SCI Subsurface Consultants, Inc.

August 23, 2001
SCI 609.004

SEP 04 2001

Ms. Marianne Robison
Buttner Properties
600 West Grand Avenue
Oakland, California 94612

April 2001
Groundwater Monitoring Event
2250 Telegraph Avenue
Oakland, California

Dear Ms. Robison:

This letter records the results of the April 2001 groundwater monitoring event for the referenced site. The groundwater monitoring program has been implemented in accordance with Regional Water Quality Control Board (RWQCB) and the Alameda County Health Care Services Agency (ACHCSA) guidelines due to past releases from former underground storage tanks (UST). In accordance with the current monitoring program, the six site wells are monitored on a semi-annual basis. The locations of the wells and former USTs are presented on the Site Plan, Plate 1.

BACKGROUND

In August 1990, two 10,000-gallon underground gasoline storage tanks and one 280-gallon waste oil tank were removed from the site. Approximately 500 cubic yards of gasoline-impacted soil were aerated onsite in 1990 and 1991 and disposed at a Class III sanitary landfill. In February 1994, SCI observed the excavation of contaminated soils near the former waste oil tank and installed four groundwater monitoring wells at the site. In May 1996, SCI installed five temporary well points and collected grab groundwater samples as part of a supplemental investigation to assist in determining locations for the installation of additional monitoring wells. SCI installed two monitoring wells (MW-5 and MW-6) at offsite locations, downgradient from the former UST excavations, in June 1997. In letters dated June 16, 1998 and November 8, 1999, ACHCSA requested that all groundwater monitoring wells (MW-1 through MW-6) be monitored and sampled on a semi-annual basis.

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GROUNDWATER SAMPLING

On April 27, 2001, SCI personnel visited the Site and sampled the six monitoring wells. Prior to sampling the presence of free product was checked and the depth to groundwater was measured in all wells. No free product was observed. Each well was then purged of approximately three casing volumes of water while monitoring pH, conductivity, and temperature. Once the wells had recovered to 80% of their initial level, they were sampled with clean disposable bailers. Samples were retained in glass containers pre-cleaned by the laboratory in accordance with EPA protocol. The containers were placed in an ice filled cooler and kept chilled pending delivery to the laboratory.

Analytical testing was performed by Curtis & Tompkins, Ltd., a laboratory certified by the State of California Department of Health Services for hazardous waste and water testing. A sample from each well was analyzed for the following:

- Total volatile hydrocarbons as gasoline (TVHg), EPA Methods 5030/8015,
- Total extractable hydrocarbons as diesel (TEHd), EPA Methods 3550/8015, using silica gel cleanup, and
- Benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl tertiary butyl ether (MTBE), EPA Methods 8020.

Well sampling forms, chain-of-custody documents, and the analytical test reports are attached. Groundwater elevation data are summarized in Table 1.

CONCLUSIONS

Based on the groundwater elevation data presented in Table 1, the groundwater gradient remains generally consistent with previous measurements. The gradient is relatively flat, 0.003 feet per foot, and tends toward the south. The groundwater flow direction for this event is shown on Plate 1.

No free product was observed during this event. The chemical constituents measured in the samples are similar in concentration to those measured during previous events. Hence, it appears that the plume is relatively stabilized.

TVHg was detected during this event in samples from wells MW-1, MW-4, and MW-6 at 160, 1,900, and 1,600 micrograms per liter (ug/l), respectively. TEHd was detected in samples from wells MW-3, MW-4, and MW-6 at 690, 710, and 440 ug/l, respectively.

MTBE was detected during this event using EPA Method 8020 in samples from wells MW-4 and MW-6. The presence of MTBE was not confirmed through application of EPA Method 8260 per the ACHCSA's November 8, 1999 letter. The detection of MTBE in samples other than well MW-6, since June 2000, is possibly associated with "false positives". MTBE results for analyses conducted using both test methods are summarized in Table 2.

ONGOING MONITORING

As requested by the ACHCSA groundwater monitoring events are to be conducted during the first and third quarters of each year until further notice. Hence, the next monitoring event should be conducted in October 2001.

New State Water Resources Control Board (SWRCB) guidelines (which become effective September 1, 2001) require that analytical data generated for this Site be submitted in a specific format to the SWRCB by the responsible party or their approved agent. Additional regulations effective in January 2002 will place further requirements on the responsible party to provide new well location information to the SWRCB. A summary of the new regulations is attached.

If you have any questions, please call either of the undersigned at (510)268.0461

Yours very truly,

Subsurface Consultants, Inc.

Emily Silverman
Staff Geologist

FOR JNA

Jeriann N. Alexander, PE, REA
Project Manager
Civil Engineer 40469 (exp. 3/31/03)

ES:JNA:ae \609.004\april 2001 qmr

Attachments: Table 1 - Groundwater Elevation Data
Table 2 - Summary of Contaminants in Groundwater
Plate 1 - Site Plan
Analytical Test Report
Chain-of-Custody Form
Well Sampling Forms
SWRCB Guideline for Electronic Submittal

cc: Mr. Tim Robison, Ph.D.
15311 Chinaberry Street
North Potomac, MD 20878

Mr. Don Huang
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Table 1
Groundwater Elevation Data
Buttner Properties
Oakland, California

Monitoring Well	Date	TOC Elevation (feet) MSL	DTW (feet)	Elevation (feet) MSL
MW-1	3/3/1994	20.55	10.39	10.16
	3/10/1994		10.54	10.01
	6/6/1994		11.36	9.19
	9/7/1994		11.92	8.63
	12/22/1994		10.83	9.72
	3/17/1995		9.73	10.82
	6/27/1995		10.51	10.04
	9/18/1995		11.12	9.43
	5/30/1996		10.49	10.06
	7/9/1997		11.79	8.76
	8/21/1998		11.00	9.55
	10/6/1998		11.84	8.71
	2/24/1999		9.74	10.81
	6/30/2000		11.28	9.27
	4/27/2001		10.56	9.99
MW-2	3/3/1994	20.03	10.37	9.66
	3/10/1994		10.53	9.50
	6/6/1994		11.15	8.88
	9/7/1994		11.72	8.31
	12/22/1994		11.27	8.76
	3/17/1995		9.85	10.18
	6/27/1995		10.70	9.33
	9/18/1995		11.67	8.36
	5/30/1996		11.56	8.47
	7/9/1997		11.52	8.51
	8/21/1998		11.91	8.12
	10/6/1998		11.57	8.46
	2/24/1999		9.91	10.12
	6/30/2000		11.16	8.87
	4/27/2001		11.32	8.71

Table 1
Groundwater Elevation Data
Buttner Properties
Oakland, California

Monitoring Well	Date	TOC Elevation (feet) MSL	DTW (feet)	Elevation (feet) MSL
MW-3	3/3/1994	18.97	9.50	9.47
	3/10/1994		9.51	9.46
	6/6/1994		10.28	8.69
	9/7/1994		10.75	8.22
	12/22/1994		9.74	9.23
	3/17/1995		8.85	10.12
	6/27/1995		9.94	9.03
	9/18/1995		10.54	8.43
	5/30/1996		9.69	9.28
	7/9/1997		10.60	8.37
	8/21/1998		10.36	8.61
	10/6/1998		10.64	8.33
	2/24/1999		8.58	10.39
	6/30/2000		10.21	8.76
	4/27/2001		9.85	9.12
MW-4	3/3/1994	19.88	10.89	8.99
	3/10/1994		11.19	8.69
	6/6/1994		11.85	8.03
	9/7/1994		12.86	7.02
	12/22/1994		12.26	7.62
	3/17/1995		10.10	9.78
	6/27/1995		11.05	8.83
	9/18/1995		11.84	8.04
	5/30/1996		10.97	8.91
	7/9/1997		12.08	7.80
	8/21/1998		11.86	8.02
	10/6/1998		12.84	7.04
	2/24/1999		10.79	9.09
	6/30/2000		12.39	7.49
	4/27/2001		11.26	8.62
MW-5	6/26/1997	16.02	8.44	7.58
	7/9/1997		8.48	7.54
	8/21/1998		8.32	7.70
	10/6/1998		8.51	7.51
	2/24/1999		6.86	9.16
	6/30/2000		7.63	8.39
	4/27/2001		7.60	8.42

Table 1
Groundwater Elevation Data
Buttner Properties
Oakland, California

Monitoring Well	Date	TOC Elevation (feet) MSL	DTW (feet)	Elevation (feet) MSL
MW-6	6/26/1997	18.36	10.89	7.47
	7/9/1997		10.98	7.38
	8/21/1998		11.00	7.36
	10/6/1998		10.79	7.57
	2/24/1999		9.32	9.04
	6/30/2000		10.37	7.99
	4/27/2001		10.10	8.26

TOC = Top of Casing
DTW = Depth to Water
Elevation Reference: USGS benchmark W1197, 1969 with a reported elevation of +21.06 feet MSL datum.

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Table 2
Chemical Concentrations in Groundwater
Buttner Properties
Oakland, California

			Petroleum Hydrocarbons				Volatile Organics									
Well	Date	Groundwater Elevation MSL (feet)	TVH as Gasoline µg/l	TEH as Kerosene µg/l	TEH as Diesel µg/l	TEH as Motor Oil mg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE -8020 µg/l	MTBE -8260 µg/l	1,1,1-TCA µg/l	1,2-DCA µg/l	PCE µg/l	Chloro-Benzene µg/l
MW-1	3/3/94	10.16	300	<50	<50	<0.5	1.3	<0.5	2.7	3.1	--	--	<0.5	5.5	<0.5	<0.5
	6/6/94	9.19	430	180+	<50	0.5	10	2.2	6.1	7.6	--	--	<0.5	<0.5	<0.5	<0.5
	9/7/94	8.63	410	<50	<50	<0.5	6.4	0.8	2.6	3.8	--	--	<0.5	3.8	<0.5	<0.5
	12/22/94	9.72	130	<50	<50	<0.5	0.7	<0.5	0.6	0.8	--	--	<0.5	3.4	<0.5	<0.5
	3/17/95	10.82	1,600	170	<50	<0.5	29	<0.5	9.1	6.9	--	--	<0.5	<0.5	<0.5	<0.5
	6/27/95	10.04	1,100	<50	<50	<0.5	14	<0.5	7.1	5	--	--	<0.5	3.3	<0.5	<0.5
	9/18/95	9.43	370	--	110+	--	4.4	0.6	2	1.4	--	--	<0.5	2.4	<0.5	<0.5
	8/21/98	9.55	170	--	62+	--	<0.5	0.76	0.79	<0.5	<2.0	--	--	--	--	--
	2/24/99	10.81	20	--	280+	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--
	6/30/00	13.47	240	--	<50	--	0.7	0.8	<0.5	0.74	4.0	--	--	--	--	--
	4/27/01	9.99	**160**	--	<50	--	**3.3**	<0.5	**0.86**	<0.50	<2.0	--	--	--	--	--
MW-2	3/3/94	9.66	110	<50	<50	<0.5	<0.5	1.7	0.58	2.7	--	--	<0.5	<0.5	<0.5	<0.5
	6/6/94	8.88	100	<50	<50	<0.5	11	<0.5	0.7	1.1	--	--	<0.5	<0.5	<0.5	<0.5
	9/7/94	8.31	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5
	12/22/94	8.76	<50	<50	<50	<0.5	0.8	<0.5	<0.5	0.8	--	--	<0.5	<0.5	<0.5	<0.5
	3/17/95	10.18	180	100	<50	<0.5	31	<0.5	1	1.8	--	--	<0.5	<0.5	<0.5	<0.5
	6/27/95	9.33	80	<50	<50	<0.5	6	<0.5	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5
	9/18/95	8.36	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5
	8/21/98	8.12	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--
	2/24/99	10.12	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--
	6/30/00	14.24	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	2.0	--	--	--	--	--
	4/27/01	8.71	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--
MW-3	3/3/94	9.47	85	<50	<50	<0.5	<0.5	0.77	<0.5	3.7	--	--	<0.5	<0.5	<0.5	<0.5
	6/6/94	8.69	100	110+	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	2.5	0.8	2.1	<0.5
	9/7/94	8.22	220	<50	<50	<0.5	11	1.8	2.6	3.5	--	--	<0.5	<0.5	0.6	<0.5
	12/22/94	9.23	130	95+	<50	<0.5	3.8	0.5	0.6	1.2	--	--	<0.5	<0.5	<0.5	<0.5
	3/17/95	10.12	1,500	270	<50	<0.5	83	6	10	15	--	--	<0.5	<0.5	<0.5	<0.5
	6/27/95	9.03	2,500	<50	<50	<0.5	330	8.9	8.1	20	--	--	<0.5	<0.5	<0.5	<0.5
	9/18/95	8.43	1,500	--	770+	--	400	11	2.2	3.3	--	--	<0.5	<0.5	<0.5	<0.5
	8/21/98	8.61	2,300	--	600+	--	410	9.3	36	25	<10	--	--	--	--	--
	2/24/99	10.39	55	--	110+	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--
	6/30/00	10.83	110	--	83+	--	<0.5	<0.5	0.51	<0.5	<2.0	--	--	--	--	--
	4/27/01	8.67	<50	--	**690+**	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--

