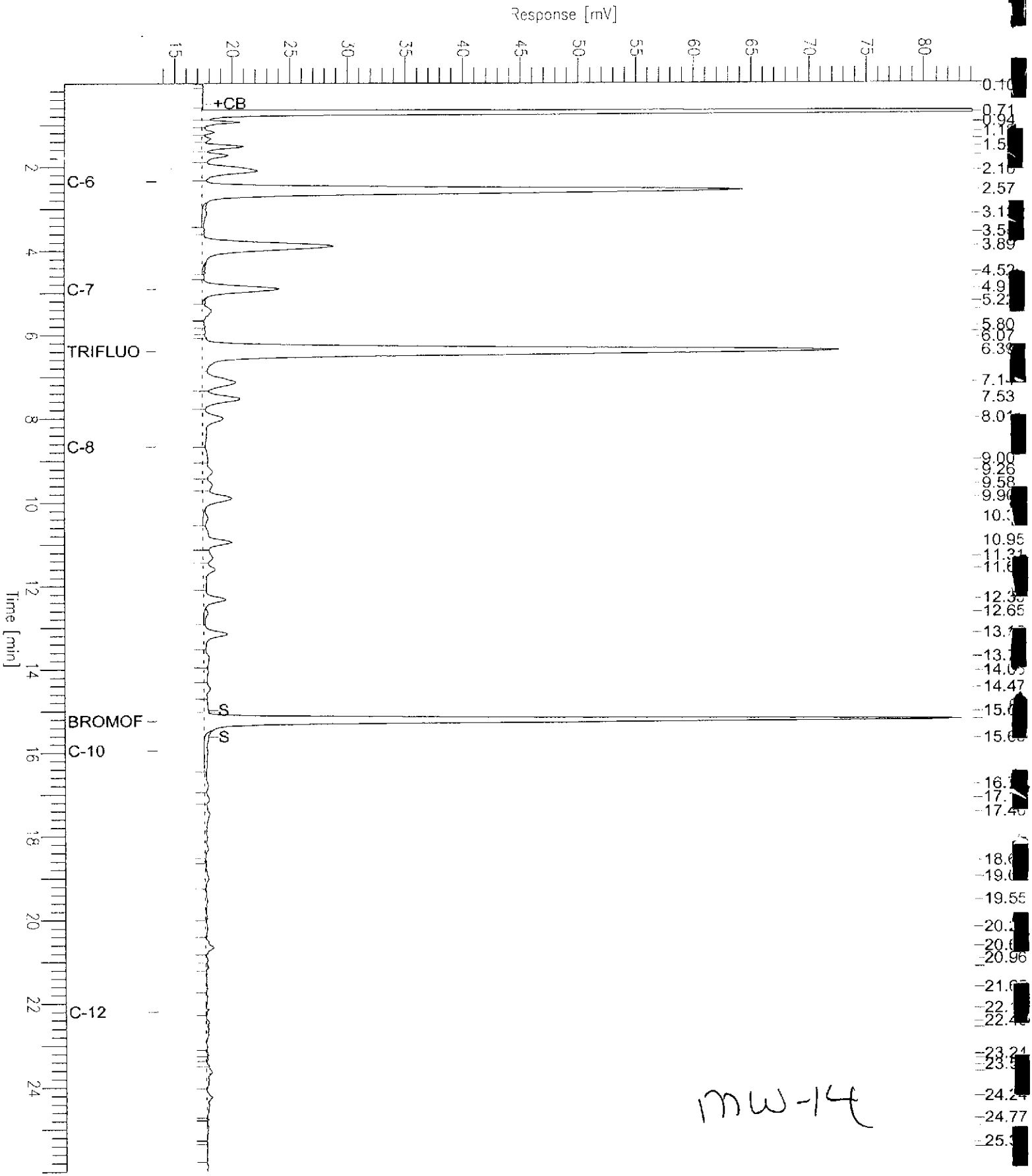


MW-15

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-004,105467,tvh
FileName : G:\GC07\DATA\249A019.RAW
Method :
Start Time : 0.02 min End Time : 26.00 min
Scale Factor: 0.0 Plot Offset: 13 mV

Sample #: a1.0 Page 1 of 1
Date : 9/7/05 09:21 AM
Time of Injection: 9/7/05 12:15 AM
Low Point : 13.42 mV High Point : 84.15 mV
Plot Scale: 70.7 mV

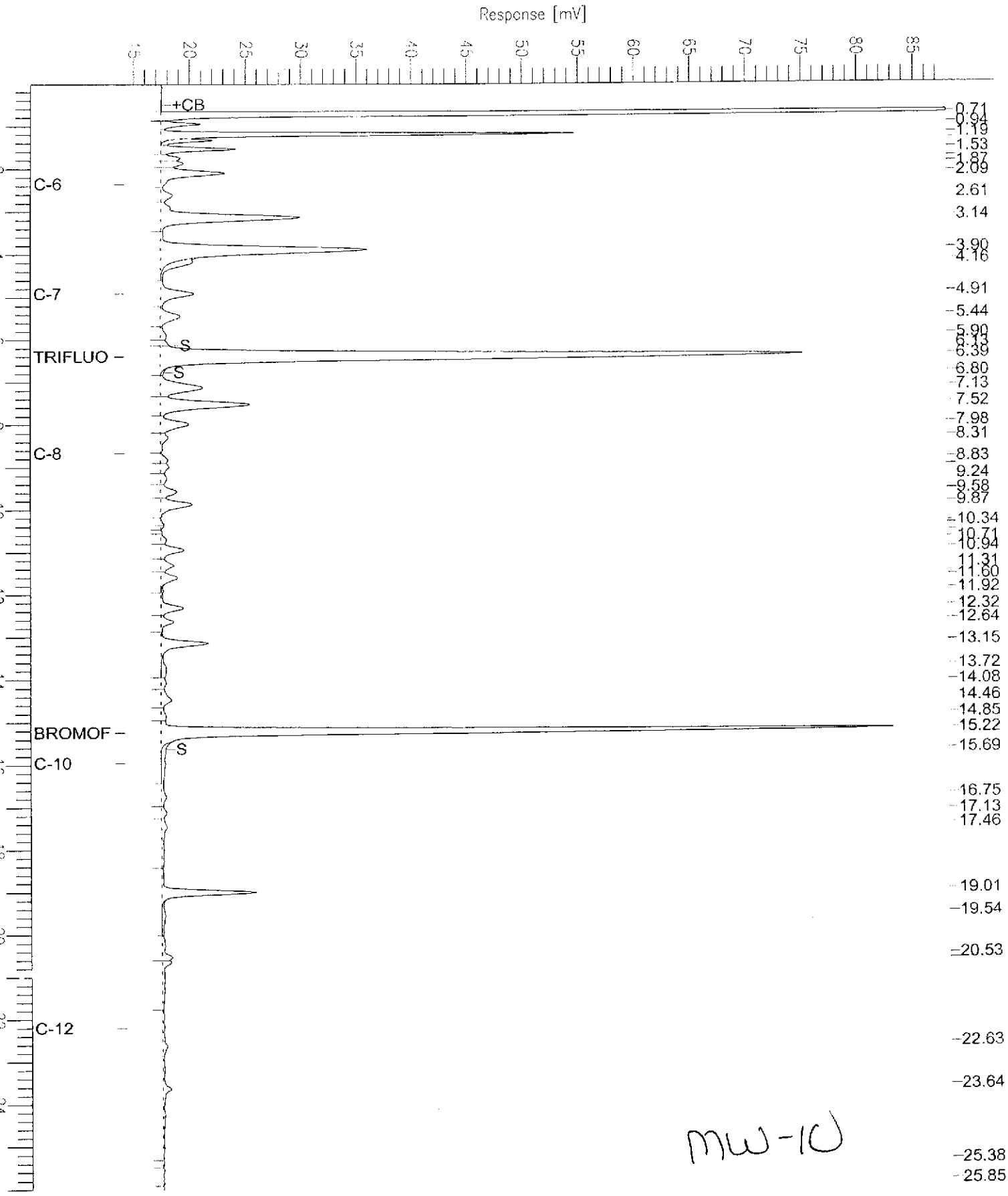


MW-14

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-006,105467,tvh
FileName : G:\GC07\DATA\249A021.RAW
Method :
Start Time : 0.02 min End Time : 26.00 min
Scale Factor: 0.0 Plot Offset: 14 mV

Sample #: a1.0 Page 1 of 1
Date : 9/7/05 09:24 AM
Time of Injection: 9/7/05 01:25 AM
Low Point : 14.19 mV High Point : 87.95 mV
Plot Scale: 73.8 mV