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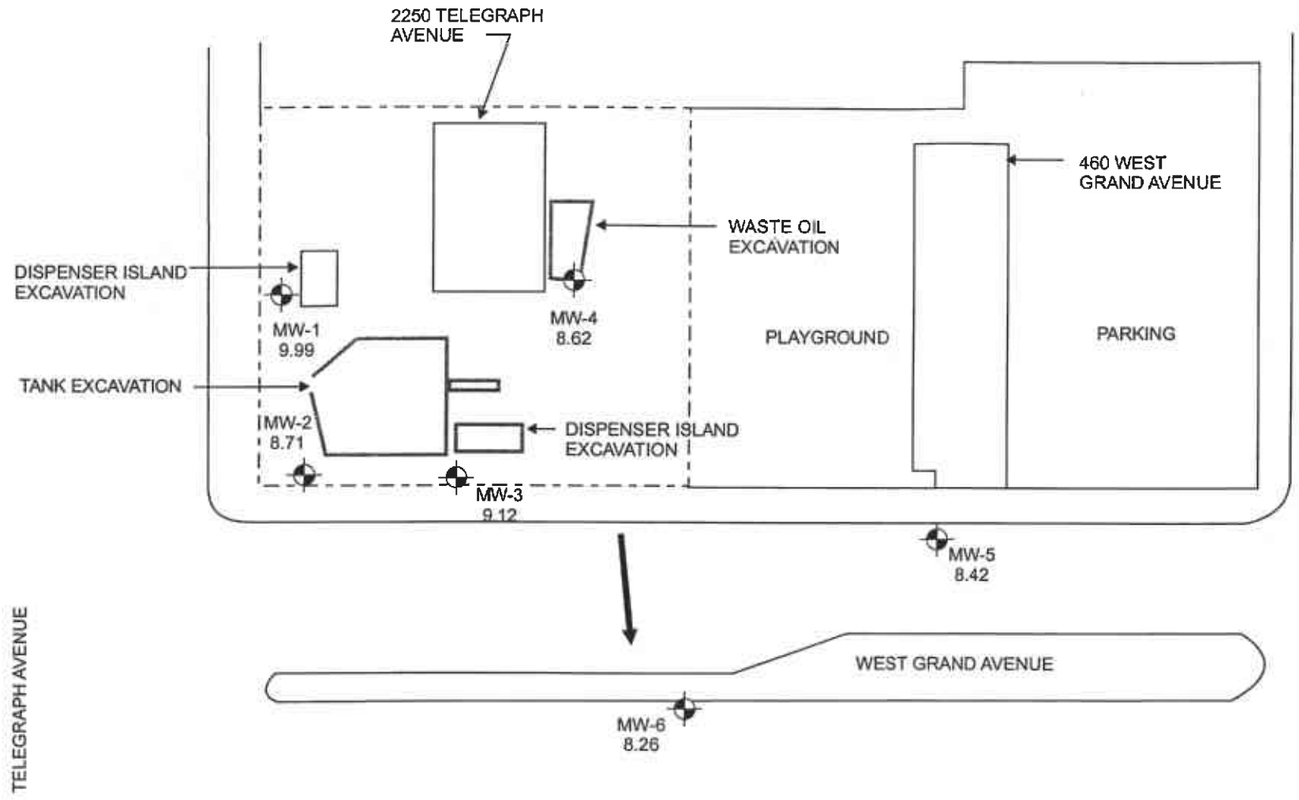
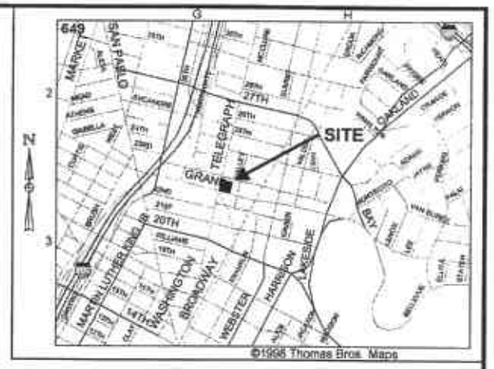
Table 2
Chemical Concentrations in Groundwater
Buttner Properties
Oakland, California

Well	Date	Groundwater Elevation MSL (feet)	Petroleum Hydrocarbons				Volatile Organics									
			TVH as Gasoline µg/l	TEH as Kerosene µg/l	TEH as Diesel µg/l	TEH as Motor Oil mg/l	Benzene µg/l	Toluene µg/l	Ethyl-benzene µg/l	Xylenes µg/l	MTBE -8020 µg/l	MTBE -8260 µg/l	1,1,1-TCA µg/l	1,2-DCA µg/l	PCE µg/l	Chloro-Benzene µg/l
MW-4	3/3/94	8.99	4,300	<50	240	<0.5	220	20	7.5	17	--	--	<0.5	5.9	<0.5	4.4
	6/6/94	8.03	4,400	<50	800+	<0.5	140	<0.5	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5
	9/7/94	7.02	10,000	490+	280+	<0.5	84	<0.5	42	69	--	--	<0.5	4.4	0.5	4.3
	12/22/94	7.62	2,400	450+	54+	<0.5	11	<0.5	7.1	11	--	--	<0.5	3.6	3.6	<0.5
	3/17/95	9.78	2,200	380	160+	<0.5	<0.5	<0.5	7.9	10	--	--	<0.5	1.7	<0.5	4.5
	6/27/95	8.83	3,100	<50	82	<0.5	<0.5	<0.5	13	19	--	--	<0.5	2.3	<0.5	4.8
	9/18/95	8.04	3,000	--	1,231+	--	12	<0.7	6.9	8.3	--	--	<0.5	1.9	<0.5	4.0
	8/21/98	8.02	1,700	--	600+	--	8.2	12	13	5.2	<2.0	-	--	--	--	--
	2/24/99	9.09	2,700	--	2,100+	--	4.3	0.64	<0.5	0.54	--	<2.0	--	--	--	--
	6/30/00	11.74	6,700	--	3,200+	--	3.1	1.7	11	16.7	27	--	--	--	--	--
	4/27/01	8.62	**1,900**	--	**710**	--	<0.5	<0.5	<0.5	<0.5	**14**	--	--	--	--	--
MW-5	6/26/97	7.58	120	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	--	<0.5	<0.5	1.6	<0.5
	8/21/98	7.70	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--
	2/24/99	9.16	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	--	<2.0	--	--	--	--
	6/30/00	8.39	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	5.1	--	--	--	--	--
	4/27/01	8.42	<50	--	<50	--	<0.5	<0.5	<0.5	<0.5	<2.0	--	--	--	--	--
MW-6	6/26/97	7.47	1,500+	--	450+	--	<0.5	<0.5	11	<0.5	-	-	<0.5	<0.5	<0.5	1.7
	8/21/98	7.36	1,400	--	540+	--	<0.5	3.6	5.6	0.4	5.7	3.2	--	--	--	--
	2/24/99	9.04	1,600	--	600+	--	<0.5	<0.5	0.56	<0.5	--	2.3	--	--	--	--
	6/30/00	8.04	1,900	--	360+	--	0.56	3	5.4	3.5	30	--	--	--	--	--
	4/27/01	8.26	**1,600**	--	**440**	--	<0.5	<0.5	<0.5	<0.5	**3.3**	--	--	--	--	--

DCA = Dichloroethane
TCA = Trichloroethane
PCE = Tetrachloroethene
- = Chemical not tested for
NR = Hydrocarbon range not reported by laboratory

\+ = Uncategorized hydrocarbons quantified in ranges specified
mg/l = milligrams per liter = parts per million
µg/l = micrograms per liter = parts per billion
<1 = Chemical not present at a concentration greater than the laboratory detection limit shown or stated on test reports





VICINITY MAP

EXPLANATION

- STRUCTURE
- LIMITS OF EXCAVATION
- MONITORING WELL LOCATION
- (9.99) GROUNDWATER ELEVATION (FT. MSL) MEASURED 4/27/01
- APPROXIMATE GROUNDWATER FLOW DIRECTION

N

APPROXIMATE SCALE (feet)

0 40 80

SITE PLAN

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

2250 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

JOB NUMBER 609.004

DATE 5/01

PLATE 1

B609.004.01.dwg

GROUNDWATER DEPTHS

Project Name: 2250 Telegraph
Job No.: 609.00H
Measured by: Ola Nzeno

Well	Date	Time	Groundwater Depth (feet)	Comments
MW-1	4/27/01	0915	10.56	
MW-2	11	0905	11.32	
MW-3	11	0900	9.85	
MW-4	11	0925	11.26	
MW-5	11	0900	7.60	
MW-6	11	1200	10.1	

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Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 2250 Telegraph
JOB NO. 609.007
SAMPLED BY: Oki Nzewi
DATE: 4/27/01
WEATHER:

WELL NO.: MW-1
WELL CASING DIAMETER: 2"
WELL MATERIAL: PVC
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC) 18.31 FEET

DEPTH TO GROUNDWATER (BTOC) 10.56 FEET

FEET OF WATER IN WELL 7.75 FEET

CALCULATED PURGE VOLUME 3.8 gallor
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT

PURGE METHOD bailer

MEASUREMENT METHOD TAPE & PASTE (ELECTRONIC SOUNDER) OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP	CONDUCTIVITY (µMHOS/CM)	TURBIDITY	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1040	6.69	18.6	109.5				
1	1041	6.72	18.5	111.3				
2	1042	6.56	18.6	111.3				
4	1050	6.71	18.7	103.9				

DEPTH TO GROUNDWATER WHEN 80% RECOVERED 12.067

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC) 11.68

SAMPLING METHOD

CONTAINERS / PRESERVATIVE

3 / HCL
40 ML

2 / Amber
LITER

/
OTHER

/
OTHER

ANALYSES:

MISC FIELD OBSERVATION:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 2250 Telegraph
JOB NO. 609-007
SAMPLED BY: Mai Nguyen
DATE: 4/27/01
WEATHER:

WELL NO.: MW-2
WELL CASING DIAMETER:
WELL MATERIAL:
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC) 16.85 FEET

DEPTH TO GROUNDWATER (BTOC) 11.32 FEET

FEET OF WATER IN WELL 5.53 FEET

CALCULATED PURGE VOLUME 2.7 gallon
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT

PURGE METHOD bailer

MEASUREMENT METHOD TAPE & PASTE (ELECTRONIC SOUNDER) OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP	CONDUCTIVITY (µMHOS/CM)	TURBIDITY	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1025	6.88	18.4	62.9				
1	1027	6.87	18.3	67.7				
2	1030	6.85	18.4	66.6				
3	1032	6.72	18.4	66.7				

DEPTH TO GROUNDWATER WHEN 80% RECOVERED 13.58

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC) 11.85

SAMPLING METHOD

CONTAINERS / PRESERVATIVE

/ 40 ML

/ LITER

/ OTHER

/ OTHER

ANALYSES:

MISC FIELD OBSERVATION:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 2750 Telegraph
JOB NO. 609-004
SAMPLED BY: Obi Nzewi
DATE: 1/27/01
WEATHER:

WELL NO.: MW-3
WELL CASING DIAMETER:
WELL MATERIAL:
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC) 16.30 FEET

DEPTH TO GROUNDWATER (BTOC) 9.85 FEET

FEET OF WATER IN WELL 6.45 FEET

CALCULATED PURGE VOLUME 3.2 gallon
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT

PURGE METHOD bailer

MEASUREMENT METHOD TAPE & PASTE (ELECTRONIC SOUNDER) OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP	CONDUCTIVITY (µMHOS/CM)	TURBIDITY	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1010	7.07	12.3	34.1				slight sheen
1	1012	6.70	17.7	32.1				"
2	1013	6.65	17.6	36.1				"
3	1015	6.46	18.1	38.3				"

DEPTH TO GROUNDWATER WHEN 80% RECOVERED 11.82

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC) 11.5

SAMPLING METHOD

CONTAINERS / PRESERVATIVE

/ 40 ML

/ LITER

/ OTHER

/ OTHER

ANALYSES:

MISC FIELD OBSERVATION:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 2250 Telegraph
JOB NO. 604-004
SAMPLED BY: Obi Nzeuwa
DATE: 4/27/01
WEATHER:

WELL NO.: MW-4
WELL CASING DIAMETER:
WELL MATERIAL:
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC) 18.30 FEET

DEPTH TO GROUNDWATER (BTOC) 11.26 FEET

FEET OF WATER IN WELL 7.04 FEET

CALCULATED PURGE VOLUME 3.45 gallon
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT

PURGE METHOD bailer

MEASUREMENT METHOD TAPE & PASTE ELECTRONIC SOUNDER OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP	CONDUCTIVITY (µMHOS/CM)	TURBIDITY	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	0940	6.63	17.4	83.5				hydrocarbon odor/sheen
1	0943	6.65	16.4	77.7				"
3	0950	6.74	17.0	79.5				"
4	1000	6.73	17.0	77.4				"

DEPTH TO GROUNDWATER WHEN 80% RECOVERED 13.51

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC) 11.34

SAMPLING METHOD

CONTAINERS / PRESERVATIVE

3 / 40 ML

2 / LITER

/ OTHER

/ OTHER

ANALYSES:

MISC FIELD OBSERVATION:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 2250 Telegraph
JOB NO. 609-007
SAMPLED BY: Ossi Nazemi
DATE: 4/27/01
WEATHER:

WELL NO.: MW-5
WELL CASING DIAMETER:
WELL MATERIAL:
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC) 17.40 FEET

DEPTH TO GROUNDWATER (BTOC) 7.60 FEET

FEET OF WATER IN WELL 9.8 FEET

CALCULATED PURGE VOLUME 4.8 gallon
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT

PURGE METHOD bailer

MEASUREMENT METHOD TAPE & PASTE ELECTRONIC SOUNDER OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP	CONDUCTIVITY (µMHOS/CM)	TURBIDITY	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1443	7.70	14.2	45.2				
1	1445	7.70	18.5	44.1				
3	1449	6.68	18.7	44.2				
5	1452	6.69	18.8	44.4				

DEPTH TO GROUNDWATER WHEN 80% RECOVERED 9.12

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC) 7.62

SAMPLING METHOD

CONTAINERS / PRESERVATIVE

/ 40 ML

/ LITER

/ OTHER

/ OTHER

ANALYSES:

MISC FIELD OBSERVATION:

Subsurface Consultants, Inc.

WELL SAMPLING FORM

PROJECT NAME: 2250 Telegraph
JOB NO. 601.001
SAMPLED BY: Obi Nazemi
DATE: 4/27/01
WEATHER:

WELL NO.: MW-6
WELL CASING DIAMETER:
WELL MATERIAL:
TOC ELEVATION:

TOTAL DEPTH OF CASING (BTOC) 18.95 FEET

DEPTH TO GROUNDWATER (BTOC) 10.1 FEET

FEET OF WATER IN WELL 8.85 FEET

CALCULATED PURGE VOLUME 4.3 gallon
(feet of water * casing dia^2 * .0408 * # of Volumes)

FREE PRODUCT

PURGE METHOD bailer

MEASUREMENT METHOD TAPE & PASTE ELECTRONIC SOUNDER OTHER

FIELD MEASUREMENTS

GALLONS REMOVED	TIME	pH	TEMP	CONDUCTIVITY (µMHOS/CM)	TURBIDITY	ORP (mV)	DO (mg/l)	COMMENTS (odor, color, ...)
0	1345	7.06	20.3	116.5				
2	1350	6.92	20.2	116.6				
3	1352	6.79	19.4	116.5				
4	1355	6.63	19.9	116.7				

DEPTH TO GROUNDWATER WHEN 80% RECOVERED 12.12

ACTUAL DEPTH TO GROUNDWATER BEFORE SAMPLING (BTOC) 10.15

SAMPLING METHOD

CONTAINERS / PRESERVATIVE

/ 40 ML

/ LITER

/ OTHER

/ OTHER

ANALYSES:

MISC FIELD OBSERVATION:

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

ANALYTICAL REPORT

Prepared for:

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

Date: 22-MAY-01
Lab Job Number: 151700
Project ID: N/A
Location: 2250 TELEGRAPH

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: _____ for JG
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: **151700** Receipt Date: **04/27/01**
Client: **Subsurface Consultants, Inc.**
Project Name: **2250 Telegraph**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for six water samples received from the above referenced project. The samples were received cold and intact.

Total Volatile Hydrocarbons: The trifluorotoluene surrogate recoveries for samples MW-4 (151700-004) and MW-6 (151700-006) were outside acceptance limits due to coelution of the surrogate peak with hydrocarbon peaks. The associated bromofluorobenzene surrogate recoveries were acceptable. No other analytical problems were encountered.

BTXE: No analytical problems were encountered.

Total Extractable Hydrocarbons: No analytical problems were encountered.

CHAIN OF CUSTODY FORM

PROJECT NAME: 2250 Old Telegraph

JOB NUMBER: _____ LAB: C S T

PROJECT CONTACT: Emily Silverman TURNAROUND: Standard

SAMPLED BY: Obi Nzeri REQUESTED BY: Obi Nzeri

PAGE _____ OF _____

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR	CONTAINERS: VOA	LITER	PINT	TUBE	METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVHg (8015)	TVH & (8015) silica	BTEX (8020)	MTBE (8020)
	MW-1	X				X	X			X			X	X	04	27	01	1230	①	X	X	X	X
	MW-2																	1210	①				
	MW-3																	1200	①				
	MW-4																	1220	①				
	MW-5																	1500	①				
	MW-6																	1400	①				
	MW-																						

Preservation Correct? ☒ Yes ☐ No ☐ N/A

Received ☒ On Ice ☒ Cold ☐ Ambient ☒ Intact

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Obi Nzeri	4/27/01 1625	[signature]	4/27/01 1625
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

① TPHd with silica gel clean up

Subsurface Consultants, Inc.

171 - 12th Street, Suite 202, Oakland, CA 94607

(510) 268-0461 - FAX: (510) 268-0137

3736 Mt. Diablo Blvd., Ste. 200, Lafayette, CA 94549

(925) 299-7960 - (925) 299-7970

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	63352
Units:	ug/L	Sampled:	04/27/01
Diln Fac:	1.000	Received:	04/27/01

Field ID:	MW-1	Lab ID:	151700-001
Type:	SAMPLE	Analyzed:	05/01/01

Analyte	Result	RL
Gasoline C7-C12	160	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	59-135
Bromofluorobenzene (FID)	109	60-140

Field ID:	MW-2	Lab ID:	151700-002
Type:	SAMPLE	Analyzed:	05/02/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	59-135
Bromofluorobenzene (FID)	109	60-140

Field ID:	MW-3	Lab ID:	151700-003
Type:	SAMPLE	Analyzed:	05/02/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	59-135
Bromofluorobenzene (FID)	106	60-140

Field ID:	MW-4	Lab ID:	151700-004
Type:	SAMPLE	Analyzed:	05/02/01

Analyte	Result	RL
Gasoline C7-C12	1,900	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	172 *	59-135
Bromofluorobenzene (FID)	134	60-140

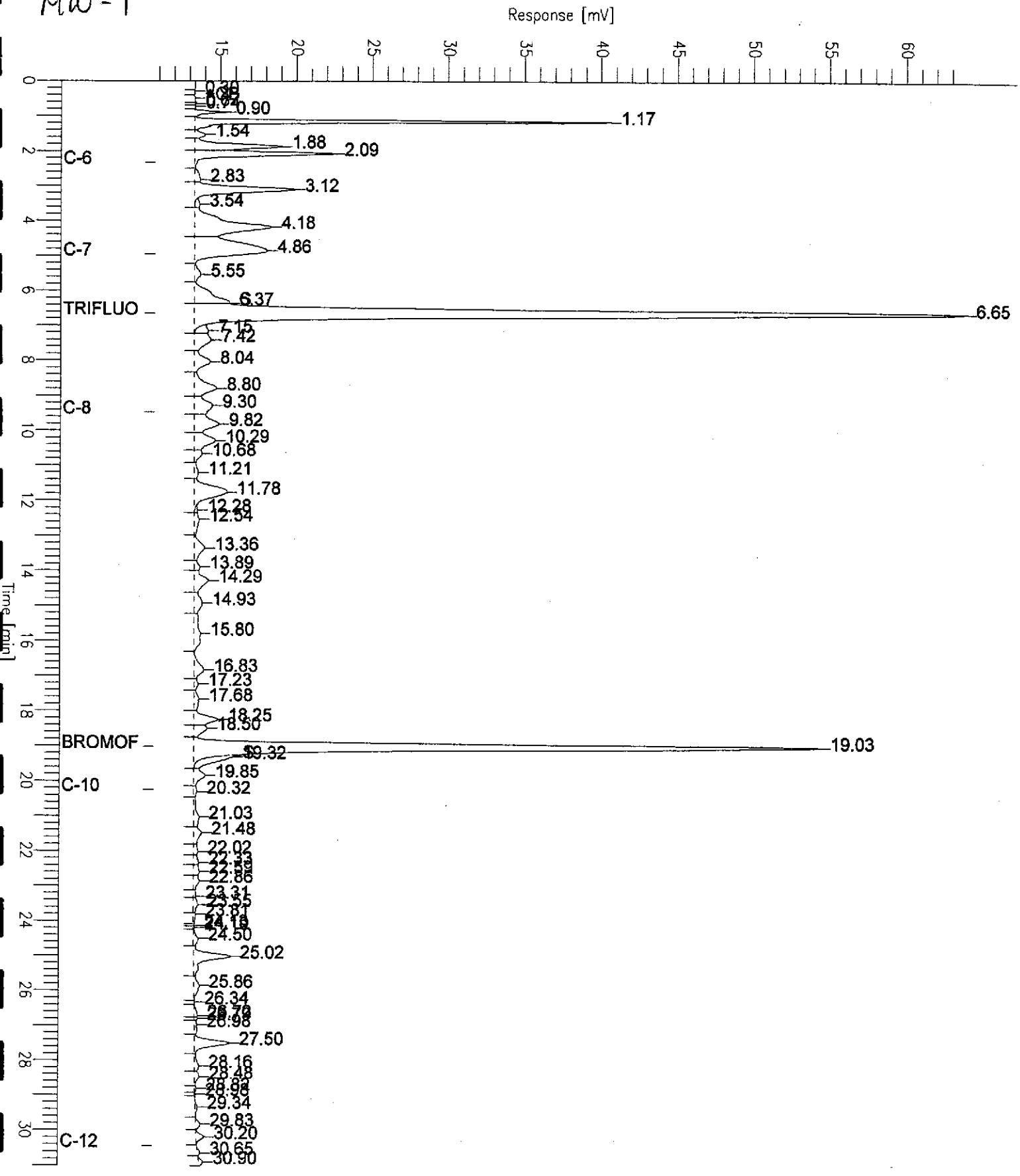
*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 151700-001,63352
FileName : G:\GC05\DATA\121G011.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 31.00 min
Scale Factor: 1.0 Plot Offset: 11 mV