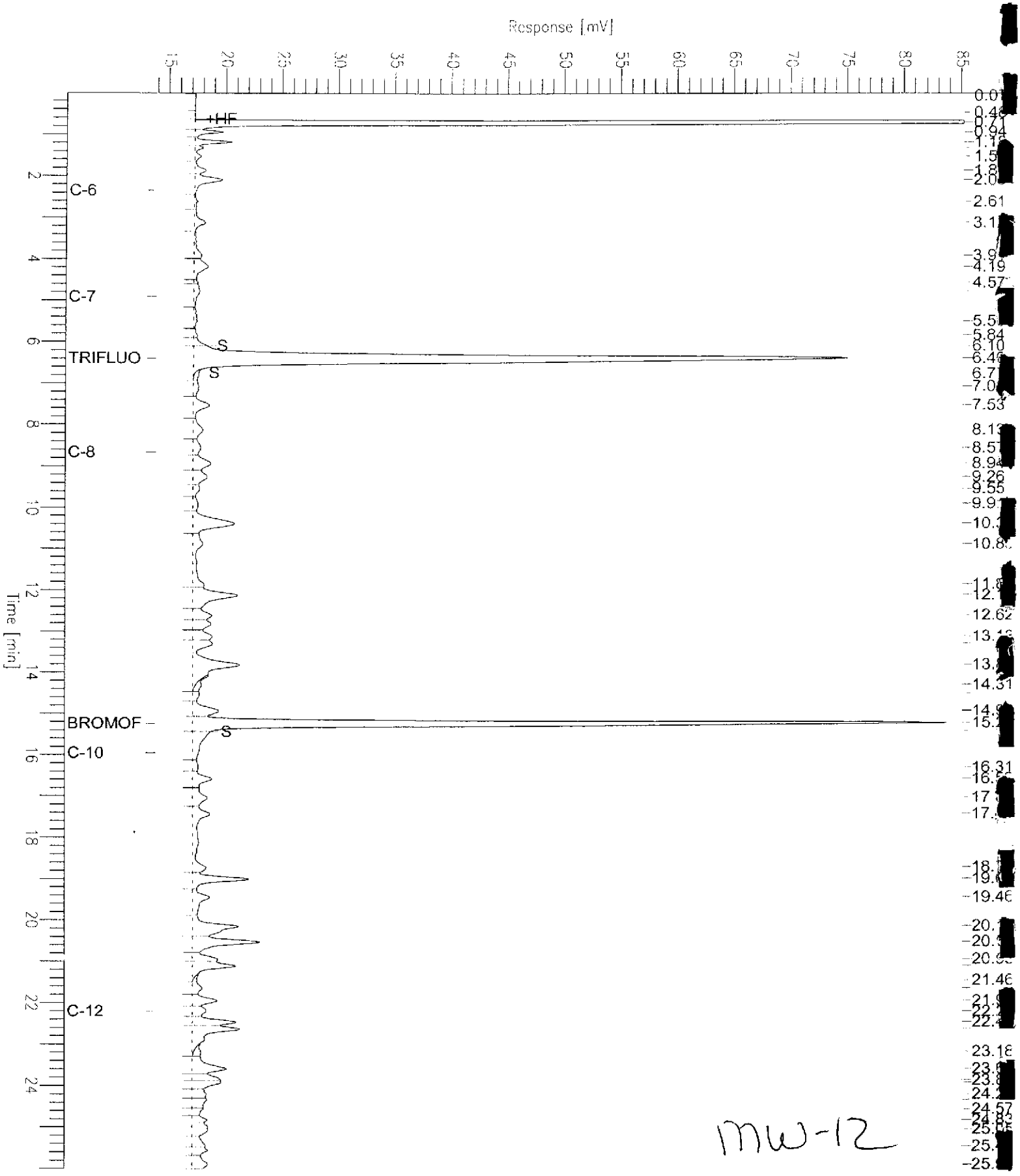


MW-10

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-009,105467,tvh
FileName : G:\GC07\DATA\249A024.RAW
Method :
Start Time : 0.02 min End Time : 26.00 min
Scale Factor: 0.0 Plot Offset: 14 mV

Sample #: a1.0 Page 1 of 1
Date : 9/7/05 09:27 AM
Time of Injection: 9/7/05 03:10 AM
Low Point : 13.96 mV High Point : 85.25 mV
Plot Scale: 71.3 mV

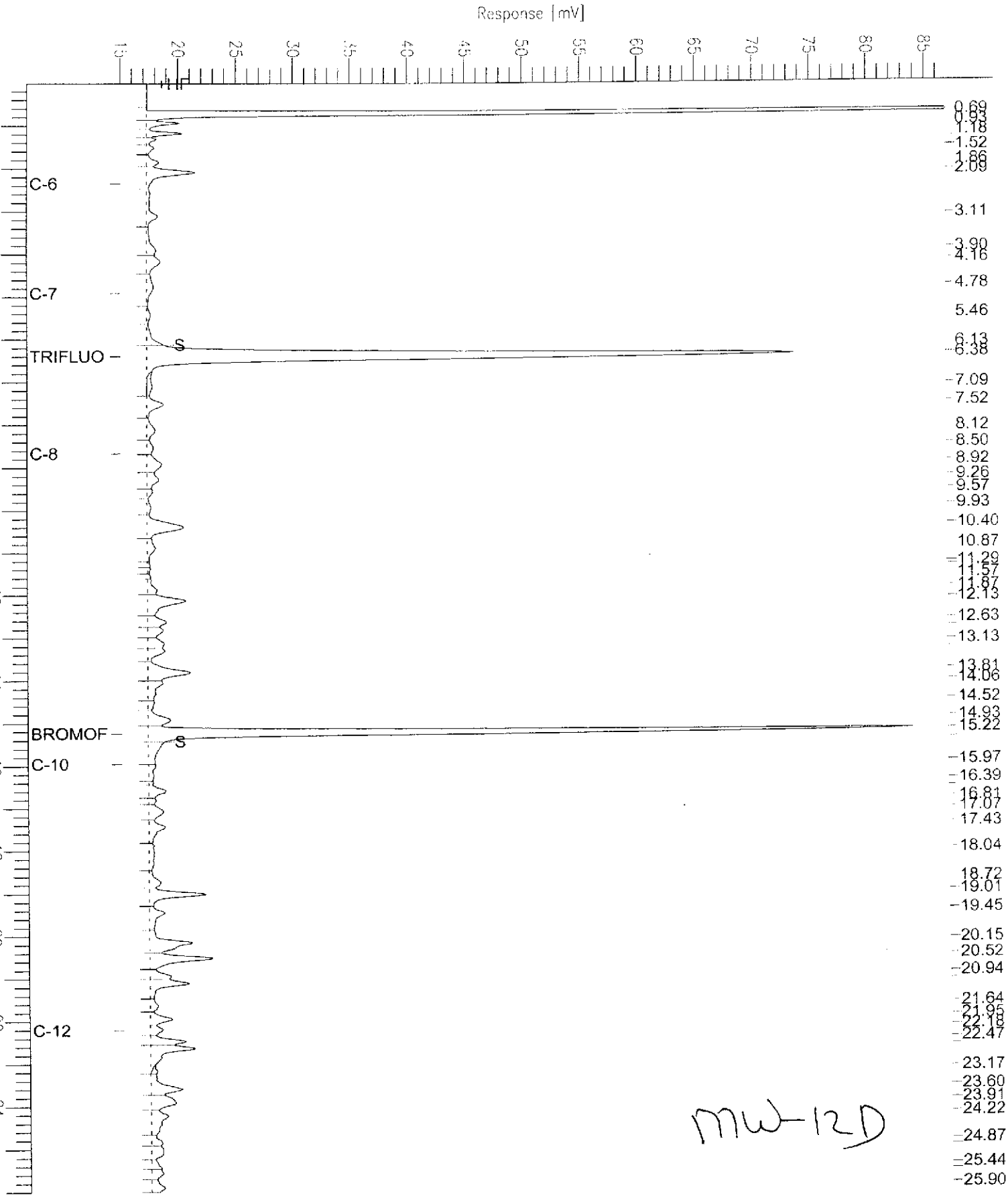


MW-12

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-010,105467,tvh
FileName : G:\GC07\DATA\249A027.RAW
Method :
Start Time : 0.02 min End Time : 26.00 min
Scale Factor: 0.0 Plot Offset: 15 mV

Sample #: a1.0 Page 1 of 1
Date : 9/9/05 12:50 PM
Time of Injection: 9/7/05 07:22 AM
Low Point : 14.99 mV High Point : 86.83 mV
Plot Scale: 71.8 mV

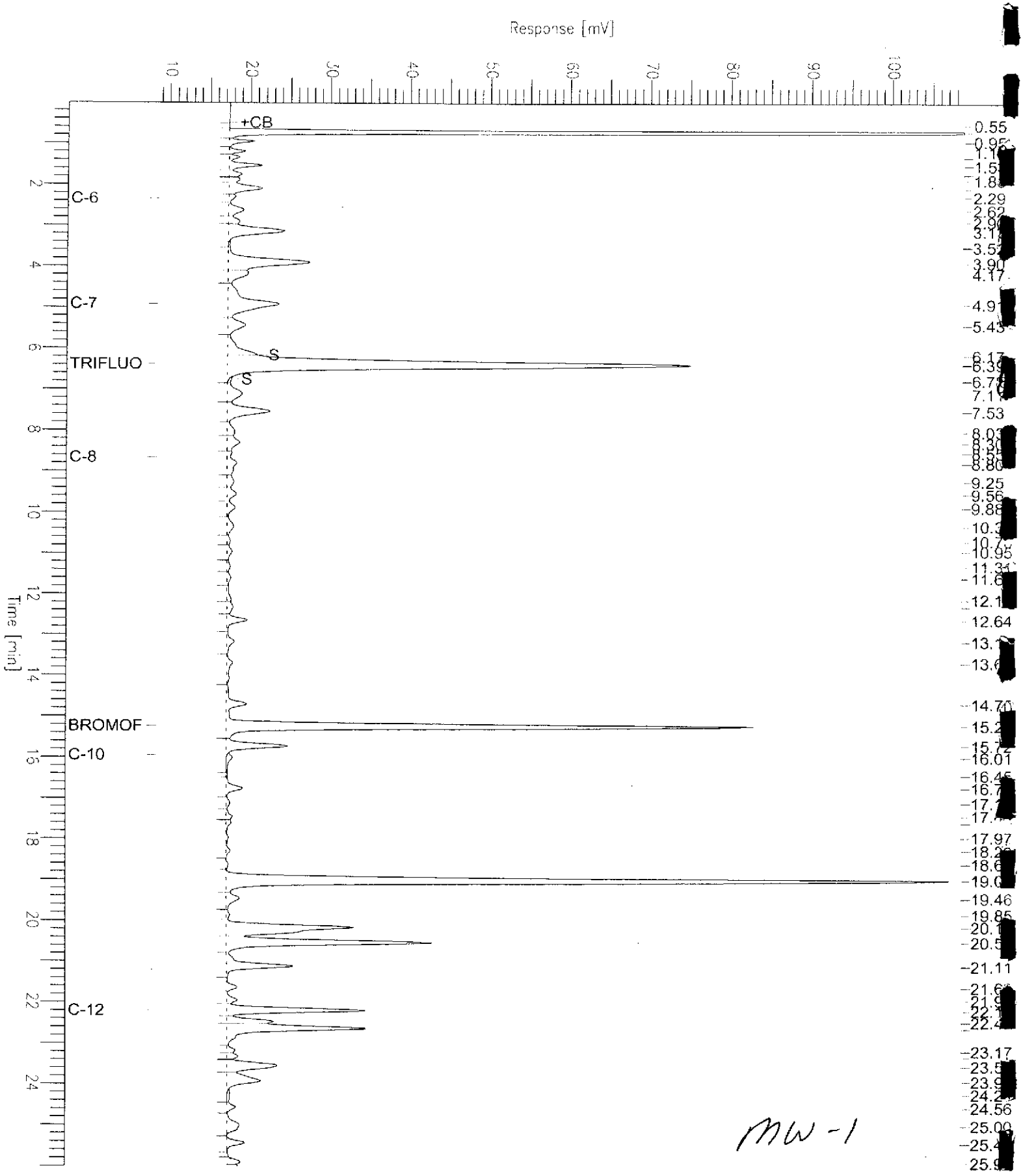


MW-12D

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-011,105467,tvh
FileName : G:\GC07\DATA\249A028.RAW
Method :
Start Time : 0.02 min End Time : 26.00 min
Scale Factor: 0.0 Plot Offset: 9 mV