Sample #: A1 Page 1 of 1
Date : 5/3/01 02:58 PM
Time of Injection: 5/1/01 11:57 PM
Low Point : 10.74 mV High Point : 63.93 mV
Plot Scale: 53.2 mV

MW-1

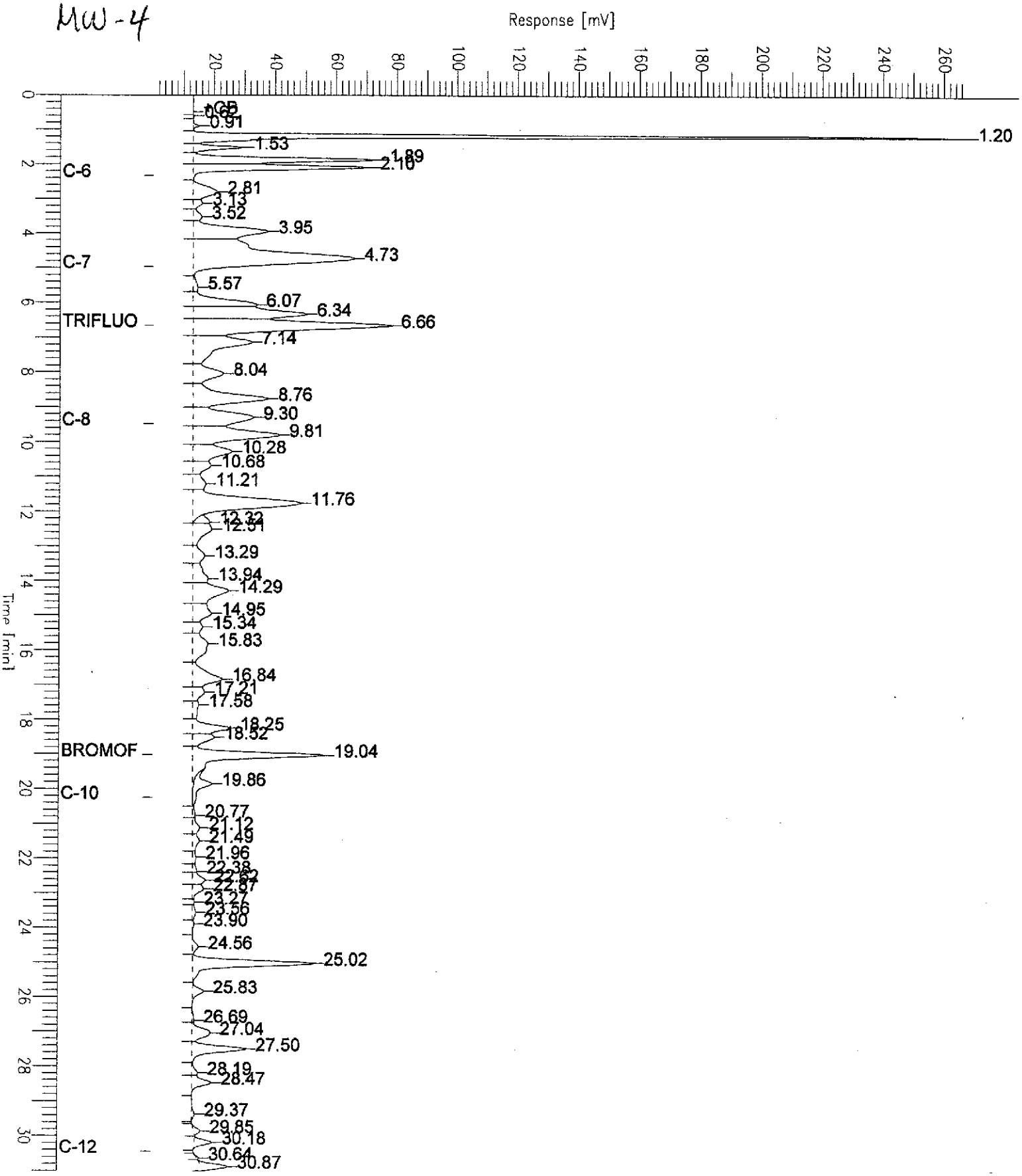


Chromatogram

Sample Name : 151700-004,63352
FileName : G:\GC05\DATA\121G014.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 31.00 min
Scale Factor: 1.0 Plot Offset: 0 mV

Sample #: A1 Page 1 of 1
Date : 5/2/01 02:39 AM
Time of Injection: 5/2/01 02:07 AM
Low Point : 0.27 mV High Point : 267.91 mV
Plot Scale: 267.6 mV

MW-4



Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	63352
Units:	ug/L	Sampled:	04/27/01
Diln Fac:	1.000	Received:	04/27/01

Field ID: MW-5 Lab ID: 151700-005
Type: SAMPLE Analyzed: 05/02/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	59-135
Bromofluorobenzene (FID)	106	60-140

Field ID: MW-6 Lab ID: 151700-006
Type: SAMPLE Analyzed: 05/02/01

Analyte	Result	RL
Gasoline C7-C12	1,600	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	144 *	59-135
Bromofluorobenzene (FID)	134	60-140

Type: BLANK Analyzed: 05/01/01
Lab ID: QC144412

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	59-135
Bromofluorobenzene (FID)	106	60-140

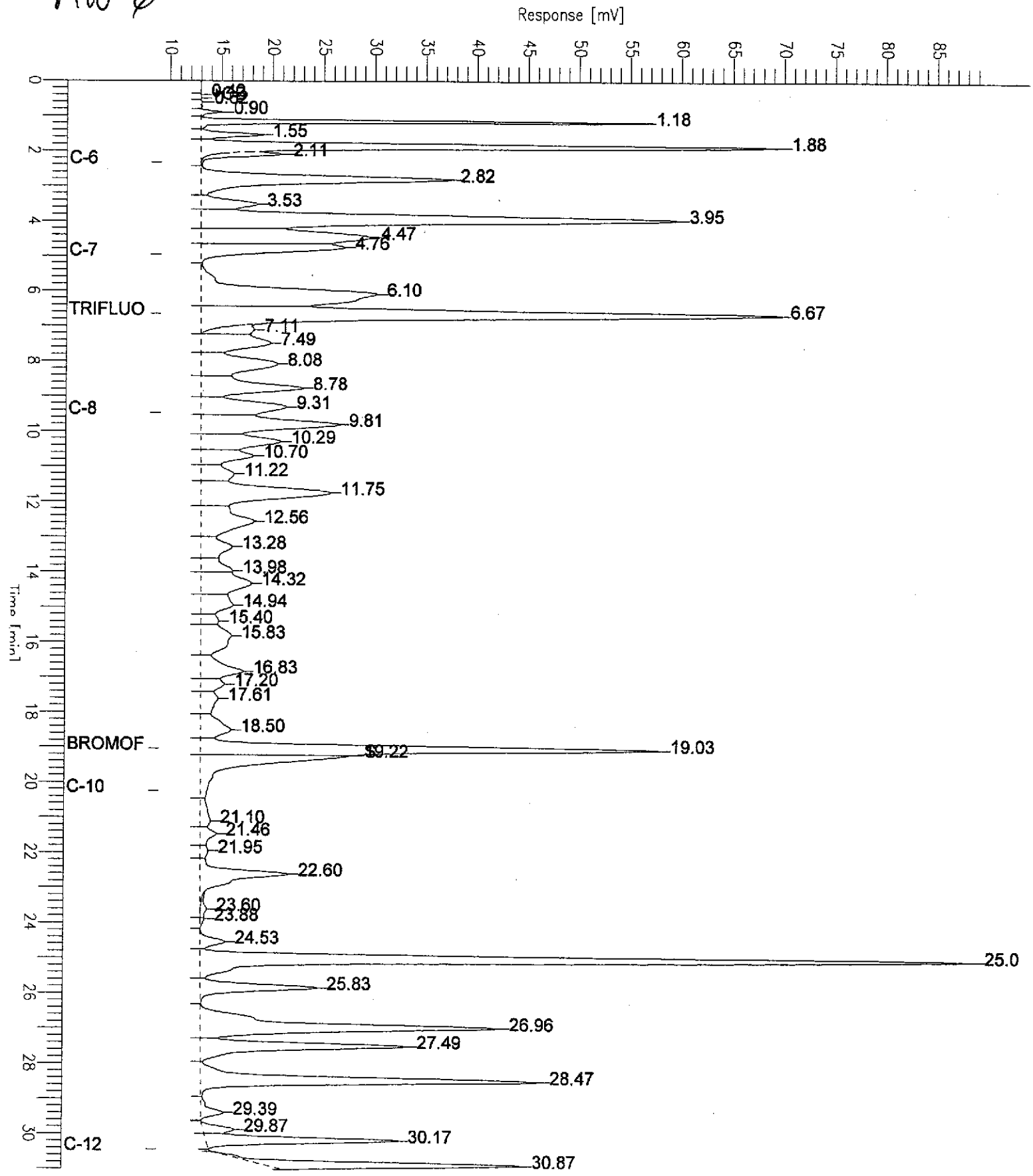
*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Chromatogram

ample Name : 151700-006,63352
ileName : G:\GC05\DATA\121G020.raw
ethod : TVHBTXE
tart Time : 0.00 min End Time : 31.00 min
cale Factor: 1.0 Plot Offset: 9 mV

Sample #: A1 Page 1 of 1
Date : 5/3/01 02:58 PM
Time of Injection: 5/2/01 06:28 AM
Low Point : 9.14 mV High Point : 89.01 mV
Plot Scale: 79.9 mV

MW-6

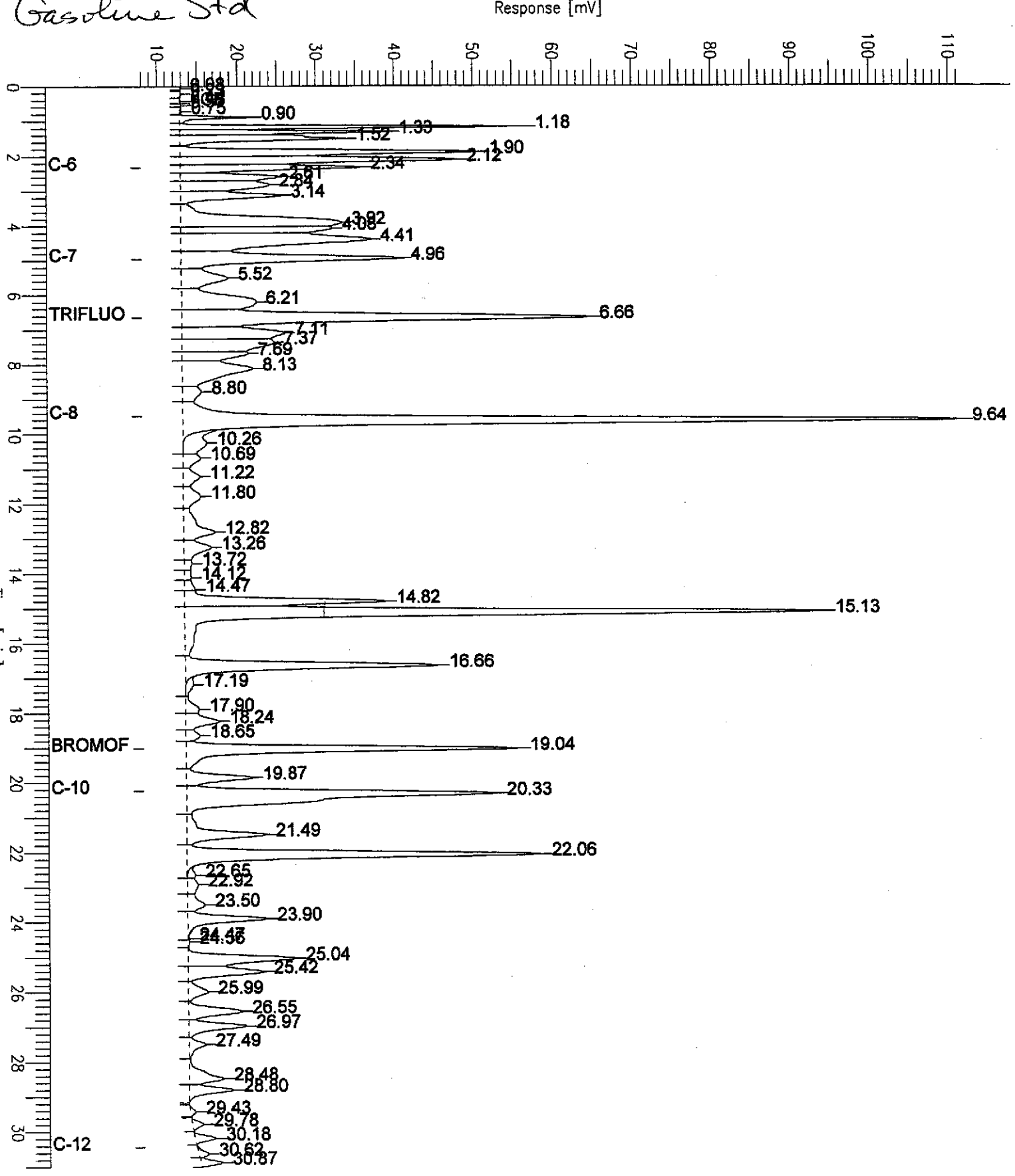


Chromatogram

Sample Name : CCV/LCS,QC144410,63352,01WS1024,5/5000
FileName : G:\GC05\DATA\121G003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 31.00 min
Scale Factor: 1.0 Plot Offset: 8 mV

Sample #: Page 1 of 1
Date : 5/1/01 06:37 PM
Time of Injection: 5/1/01 06:07 PM
Low Point : 7.96 mV High Point : 111.53 mV
Plot Scale: 103.6 mV

Gasoline Std



Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	63352
Units:	ug/L	Sampled:	04/27/01
Diln Fac:	1.000	Received:	04/27/01

Field ID: MW-1 Lab ID: 151700-001
Type: SAMPLE Analyzed: 05/01/01

Analyte	Result	RL
MTBE	ND	2.0
Benzene	3.3	0.50
Toluene	ND	0.50
Ethylbenzene	0.86	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	84	56-142
Bromofluorobenzene (PID)	91	55-149

Field ID: MW-2 Lab ID: 151700-002
Type: SAMPLE Analyzed: 05/02/01

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	80	56-142
Bromofluorobenzene (PID)	88	55-149

Field ID: MW-3 Lab ID: 151700-003
Type: SAMPLE Analyzed: 05/02/01

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	81	56-142
Bromofluorobenzene (PID)	86	55-149

C= Presence confirmed, but confirmation concentration differed by more than a factor of two
ND= Not Detected
RL= Reporting Limit

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	63352
Units:	ug/L	Sampled:	04/27/01
Diln Fac:	1.000	Received:	04/27/01

Field ID: MW-4 Lab ID: 151700-004
Type: SAMPLE Analyzed: 05/02/01

Analyte	Result	RL
MTBE	14	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	109	56-142
Bromofluorobenzene (PID)	93	55-149

Field ID: MW-5 Lab ID: 151700-005
Type: SAMPLE Analyzed: 05/02/01

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	82	56-142
Bromofluorobenzene (PID)	87	55-149

Field ID: MW-6 Lab ID: 151700-006
Type: SAMPLE Analyzed: 05/02/01

Analyte	Result	RL
MTBE	3.3 C	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	99	56-142
Bromofluorobenzene (PID)	108	55-149

C= Presence confirmed, but confirmation concentration differed by more than a factor of two
ND= Not Detected
RL= Reporting Limit

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	63352
Units:	ug/L	Sampled:	04/27/01
Diln Fac:	1.000	Received:	04/27/01

Type:	BLANK	Analyzed:	05/01/01
Lab ID:	QC144412		

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	84	56-142
Bromofluorobenzene (PID)	86	55-149

C= Presence confirmed, but confirmation concentration differed by more than a factor of two
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC144410	Batch#:	63352
Matrix:	Water	Analyzed:	05/01/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,902	95	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	59-135
Bromofluorobenzene (FID)	114	60-140

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC144411	Batch#:	63352
Matrix:	Water	Analyzed:	05/01/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	19.15	96	51-125
Benzene	20.00	20.37	102	67-117
Toluene	20.00	20.18	101	69-117
Ethylbenzene	20.00	21.17	106	68-124
m,p-Xylenes	40.00	43.04	108	70-125
o-Xylene	20.00	21.56	108	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	85	56-142
Bromofluorobenzene (PID)	90	55-149

Gasoline by GC/FID CA LUFT

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	63352
MSS Lab ID:	151703-011	Sampled:	04/27/01
Matrix:	Water	Received:	04/27/01
Units:	ug/L	Analyzed:	05/02/01
Diln Fac:	1.000		

Type: MS Lab ID: QC144413

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	61.71	2,000	1,828	88	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	59-135
Bromofluorobenzene (FID)	117	60-140

Type: MSD Lab ID: QC144414

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,804	87	65-131	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	59-135
Bromofluorobenzene (FID)	115	60-140

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/27/01
Units:	ug/L	Received:	04/27/01
Diln Fac:	1.000	Prepared:	04/30/01
Batch#:	63334	Analyzed:	05/01/01

'ield ID: MW-1 Lab ID: 151700-001
'ype: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	78	44-121

'ield ID: MW-2 Lab ID: 151700-002
'ype: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	70	44-121

'ield ID: MW-3 Lab ID: 151700-003
'ype: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	69	44-121

'ield ID: MW-4 Lab ID: 151700-004
'ype: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	74	44-121

'ield ID: MW-5 Lab ID: 151700-005
'ype: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	74	44-121

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits fuel pattern which does not resemble standard
ID= Not Detected
'L= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/27/01
Units:	ug/L	Received:	04/27/01
Diln Fac:	1.000	Prepared:	04/30/01
Batch#:	63334	Analyzed:	05/01/01

Field ID:	MW-6	Lab ID:	151700-006
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	440 L Y	50

Surrogate	%REC	Limits
Hexacosane	70	44-121

ype:	BLANK	Cleanup Method:	EPA 3630C
ab ID:	QC144336		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	78	44-121

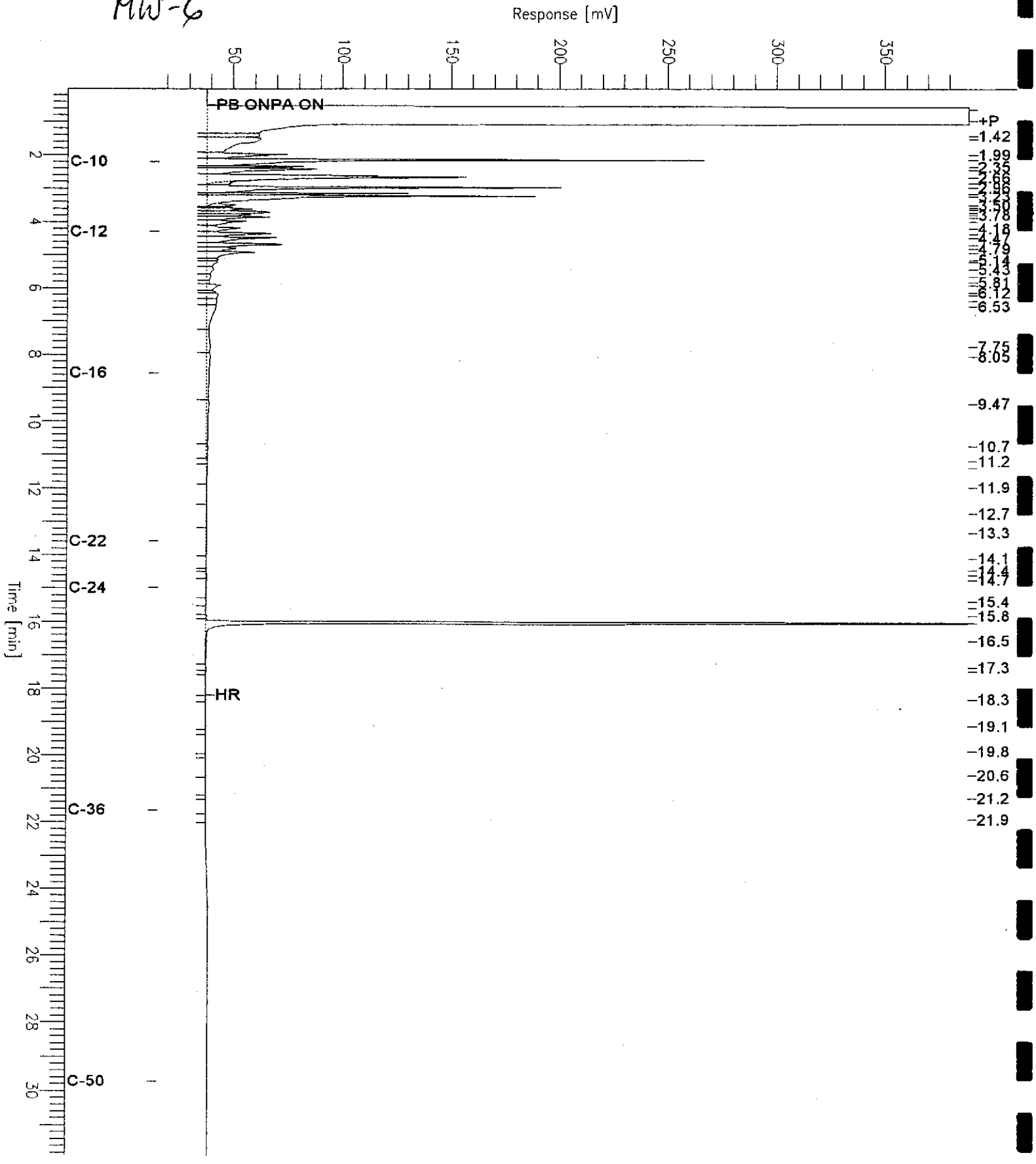
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits fuel pattern which does not resemble standard
D= Not Detected
L= Reporting Limit