Sample #: a1.0 Page 1 of 1
Date : 9/7/05 09:29 AM
Time of Injection: 9/7/05 07:57 AM
Low Point : 8.60 mV High Point : 108.84 mV
Plot Scale: 100.2 mV

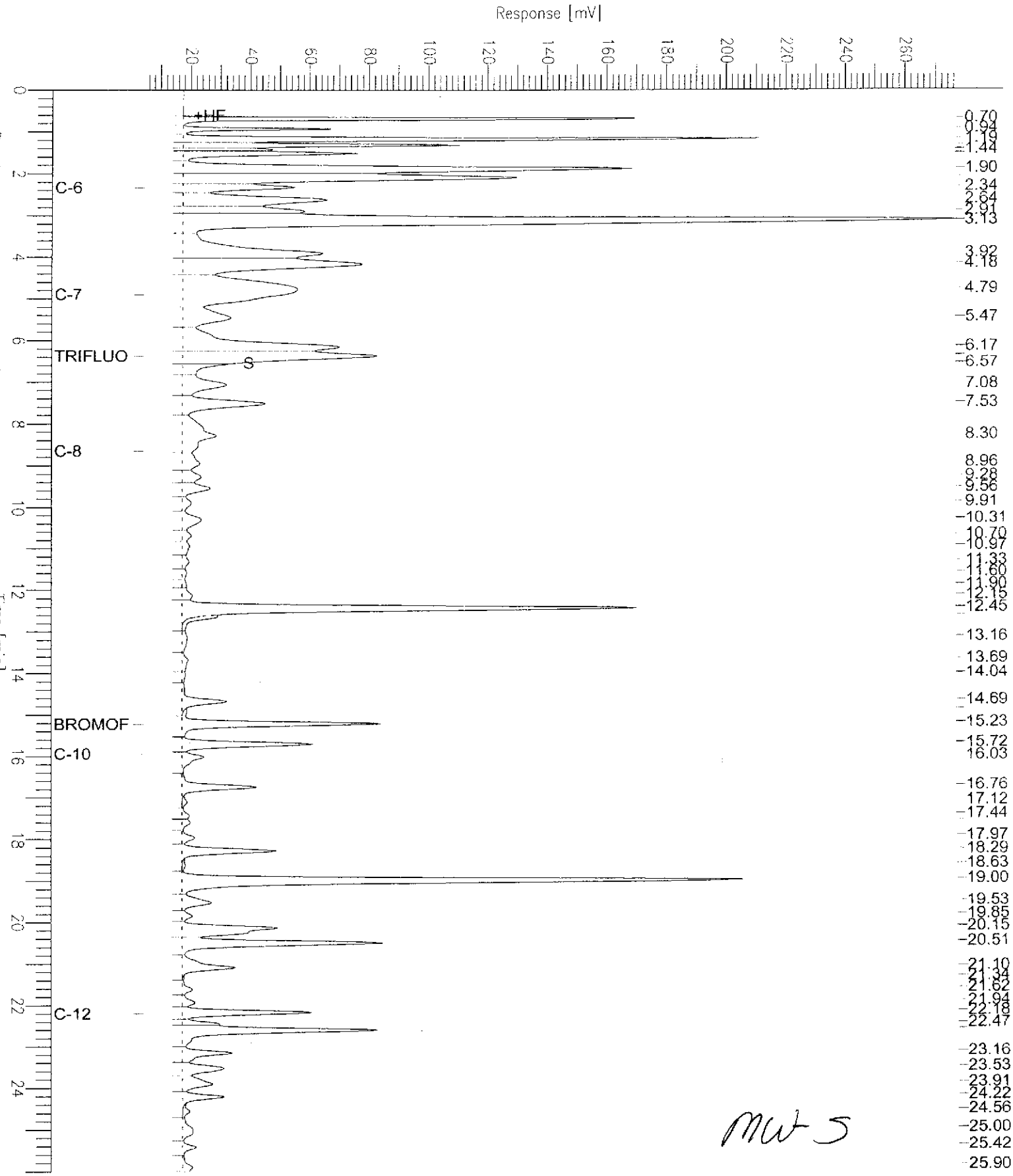


MW-1

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-013,105467,tvh
FileName : G:\GC07\DATA\249A032.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 4 mV

Sample #: a1.0
Date : 9/7/05 11:09 AM
Time of Injection: 9/7/05 10:18 AM
Low Point : 4.35 mV High Point : 276.41 mV
Plot Scale: 272.1 mV

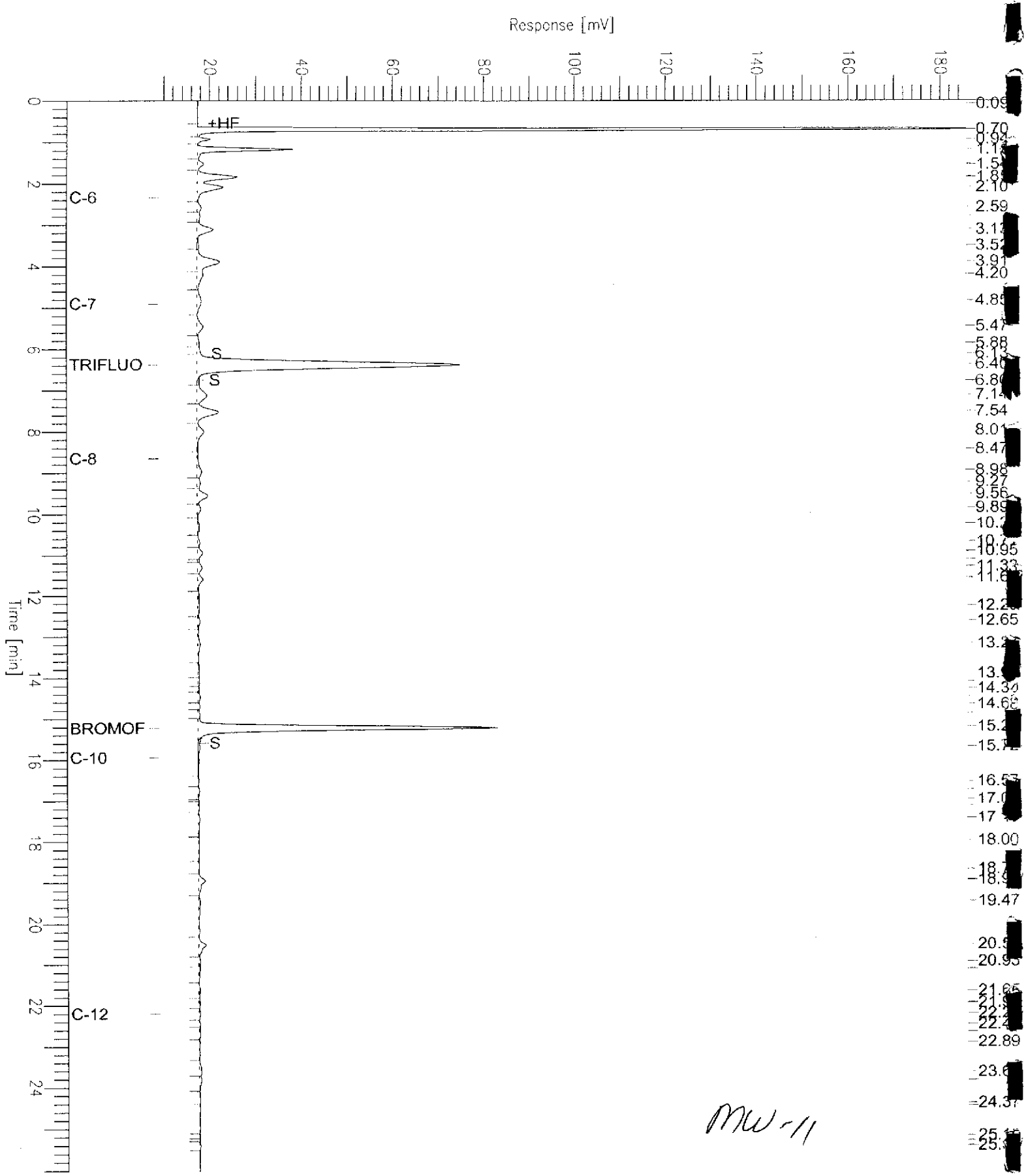


MW 5

GC07 TVH 'A' Data File RTX 502

Sample Name : 181691-015,105467,tvh
FileName : G:\GC07\DATA\249A031.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: b1.0 Page 1 of 1
Date : 9/7/05 10:38 AM
Time of Injection: 9/7/05 09:43 AM
Low Point : 8.85 mV High Point : 185.65 mV
Plot Scale: 176.8 mV