Chromatogram

Sample Name : 151700-006sg,63334
FileName : G:\GC15\CHB\120B040.RAW
Method : BTEH107.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 16 mV

Sample #: 63334 Page 1 of 1
Date : 05/02/2001 09:40 AM
Time of Injection: 05/01/2001 10:40 PM
Low Point : 16.07 mV High Point : 388.78 mV
Plot Scale: 372.7 mV

MW-6

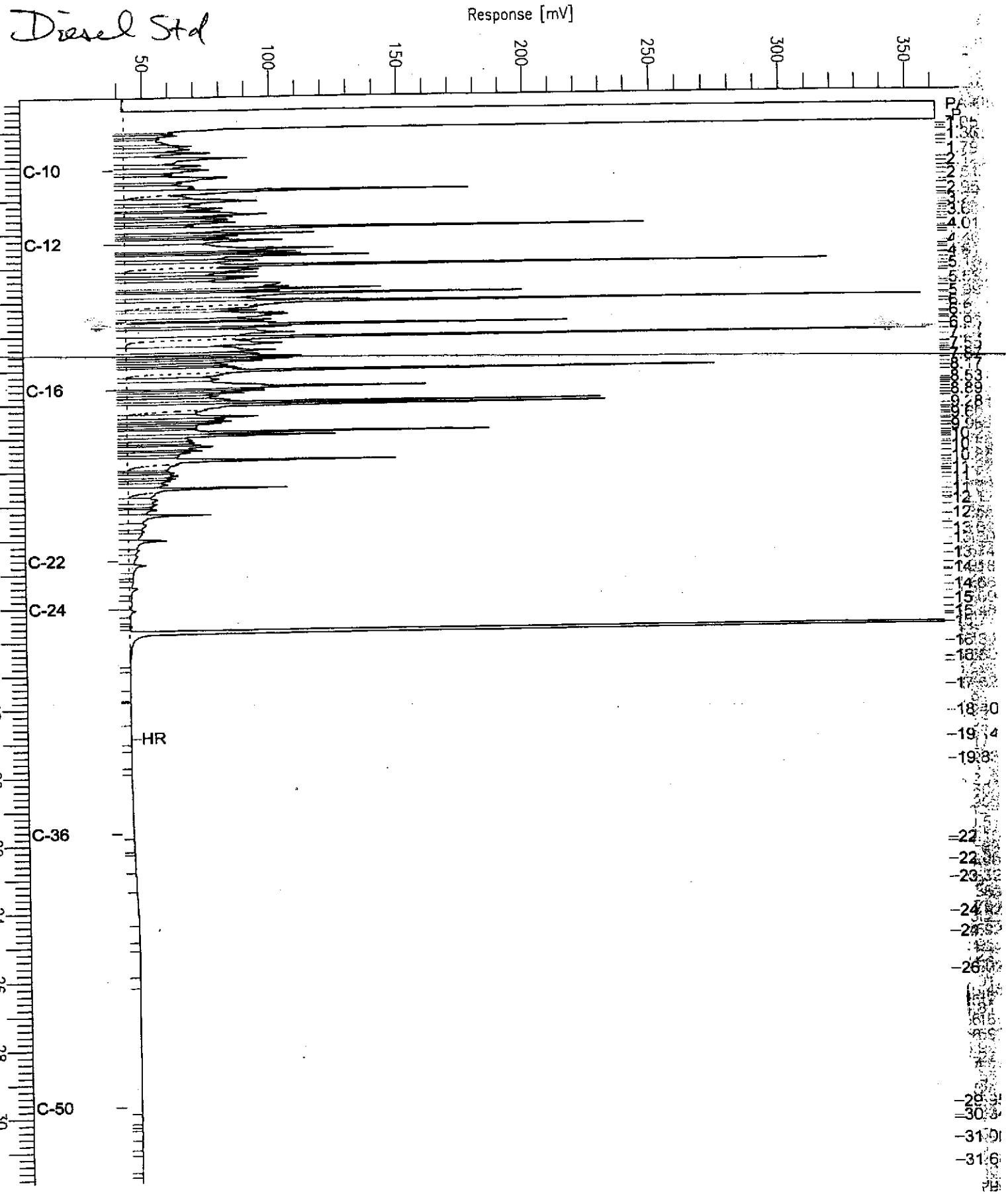


Chromatogram

ample Name : ccv,01ws0904,dsl
ileName : G:\GC11\CHA\120A002.RAW
hod : ATEH097.MTH
rt Time : 0.01 min End Time : 31.91 min
cale Factor: 0.0 Plot Offset: 38 mV

Sample #: 500mg/L
Date : 4/30/01 12:25 PM
Time of Injection: 4/30/01 11:49 AM
Low Point : 38.35 mV High Point : 362.17 mV
Plot Scale: 323.8 mV

Diesel Std



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	151700	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	63334
Units:	ug/L	Prepared:	04/30/01
Diln Fac:	1.000	Analyzed:	05/01/01

ype: BS
ab ID: QC144337

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,339	1,500	64	45-110

Surrogate	%REC	Limits
Hexacosane	76	44-121

ype: BSD
ab ID: QC144338

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,339	1,543	66	45-110	3	22

Surrogate	%REC	Limits
Hexacosane	76	44-121

PD= Relative Percent Difference

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

ANALYTICAL REPORT

Prepared for:

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

Date: 22-MAY-01
Lab Job Number: 151820
Project ID: N/A
Location: 2250 TELEGRAPH

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: _____ for JG
Operations Manager

CA ELAP # 1459

Curtis & Tompkins, Ltd.

Laboratory Number: **151820** Order Date: **04/27/01**
Client: **Subsurface Consultants, Inc.**
Project Name: **2250 Telegraph**

CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for three water samples ordered from the above referenced project. The samples were received cold and intact.

These samples were analyzed to confirm results obtained from C&T login number 151700. Results for the volatile constituents confirmed the original results, however, the extractables produced different results from the original. Further investigation confirmed that the two bottles submitted for analysis had different levels of extractable hydrocarbons.

Total Volatile Hydrocarbons: No analytical problems were encountered.

BTXE: No analytical problems were encountered.

Total Extractable Hydrocarbons: No analytical problems were encountered.

CURTIS & TOMPKINS, LTD. BERKELEY LOGIN CHANGE FORM

Reason for change: A Client Request: By: E. Silverman Date/Time: 5/9/01 2:30P Initials: SES
_____ Login Review _____ Data Review

Current Lab ID	Previous Lab ID	Client ID	Matrix	Add/Cancel	Analysis	Duedate
151820-001	151700-003	MW-3	Water	Add	TVH, TEH	5/11/01
-002	-004	MW-4	↓	↓	TEH, BTXE	↓
-003	-006	MW-6	↓	↓	BTXE	↓

Curtis & Tompkins, Ltd.

Subject: Login 151700
Date: Fri, 04 May 2001 14:18:13 -0700
From: "Emily Silverman" <esilverman@subsurfaceconsultants.com>
To: <steve@ctberk.com>

Curtis & Tompkins, Ltd.

Hi Steve -

As discussed please reanalyze MW-3 for TVHg and TEHd, MW-4 for TEHd and BTEX, and MW-6 for BTEX. Please use silica gel cleanup for the extractables.

Thanks very much.

Emily Silverman
Subsurface Consultants, Inc.
tel: 925.299.7960
fax: 925.299.7970
e-mail: esilverman@subsurfaceconsultants.com

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8015M
Field ID:	MW-3	Batch#:	63452
Matrix:	Water	Sampled:	04/27/01
Units:	ug/L	Received:	04/27/01
Diln Fac:	1.000	Analyzed:	05/05/01

Type: SAMPLE Lab ID: 151820-001

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	59-135
Bromofluorobenzene (FID)	105	60-140

Type: BLANK Lab ID: QC144763

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	59-135
Bromofluorobenzene (FID)	105	60-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	04/27/01
Units:	ug/L	Received:	04/27/01
Diln Fac:	1.000	Analyzed:	05/05/01
Batch#:	63452		

Field ID: MW-4 Lab ID: 151820-002
Type: SAMPLE

Analyte	Result	RL
MTBE	13	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	108	56-142
Bromofluorobenzene (PID)	95	55-149

Field ID: MW-6 Lab ID: 151820-003
Type: SAMPLE

Analyte	Result	RL
MTBE	3.3 C	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	97	56-142
Bromofluorobenzene (PID)	94	55-149

Type: BLANK Lab ID: QC144763

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	84	56-142
Bromofluorobenzene (PID)	85	55-149

C= Presence confirmed, but confirmation concentration differed by more than a factor of two
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	63452
Units:	ug/L	Analyzed:	05/06/01
Diln Fac:	1.000		

Type: BS Lab ID: QC144767

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	19.46	97	51-125
Benzene	20.00	21.13	106	67-117
Toluene	20.00	20.18	101	69-117
Ethylbenzene	20.00	20.94	105	68-124
m,p-Xylenes	40.00	43.38	108	70-125
o-Xylene	20.00	22.21	111	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	80	56-142
Bromofluorobenzene (PID)	84	55-149

Type: BSD Lab ID: QC144768

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.69	98	51-125	1	20
Benzene	20.00	20.92	105	67-117	1	20
Toluene	20.00	20.57	103	69-117	2	20
Ethylbenzene	20.00	20.93	105	68-124	0	20
m,p-Xylenes	40.00	42.91	107	70-125	1	20
o-Xylene	20.00	22.49	112	65-129	1	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	81	56-142
Bromofluorobenzene (PID)	85	55-149

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8015M
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC144764	Batch#:	63452
Matrix:	Water	Analyzed:	05/05/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,028	101	73-121

Surrogate	%REC	Limits
Trifluorotoluene (FID)	119	59-135
Bromofluorobenzene (FID)	112	60-140

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 5030
Project#:	STANDARD	Analysis:	EPA 8015M
Field ID:	ZZZZZZZZZZ	Batch#:	63452
MSS Lab ID:	151817-009	Sampled:	05/04/01
Matrix:	Water	Received:	05/04/01
Units:	ug/L	Analyzed:	05/05/01
Diln Fac:	1.000		

Type: MS Lab ID: QC144765

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<24.00	2,000	2,000	100	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	59-135
Bromofluorobenzene (FID)	112	60-140

Type: MSD Lab ID: QC144766

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,887	94	65-131	6	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	59-135
Bromofluorobenzene (FID)	111	60-140

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Sampled:	04/27/01
Units:	ug/L	Received:	04/27/01
Diln Fac:	1.000		

ield ID:	MW-3	Prepared:	05/04/01
ype:	SAMPLE	Analyzed:	05/08/01
ab ID:	151820-001	Cleanup Method:	EPA 3630C
atch#:	63446		