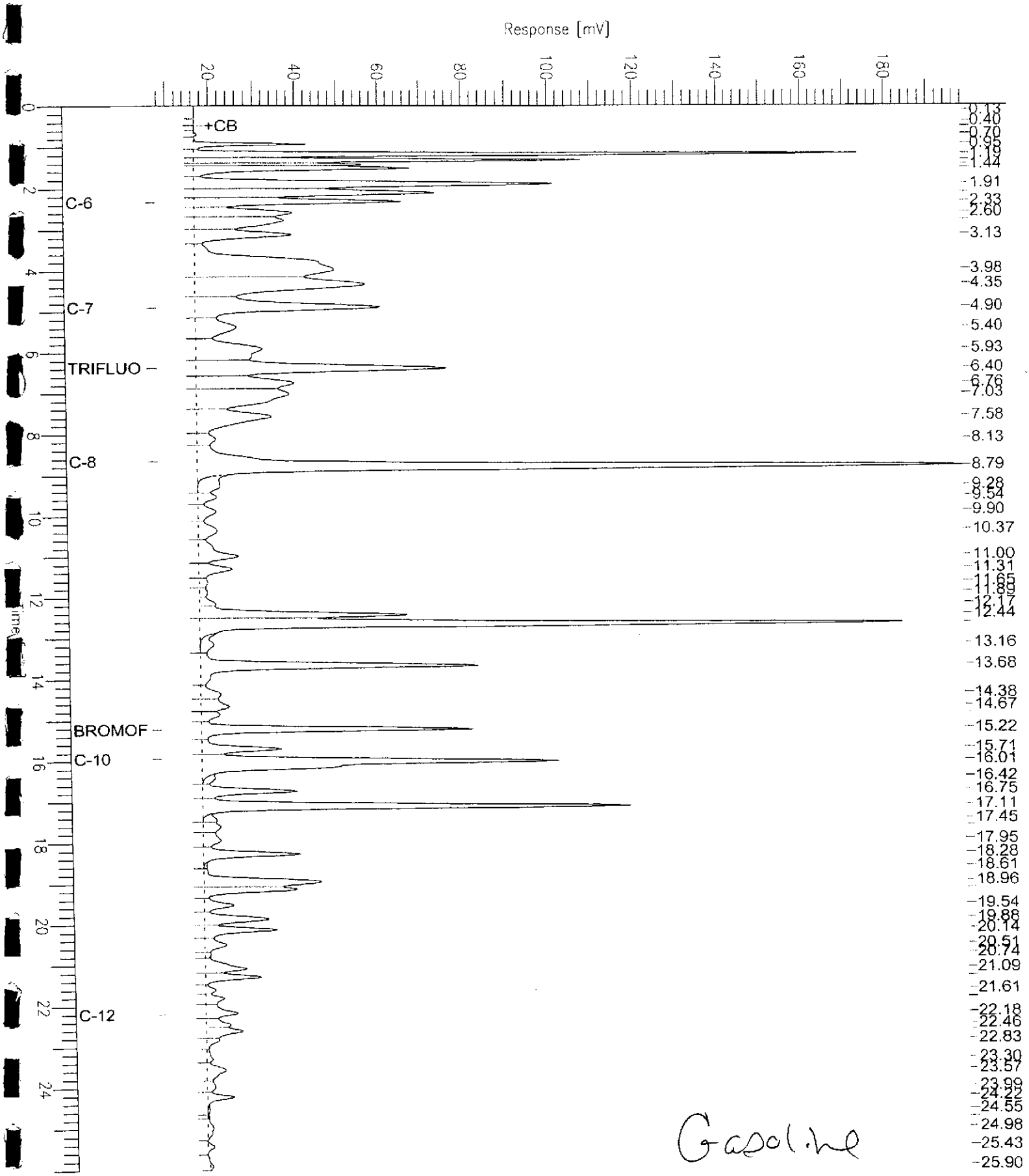


MW-11

GC07 TVH 'A' Data File RTX 502

ample Name : ccv/lcs,qc307650,105467,S1413,5/5000
eName : G:\GC07\DATA\249A004.raw
nod : TVHBTXE
rt Time : 0.00 min End Time : 26.00 min
cale Factor: 1.0 Plot Offset: 8 mV

Sample #:
Date : 9/6/05 03:56 PM
Time of Injection: 9/6/05 03:30 PM
Low Point : 7.64 mV High Point : 198.01 mV
Plot Scale: 190.4 mV



Gasoline

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC307650	Batch#:	105467
Matrix:	Water	Analyzed:	09/06/05
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,006	100	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	63-141
Bromofluorobenzene (FID)	97	79-139

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	105467
MSS Lab ID:	181668-002	Sampled:	09/02/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/06/05
Diln Fac:	1.000		

Type: MS Lab ID: QC307651

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<23.71	2,000	1,965	98	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	63-141
Bromofluorobenzene (FID)	105	79-139

Type: MSD Lab ID: QC307652

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,959	98	80-120	0	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	63-141
Bromofluorobenzene (FID)	100	79-139

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Prepared:	09/11/05
Diln Fac:	1.000	Analyzed:	09/12/05
Batch#:	105644		

Field ID: MW-17 Sampled: 09/01/05
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 181691-002

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	55-143

Field ID: MW-15 Sampled: 09/01/05
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 181691-003

Analyte	Result	RL
Kerosene C10-C16	120 H Y	50
Diesel C10-C24	420 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	55-143

Field ID: MW-14 Sampled: 09/01/05
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 181691-004

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	91	55-143

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Prepared:	09/11/05
Diln Fac:	1.000	Analyzed:	09/12/05
Batch#:	105644		

Field ID: MW-13
Type: SAMPLE
Lab ID: 181691-005
Sampled: 09/01/05
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	320	300

Surrogate	%REC	Limits
Hexacosane	94	55-143

Field ID: MW-10
Type: SAMPLE
Lab ID: 181691-006
Sampled: 09/01/05
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	55-143

Field ID: MW-2
Type: SAMPLE
Lab ID: 181691-007
Sampled: 09/01/05
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	91	55-143

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Prepared:	09/11/05
Diln Fac:	1.000	Analyzed:	09/12/05
Batch#:	105644		

Field ID: MW-2FB-1 Sampled: 09/01/05
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 181691-008

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	57	55-143

Field ID: MW-12 Sampled: 09/02/05
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 181691-009

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	60	55-143

Field ID: MW-12D Sampled: 09/02/05
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 181691-010

Analyte	Result	RL
Kerosene C10-C16	120	50
Diesel C10-C24	110 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	55-143

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Prepared:	09/11/05
Diln Fac:	1.000	Analyzed:	09/12/05
Batch#:	105644		

Field ID: MW-1
Type: SAMPLE
Lab ID: 181691-011
Sampled: 09/02/05
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	170	50
Diesel C10-C24	140 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	105	55-143

Field ID: MW-7
Type: SAMPLE
Lab ID: 181691-012
Sampled: 09/02/05
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	94	55-143

Field ID: MW-5
Type: SAMPLE
Lab ID: 181691-013
Sampled: 09/02/05
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	640	50
Diesel C10-C24	510 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	55-143

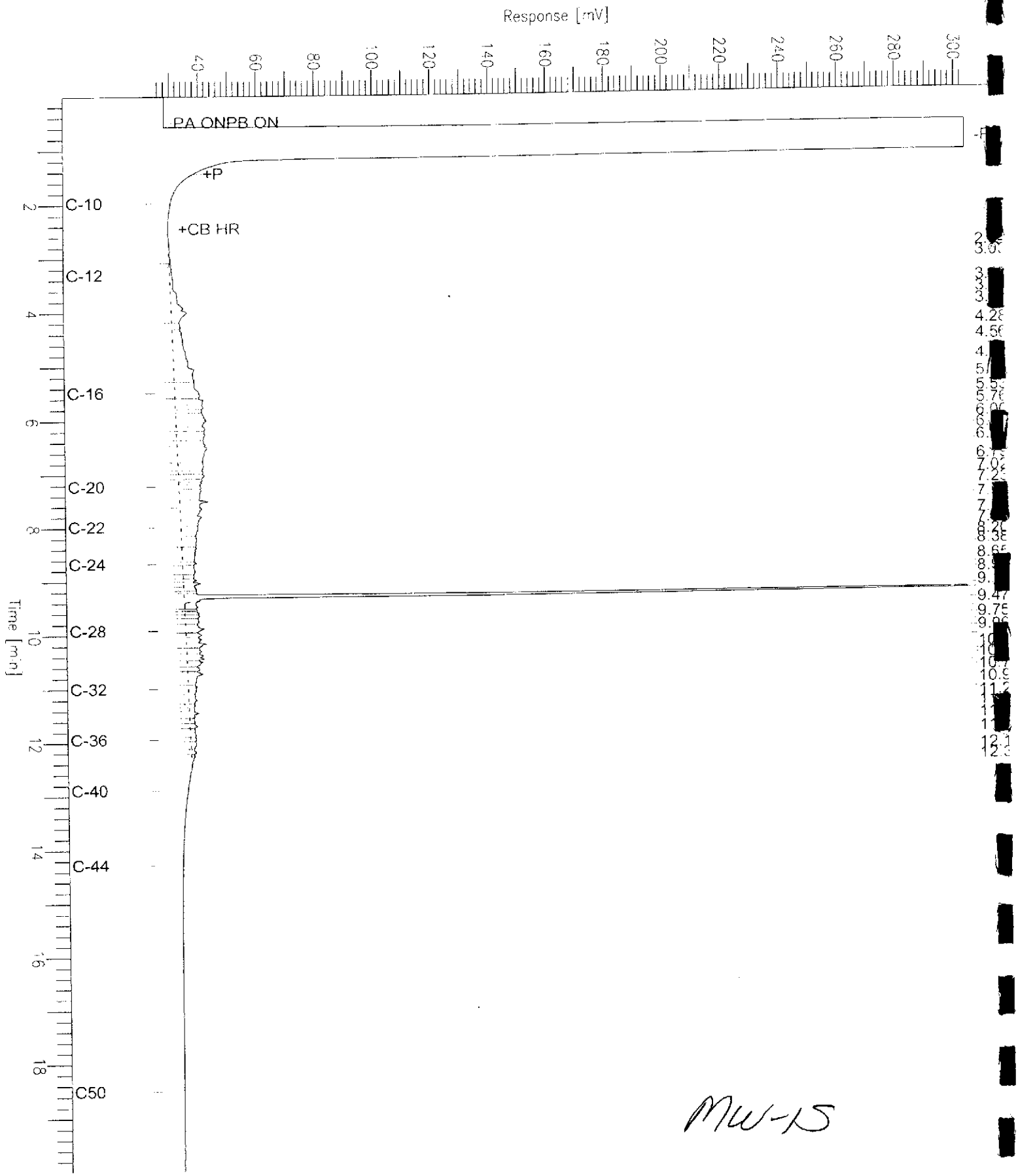
H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