Analyte	Result	RL
Diesel C10-C24	690 H L	50

Surrogate	%REC	Limits
Hexacosane	120	44-121

ield ID:	MW-4	Prepared:	05/09/01
ype:	SAMPLE	Analyzed:	05/11/01
ab ID:	151820-002	Cleanup Method:	EPA 3630C
atch#:	63539		

Analyte	Result	RL
Diesel C10-C24	710 H L	50

Surrogate	%REC	Limits
Hexacosane	84	44-121

ype:	BLANK	Prepared:	05/04/01
ab ID:	QC144740	Analyzed:	05/08/01
atch#:	63446	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	98	44-121

ype:	BLANK	Prepared:	05/09/01
ab ID:	QC145075	Analyzed:	05/10/01
atch#:	63539	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	76	44-121

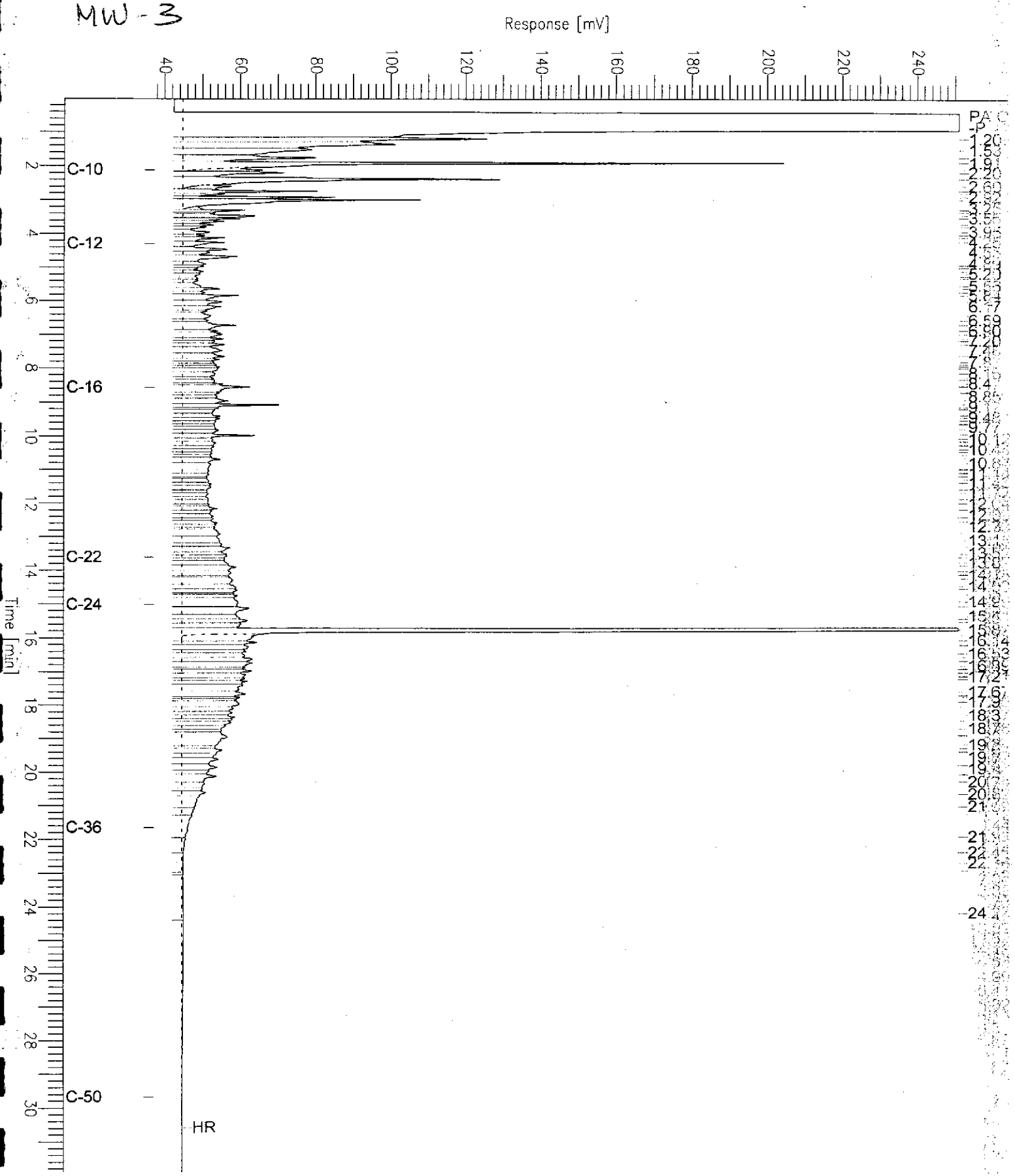
H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
D= Not Detected
L= Reporting Limit

Chromatogram

Sample Name : 151820-001sg,63446
FileName : G:\GC11\CHA\126A054.RAW
Method : ATEH097.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 37 mV

Sample #: 63446 Page 1 of 1
Date : 5/8/01 04:10 PM
Time of Injection: 5/8/01 02:50 PM
Low Point : 37.38 mV High Point : 251.03 mV
Plot Scale: 213.7 mV

MW-3

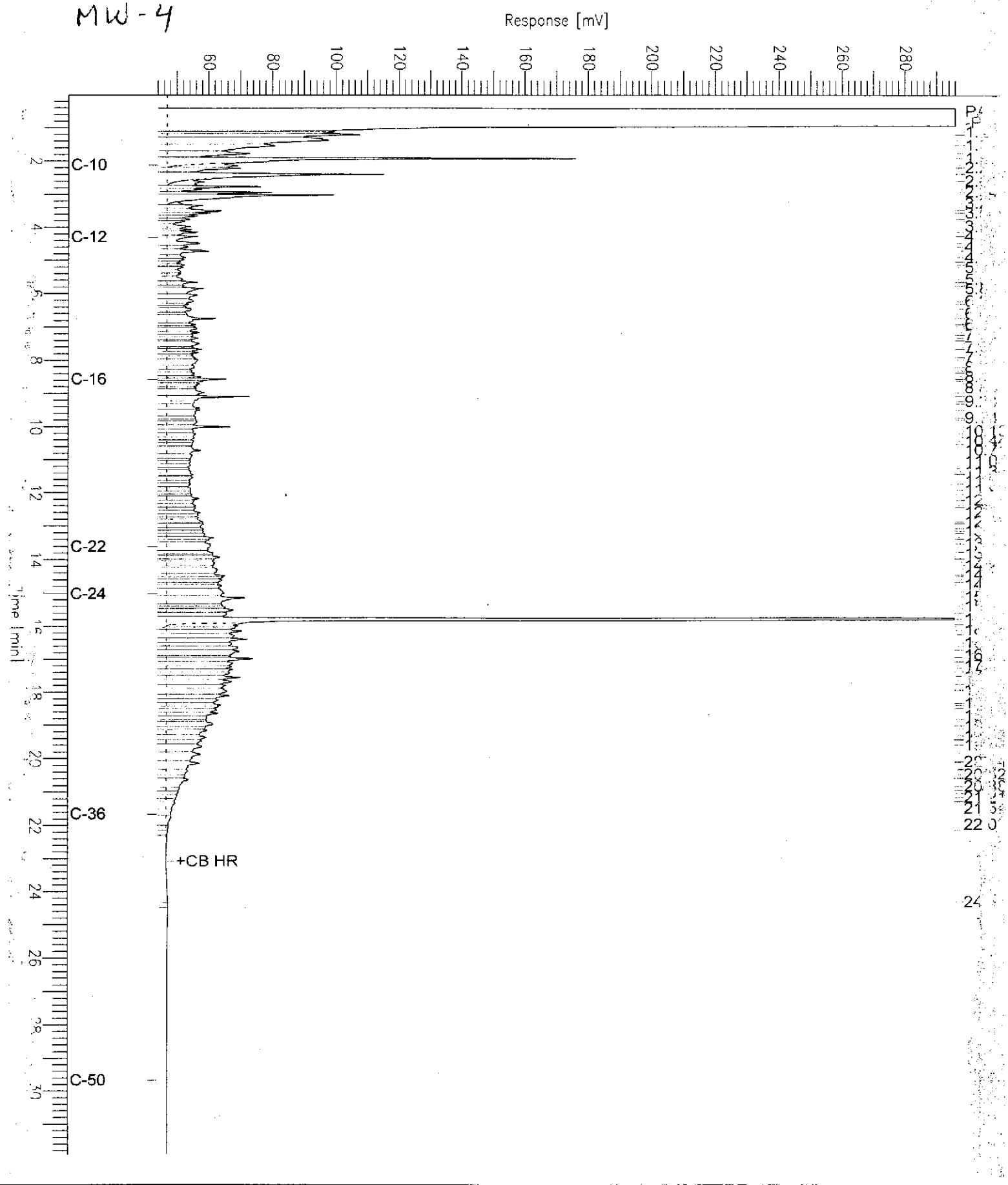


Chromatogram

Sample Name : 151820-002sg,63539
FileName : G:\GC11\CHA\130A014.RAW
Method : ATEH097.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 44 mV

Sample #: 63539 Page 1 of 1
Date : 5/11/01 09:41 AM
Time of Injection: 5/11/01 12:36 AM
Low Point : 43.97 mV High Point : 296.01 mV
Plot Scale: 252.0 mV

MW-4



Chromatogram

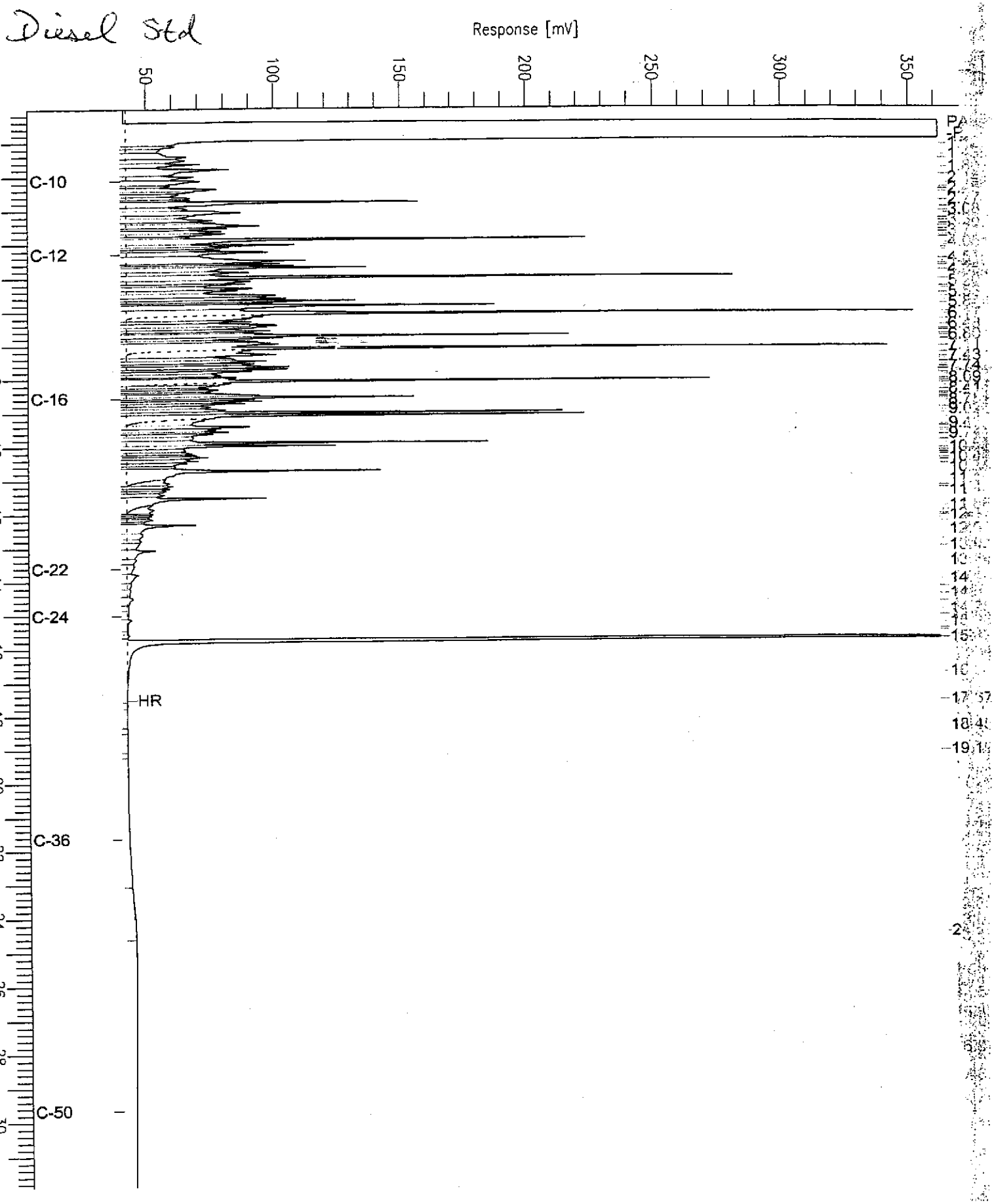
Sample Name : ccv,01ws0904,dsl
FileName : G:\GC11\CHA\130A002.RAW
Method : ATEH097.MTH
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 31.91 min
Plot Offset: 40 mV