5.0

Chromatogram

Sample Name : 181691-003sg,105644
FileName : G:\GC13\CHB\255B008.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 25 mV

Sample #: 105644
Date : 9/12/05 05:00 PM
Time of Injection: 9/12/05 03:51 PM
Low Point : 24.79 mV High Point : 303.77 mV
Plot Scale: 279.0 mV

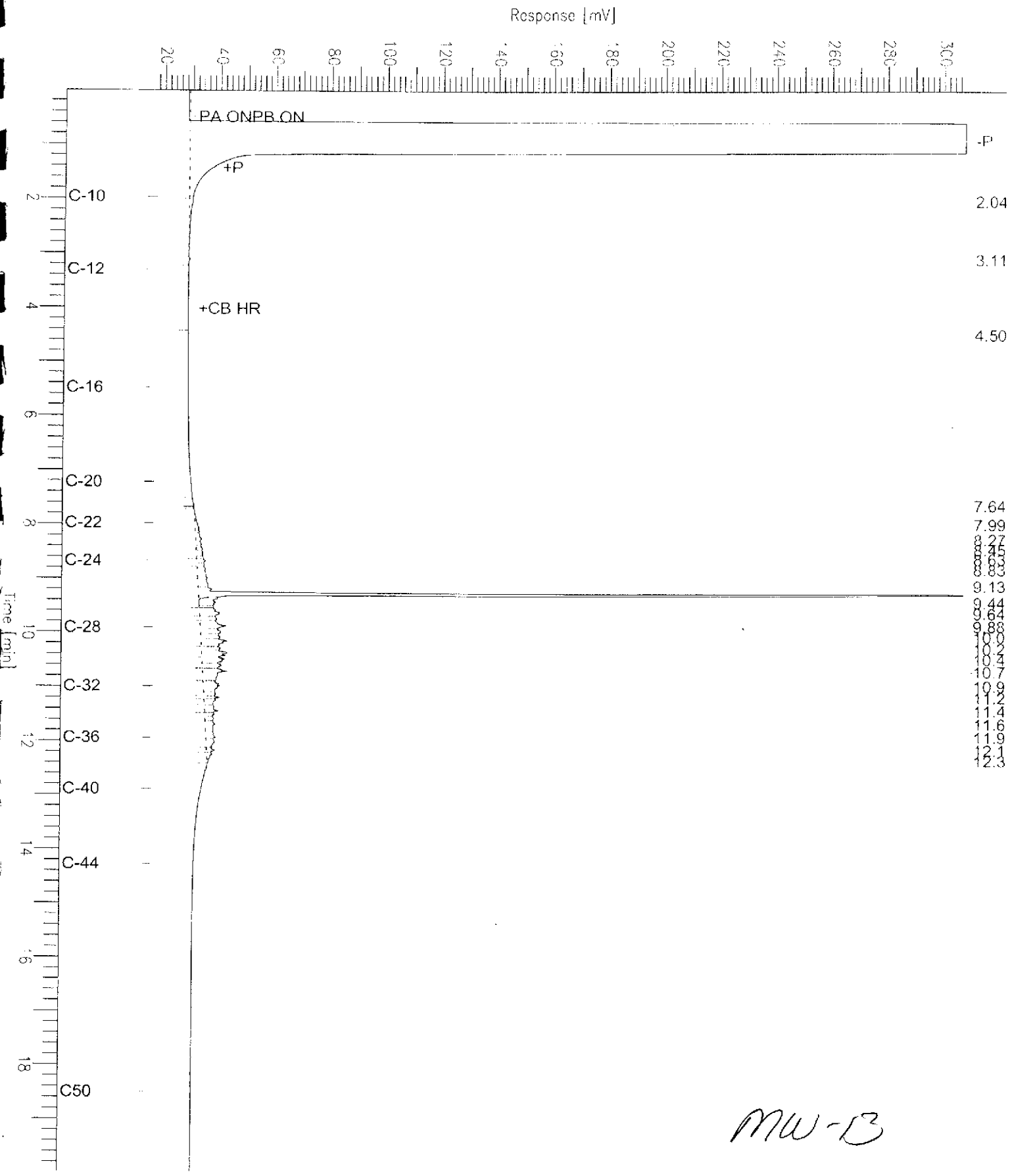


MW-15

Chromatogram

Sample Name : 181691-005sg,105644
FileName : G:\GC13\CHB\255B010.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 17 mV

Sample #: 105644 Page 1 of 1
Date : 9/12/05 05:09 PM
Time of Injection: 9/12/05 04:47 PM
Low Point : 17.29 mV High Point : 307.69 mV
Plot Scale: 290.4 mV

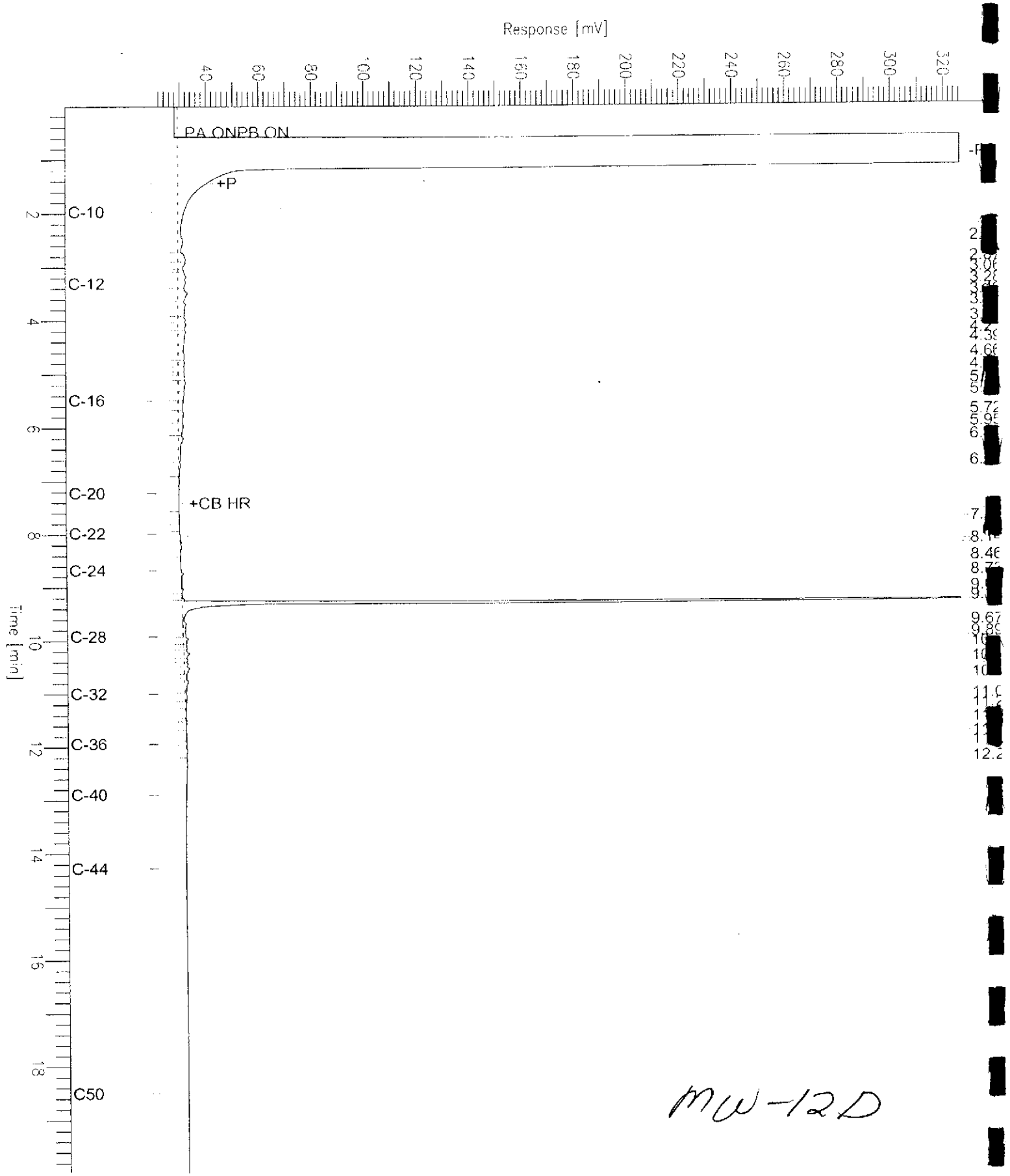


MW-13

Chromatogram

Sample Name : 181691-010sg,105644
FileName : G:\GC13\CHB\255B015.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 21 mV

Sample #: 105644
Date : 9/12/05 07:30 PM
Time of Injection: 9/12/05 07:08 PM
Low Point : 20.93 mV High Point : 326.39 mV
Plot Scale: 305.5 mV

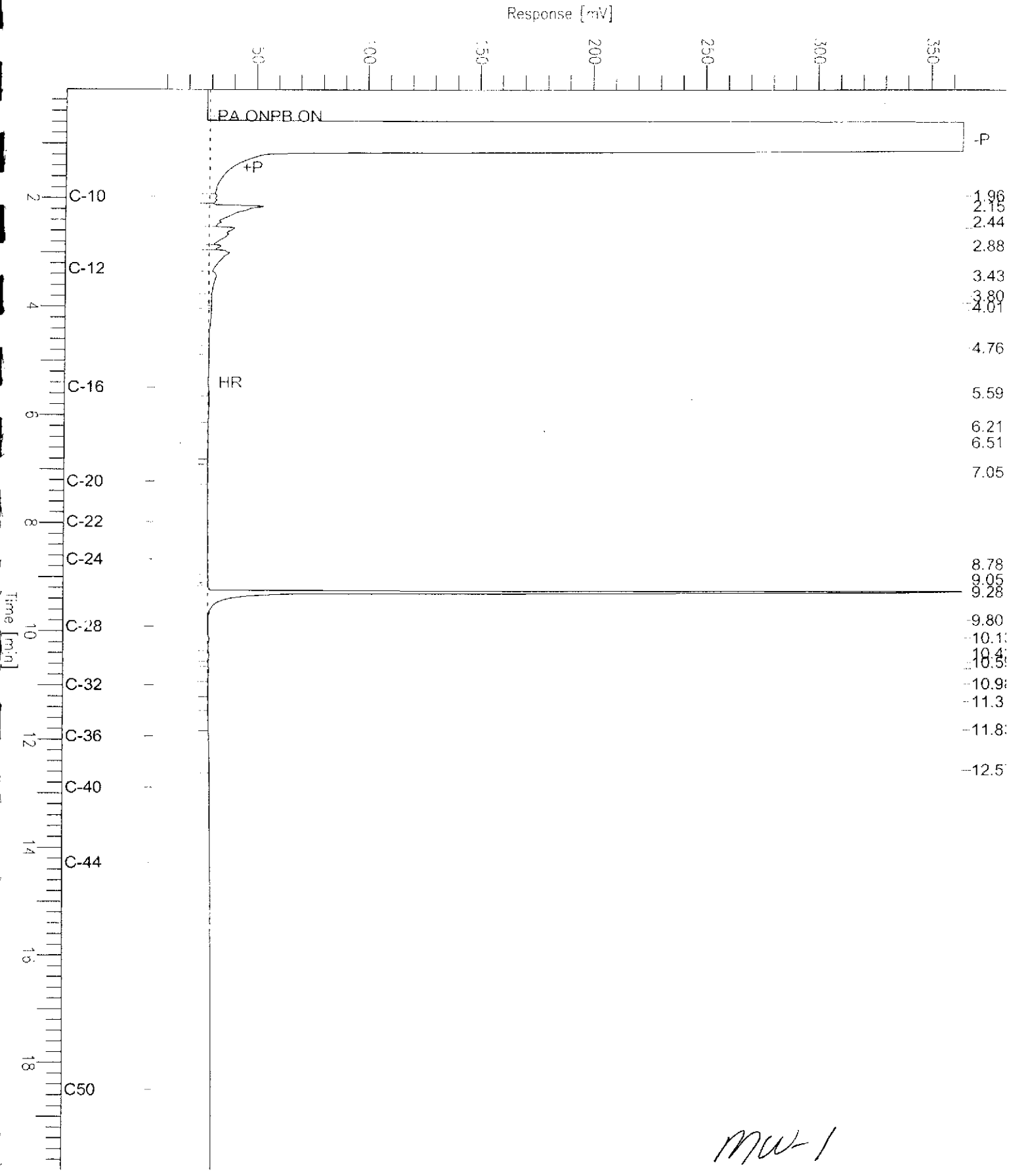


MW-12D

Chromatogram

Sample Name : 181691-011sg,105644
FileName : G:\GC13\CHB\255B020.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 6 mV

Sample #: 105644 Page 1 of 1
Date : 9/13/05 08:23 AM
Time of Injection: 9/12/05 09:30 PM
Low Point : 5.80 mV High Point : 363.97 mV
Plot Scale: 358.2 mV

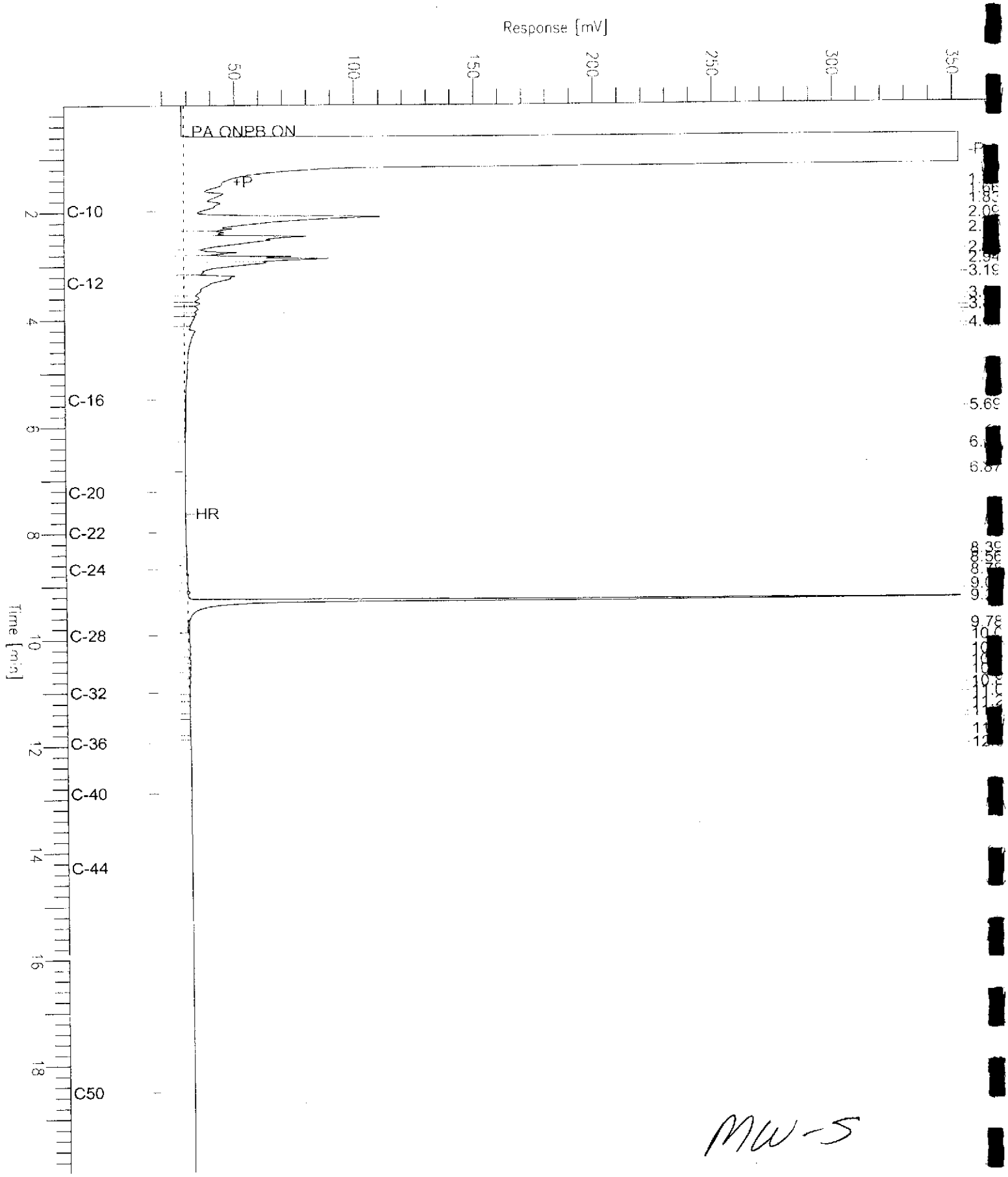


MW-1

Chromatogram

Sample Name : 181691-013sg,105644
FileName : G:\GC13\CHB\255B022.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 17 mV

Sample #: 105644
Date : 9/13/05 08:24 AM
Time of Injection: 9/12/05 10:26 PM
Low Point : 17.06 mV High Point : 352.71 mV
Plot Scale: 335.6 mV

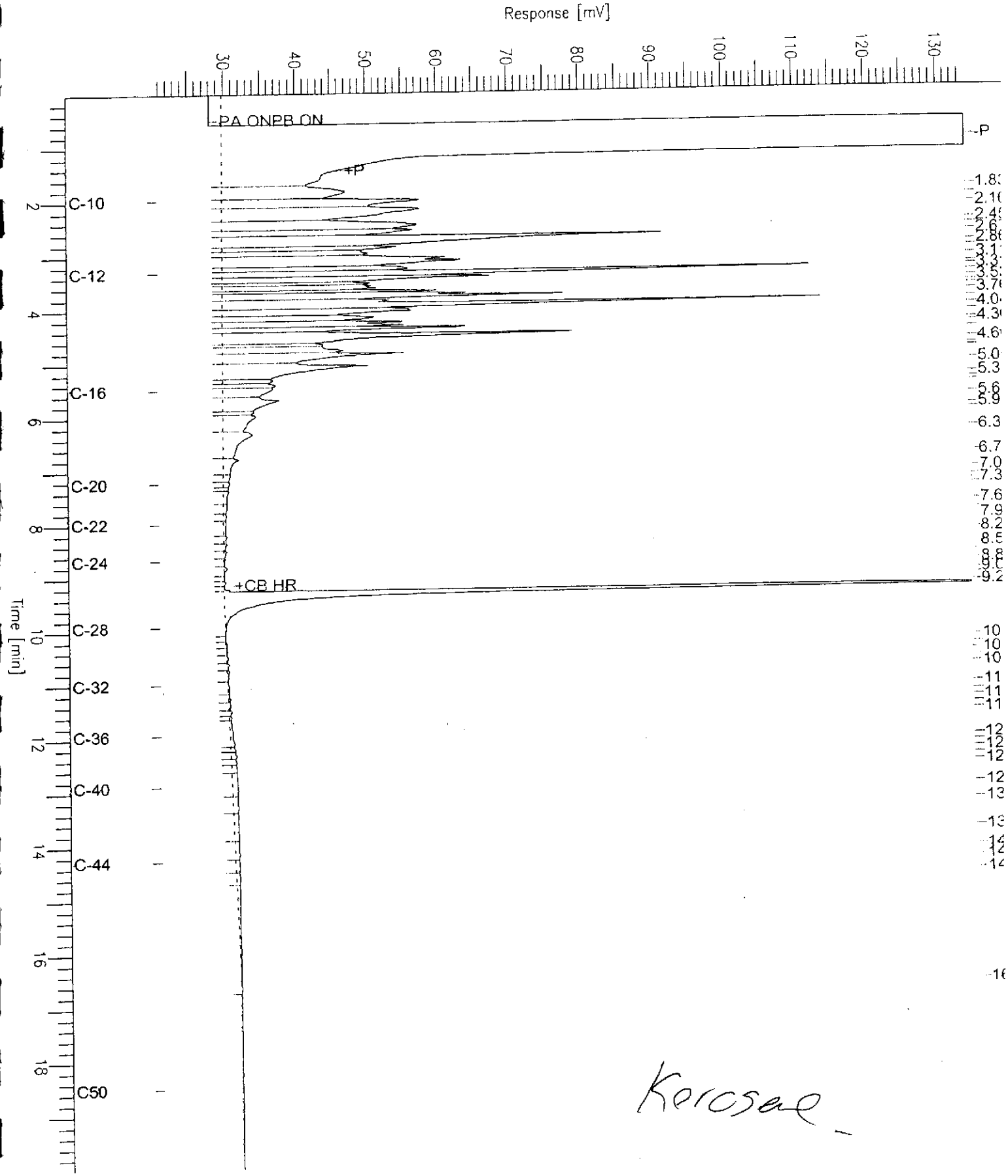


MW-5

Chromatogram

Sample Name : ccv,s1060,ker
FileName : G:\GC13\CHB\255B005.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min End Time : 19.99 min
Scale Factor: 0.0 Plot Offset: 21 mV

Sample #: 250mg/L
Date : 9/12/05 02:49 PM
Time of Injection: 9/12/05 02:27 PM
Low Point : 20.85 mV High Point : 133.98 mV
Plot Scale: 113.1 mV

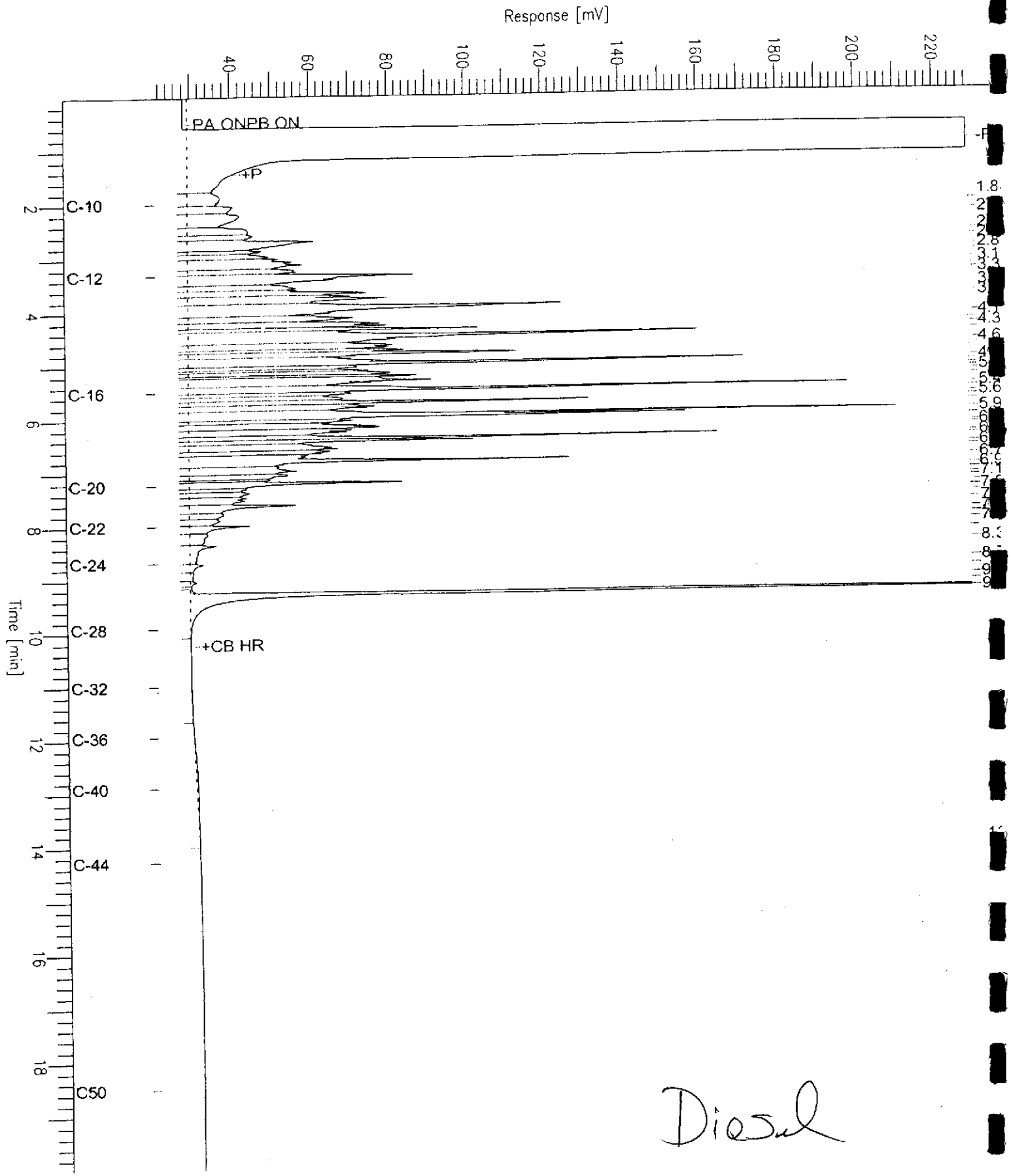


Kerosene

Chromatogram

Sample Name : ccv,S1289,dsl
FileName : G:\GC13\CHB\255B003.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min
End Time : 19.99 min
Scale Factor: 0.0
Plot Offset: 21 mV

Sample #: 500mg/L
Date : 9/12/05 10:52 AM
Time of Injection: 9/12/05 10:20 AM
Low Point : 21.12 mV
High Point : 228.45 mV
Plot Scale: 207.3 mV



Diesel

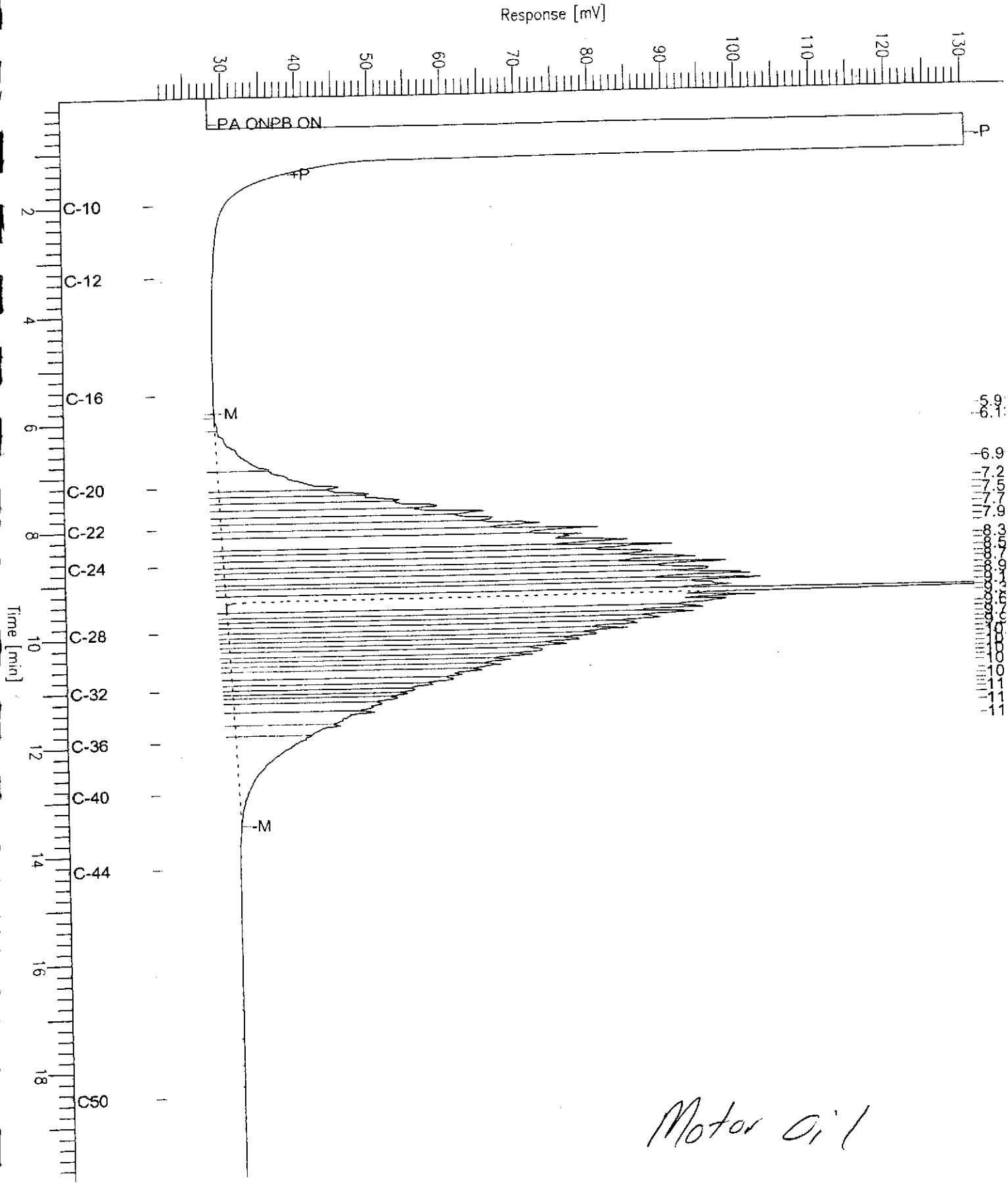
Chromatogram

Sample Name : ccv,S1363,mo
FileName : G:\GC13\CHB\255B004.RAW
Method : BTEH250S.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 19.99 min
Plot Offset: 21 mV

Sample #: 500mg/L
Date : 9/12/05 11:21 AM
Time of Injection: 9/12/05 10:49 AM
Low Point : 21.07 mV
Plot Scale: 109.4 mV

High Point : 130.46 mV



Motor Oil

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Prepared:	09/11/05
Diln Fac:	1.000	Analyzed:	09/12/05
Batch#:	105644		

Field ID: MW-11 Sampled: 09/02/05
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 181691-015

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	83	55-143

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC308411

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	55-143

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-14	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	105644
Units:	ug/L	Prepared:	09/11/05
Diln Fac:	1.000	Analyzed:	09/12/05

Type: BS
Lab ID: QC308412
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,169	87	50-133

Surrogate	%REC	Limits
Hexacosane	97	55-143

Type: BSD
Lab ID: QC308413
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,923	77	50-133	12	40

Surrogate	%REC	Limits
Hexacosane	87	55-143

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-17	Batch#:	105665
Lab ID:	181691-002	Sampled:	09/01/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/12/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	80-122
Toluene-d8	98	80-120
Bromofluorobenzene	116	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-15	Batch#:	105665
Lab ID:	181691-003	Sampled:	09/01/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/12/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	1.2	0.5
o-Xylene	0.8	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	109	80-124

ND= Not Detected
RL= Reporting Limit

8.0

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-14	Batch#:	105665
Lab ID:	181691-004	Sampled:	09/01/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/12/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	0.7	0.5
Benzene	6.7	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-13	Batch#:	105665
Lab ID:	181691-005	Sampled:	09/01/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/12/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	115	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-10	Batch#:	105665
Lab ID:	181691-006	Sampled:	09/01/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/12/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	2.4	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	0.7	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	80-122
Toluene-d8	100	80-120
Bromofluorobenzene	110	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	105752
Lab ID:	181691-007	Sampled:	09/01/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/14/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	0.8	0.5
Benzene	2.8	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	80-122
Toluene-d8	95	80-120
Bromofluorobenzene	103	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-2FB-1	Batch#:	105752
Lab ID:	181691-008	Sampled:	09/01/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/14/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	80-122
Toluene-d8	97	80-120
Bromofluorobenzene	107	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-12	Batch#:	105716
Lab ID:	181691-009	Sampled:	09/02/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/13/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	80-122
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-12D	Batch#:	105716
Lab ID:	181691-010	Sampled:	09/02/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/13/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	105716
Lab ID:	181691-011	Sampled:	09/02/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/14/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	6.6	0.5
Toluene	1.0	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	2.3	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	80-122
Toluene-d8	101	80-120
Bromofluorobenzene	99	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	105716
Lab ID:	181691-012	Sampled:	09/02/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/13/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	3.2	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	80-122
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-5	Units:	ug/L
Lab ID:	181691-013	Sampled:	09/02/05
Matrix:	Water	Received:	09/02/05

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
MTBE	92	0.5	1.000	105716	09/14/05
Benzene	13	0.5	1.000	105716	09/14/05
Toluene	1.4	0.5	1.000	105716	09/14/05
Ethylbenzene	55	0.7	1.429	105818	09/15/05
m,p-Xylenes	7.8	0.5	1.000	105716	09/14/05
o-Xylene	0.8	0.5	1.000	105716	09/14/05

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	109	80-122	1.000	105716	09/14/05
Toluene-d8	106	80-120	1.000	105716	09/14/05
Bromofluorobenzene	106	80-124	1.000	105716	09/14/05

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	105716
Lab ID:	181691-015	Sampled:	09/02/05
Matrix:	Water	Received:	09/02/05
Units:	ug/L	Analyzed:	09/13/05
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	4.5	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC308499	Batch#:	105665
Matrix:	Water	Analyzed:	09/12/05
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	119	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC308717	Batch#:	105716
Matrix:	Water	Analyzed:	09/13/05
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	80-122
Toluene-d8	101	80-120
Bromofluorobenzene	121	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC308865	Batch#:	105752
Matrix:	Water	Analyzed:	09/14/05
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	110	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC309142	Batch#:	105818
Matrix:	Water	Analyzed:	09/15/05
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	80-122
Toluene-d8	98	80-120
Bromofluorobenzene	110	80-124

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	105665
Units:	ug/L	Analyzed:	09/12/05
Diln Fac:	1.000		

Type: BS Lab ID: QC308497

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	28.01	112	72-129
Benzene	25.00	26.31	105	80-120
Toluene	25.00	25.07	100	80-120
Ethylbenzene	25.00	27.23	109	80-120
m,p-Xylenes	50.00	53.91	108	80-120
o-Xylene	25.00	26.37	105	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-124

Type: BSD Lab ID: QC308498

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	28.12	112	72-129	0	20
Benzene	25.00	26.31	105	80-120	0	20
Toluene	25.00	25.69	103	80-120	2	20
Ethylbenzene	25.00	26.97	108	80-120	1	20
m,p-Xylenes	50.00	52.87	106	80-120	2	20
o-Xylene	25.00	26.55	106	80-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	80-122
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-124

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	105716
Units:	ug/L	Analyzed:	09/13/05
Diln Fac:	1.000		

Type: BS Lab ID: QC308715

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	25.33	101	72-129
Benzene	25.00	25.86	103	80-120
Toluene	25.00	24.75	99	80-120
Ethylbenzene	25.00	26.51	106	80-120
m,p-Xylenes	50.00	54.50	109	80-120
o-Xylene	25.00	27.18	109	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-124

Type: BSD Lab ID: QC308716

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	25.64	103	72-129	1	20
Benzene	25.00	25.59	102	80-120	1	20
Toluene	25.00	25.89	104	80-120	4	20
Ethylbenzene	25.00	26.07	104	80-120	2	20
m,p-Xylenes	50.00	52.81	106	80-120	3	20
o-Xylene	25.00	26.55	106	80-120	2	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-124

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC308902	Batch#:	105752
Matrix:	Water	Analyzed:	09/14/05
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	26.81	107	72-129
Benzene	25.00	26.38	106	80-120
Toluene	25.00	25.78	103	80-120
Ethylbenzene	25.00	26.66	107	80-120
m,p-Xylenes	50.00	54.22	108	80-120
o-Xylene	25.00	27.45	110	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	80-122
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-124

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC309141	Batch#:	105818
Matrix:	Water	Analyzed:	09/15/05
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	27.01	108	72-129
Benzene	25.00	27.49	110	80-120
Toluene	25.00	26.84	107	80-120
Ethylbenzene	25.00	27.61	110	80-120
m,p-Xylenes	50.00	56.96	114	80-120
o-Xylene	25.00	28.23	113	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	80-122
Toluene-d8	99	80-120
Bromofluorobenzene	91	80-124

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	105818
MSS Lab ID:	181771-002	Sampled:	09/06/05
Matrix:	Water	Received:	09/09/05
Units:	ug/L	Analyzed:	09/16/05
Diln Fac:	40.00		

Type: MS Lab ID: QC309161

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<2.597	1,000	1,188	119	75-122
Benzene	910.3	1,000	2,764	185 *	79-120
Toluene	239.1	1,000	1,553	131 *	77-120
Ethylbenzene	60.68	1,000	1,282	122 *	73-120
m,p-Xylenes	175.3	2,000	2,718	127 *	70-120
o-Xylene	91.95	1,000	1,330	124 *	68-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	116	80-122
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-124

Type: MSD Lab ID: QC309162

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	1,000	1,128	113	75-122	5	20
Benzene	1,000	2,651	174 *	79-120	4	20
Toluene	1,000	1,477	124 *	77-120	5	20
Ethylbenzene	1,000	1,218	116	73-120	5	20
m,p-Xylenes	2,000	2,611	122 *	70-120	4	20
o-Xylene	1,000	1,317	122 *	68-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	113	80-122
Toluene-d8	98	80-120
Bromofluorobenzene	91	80-124

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

28.0

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	181691	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-14	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	105818
MSS Lab ID:	181771-005	Sampled:	09/06/05
Matrix:	Water	Received:	09/09/05
Units:	ug/L	Analyzed:	09/16/05
Diln Fac:	14.29		

Type: MS Lab ID: QC309163

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	12.22	357.1	408.1	111	75-122
Benzene	1,184	357.1	1,479 >LR b	82	79-120
Toluene	15.83	357.1	391.3	105	77-120
Ethylbenzene	90.87	357.1	482.8	110	73-120
m,p-Xylenes	76.04	714.3	894.0	115	70-120
o-Xylene	6.717	357.1	412.6	114	68-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	117	80-122
Toluene-d8	101	80-120
Bromofluorobenzene	89	80-124

Type: MSD Lab ID: QC309164

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	357.1	391.2	106	75-122	4	20
Benzene	357.1	1,393	58 *	79-120	NC	20
Toluene	357.1	371.7	100	77-120	5	20
Ethylbenzene	357.1	447.8	100	73-120	8	20
m,p-Xylenes	714.3	835.3	106	70-120	7	20
o-Xylene	357.1	388.9	107	68-120	6	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	111	80-122
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-124

*= Value outside of QC limits; see narrative
b= See narrative
NC= Not Calculated
>LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

29.0