Sample #: 500mg/L
Date : 5/10/01 04:21 PM
Time of Injection: 5/10/01 03:44 PM
Low Point : 40.05 mV
Plot Scale: 321.6 mV

High Point : 361.66 mV

Diesel Std



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	63446
Units:	ug/L	Prepared:	05/04/01
Diln Fac:	1.000	Analyzed:	05/08/01

ype: BS
ab ID: QC144741

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,978	79	45-110

Surrogate	%REC	Limits
Hexacosane	88	44-121

ype: BSD
ab ID: QC144742

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,106	84	45-110	6	22

Surrogate	%REC	Limits
Hexacosane	93	44-121

PD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	151820	Location:	2250 TELEGRAPH
Client:	Subsurface Consultants	Prep:	EPA 3520
Project#:	STANDARD	Analysis:	EPA 8015M
Matrix:	Water	Batch#:	63539
Units:	ug/L	Prepared:	05/09/01
Diln Fac:	1.000	Analyzed:	05/10/01

Type: BS
Lab ID: QC145076
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,339	1,495	64	45-110

Surrogate	%REC	Limits
Hexacosane	82	44-121

Type: BSD
Lab ID: QC145077
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,339	1,529	65	45-110	2	22

Surrogate	%REC	Limits
Hexacosane	82	44-121

PD= Relative Percent Difference

Winston H. Hickox
Secretary for Environmental Protection

State Water Resources Control Board

Division of Clean Water Programs
1001 I Street, Sacramento, California 95814
P.O. Box 944212, Sacramento, California 94244-2120
(916) 341-5650 ♦ FAX (916) 341-5808 ♦ www.swrcb.ca.gov

Gray Davis
Governor

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov.

TO: All Interested Parties - Underground Storage Tanks (USTs)

NEW REGULATORY REQUIREMENT FOR ELECTRONIC SUBMITTAL OF LABORATORY DATA TO THE STATE GEOTRACKER INTERNET DATABASE

This letter is to inform interested parties of new requirements for submission of electronic laboratory data for Underground Storage Tank Program reports effective **September 1, 2001**. These requirements are contained in emergency regulations (CCR Title 23, Chapter 16, Article 12) recently adopted by the State Water Resources Control Board (Board). The Board adopted these regulations to implement Assembly Bill 2886 (Chapter 727, Statutes of 2000, "AB 2886"). The regulations and other background information are available on the Internet by going to **http://geotracker.swrcb.ca.gov** and clicking on "AB 2886".

The emergency regulations (Water Code Sections 13195-13198) require persons to ensure electronic submission of laboratory data (i.e. soil or water chemical analysis) and locational data (i.e. location and elevation of groundwater monitoring wells), via the Internet to the SWRCB's GeoTracker database. Persons currently provide these data in paper format to the lead regulatory agency [Regional Water Quality Control Board or local agency]. The pre-existing requirement for paper reports that include the laboratory and locational data covered in the emergency regulations will not change. However, as of **September 1, 2001**, persons must also ensure electronic submittal of laboratory analytical reports to GeoTracker in the Electronic Deliverable Format (EDF) specified in the emergency regulations, as described below. For eligible sites, the Underground Storage Tank Cleanup Fund will cover the additional costs incurred by claimants for electronic submission of laboratory and locational data, to the extent these costs are reasonable and necessary.

EDF is a data dictionary that enables laboratories to produce data of known quality in a standardized format that can be transmitted electronically. EDF data is essentially an electronic version of analytical test results and quality assurance information that laboratories send to their clients, who may use the data for site characterization or compliance monitoring. Following data interpretation and review, the data must be submitted in the EDF format. We expect that most laboratories will modify their Laboratory Information Management System (LIMS) or other reporting format to conform to the EDF format.

To support the implementation of electronic reporting, we will conduct training workshops for interested parties (see enclosed training schedule). We will also notify those persons who are on the Underground Storage Tank Program's Interested Parties' list regarding the workshops. These workshops will be conducted at different locations throughout the state beginning in July, 2001. For laboratory personnel, we will offer comprehensive training on Days 3-5. Since training

capacity on Days 3-5 of the five-day training is limited, only one representative at most from each laboratory will be able to sign up for these three-day sessions. This representative will be introduced to the COELT (Corps of Engineers Loading Tools) software and its downloading, EDF format, and the Electronic Data Consistency Checker (EDCC) or error-checking program. Other representatives from laboratories are welcome to attend Day 1 or Day 2 (same material repeated each day) of the five-day training, which will concentrate on the new regulations and the GeoTracker database. To sign up for the workshops online through the SWRCB website go to http://www.swrcb.ca.gov/cwphome/ust/docs/ab2886/register.html.

If you have any questions or comments regarding this new reporting requirement, please call Mr. Hamid Foolad at (916) 341-5791 or Mrs. Terry Brazell at (916) 341-5645. After July 5, 2001, Mr. Michael Gjerde, the primary contact for the AB 2886 emergency regulations, will be available at (916) 341-5682.

Sincerely,

Elizabeth L. Haven

Elizabeth L. Haven, Manager
Underground Storage Tank Program

Enclosure

cc: Regional Water Quality Control Boards
Local Oversight Program Agencies
Local Agencies
Western States Petroleum Association
California Independent Oil Marketers Association
Mr. Ryan Hill, Santa Barbara County, CUPA UST Liaison

AB2886
Frequently Asked Questions

1. Who will submit electronic compliance data to the SWRCB?
2. Why was EDF chosen as a standard for the SWRCB for reporting of analytical laboratory data?
3. How does EDF work?
4. What is the latest version of EDF?
5. How will analytical laboratories produce EDF?
6. How would Responsible Parties (RPs) or their agents submit EDF to GeoTracker?
7. Who will authorize the final movement of data into GeoTracker?
8. How will agencies download EDF Lab data from GeoTracker?
9. Can agencies load the EDF data into their own custom databases?
10. How much will it cost analytical Labs to produce electronic data in the EDF format?
11. How much will it cost for RPs to implement EDF reporting?
12. Who will support and provide training for EDF data Transfer?

Contact us with comments or questions to add to the FAQs.

---

1. Who will submit electronic compliance data to the SWRCB?

AB2886 (Water Code Sections 13195-13198) requires responsible parties (RPs) to electronically submit compliance data, such as soil or water chemistry analysis, location, and elevation data to the SWRCB Geographical Environmental Information Management System (GeoTracker). This data is currently reported in paper format in site investigations and quarterly monitoring reports. By September 1, 2001 the laboratory analytical data from all LUST sites will be required to be electronically reported to GeoTracker. After January 1, 2002, location data and well data related to elevation (i.e. depth to water) will also need to be electronically reported.

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2. Why was EDF chosen as a standard for the SWRCB for reporting of analytical laboratory data?

There are many examples of electronic data delivery or reporting formats produced by analytical laboratories in California and nation-wide. A wide variety of custom, government derived, and commercial formats are currently utilized. A format developed by the Army Corp of Engineers, Electronic Deliverable Format (EDF/COELT), was chosen as a primary standard reporting format for the SWRCB GeoTracker system because the GeoTracker advisory committee and the SWRCB desired a reporting format that met the following criteria. No other electronic data deliverable met all of the criteria listed below.

- Presently in-use and produced by commercial laboratories in California
- Well-documented (detailed documentation readily available)
- Non-proprietary, in public domain
- Must have publicly available software tools for producing and verifying the reporting format (software tools must be free-of-charge to the commercial lab or responsible party) – these are available from http://www.swrcb.ca.gov/cwphome/ust/usthmpg.htm
- Use of this reporting format would not cause responsible parties to incur a fee to report data to SWRCB GeoTracker.

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3. How does EDF work?

EDF is a data dictionary that provides an instruction set for a laboratory to produce data of a known quality, in a standardized format, that can be transmitted electronically. EDF data is essentially an electronic version of analytical test results that the laboratory sends to their client (responsible party) in standard hard-copy analytical reports. The EDF data is sent to the responsible party, who may use the data for site characterization or monitoring. Following interpretation and review, the responsible party or their agent will submit the electronic EDF data via the Internet to the SWRCB Geographical Environmental Information Management System (GeoTracker). In addition, the responsible party or their agent will continue to send the hard copy site investigation and quarterly monitoring reports to the lead oversight agency.

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4. What is the latest version of EDF?

EDF version 1.2i dated April 2001. This is available also from links to the SWRCB tanks web page. http://www.swrcb.ca.gov/cwphome/ust/usthmpg.htm

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5. How will analytical laboratories produce EDF?

The labs may produce EDF by two methods: 1) by using their own Laboratory Information Management System (LIMS) system software or 2) using free COELT software (also available from the SWRCB Tanks webpage). In the first case, the laboratory may produce EDF directly from their LIMS without using the additional COELT software. Presently there are several LIMS that currently support and produce the EDF data standard. Laboratories that have a LIMS will download the free EDF documentation and set up translation tables between their LIMS and EDF. These tables will relate the laboratory's nomenclature to EDF's nomenclature. For example, if a laboratory identifies a Field Sample as *CLIENTSAMP*, to convert the data to EDF, the laboratory will need to identify the EDF information field that has the same meaning, which is *SAMPID*. Similarly, the laboratory will need to translate valid values. For example, if the laboratory identifies gasoline as *GAS*, they will need to identify the valid value with the same meaning in the EDF system, which is *GASOLINE*. Once these tables are populated, the LIMS will be programmed to export the translated data out of the system as five relational tables. This export generally can be created using wizard functions provided by the LIMS vendor.

Laboratories that do not have LIMS will need to use a data-loading tool. The EDF data-loading tool is COELT and may be downloaded for free from the SWRCB web site. COELT is somewhat akin to a stripped-down LIMS. Because of its LIMS functions, COELT is a more complicated application than a standard database entry package, and therefore training is recommended.

Once the EDF is produced the laboratory can use a free on-line consistency checking program provided by the SWRCB, to verify that the data format is correct and that logic errors (e.g., sample collection date later than sample analysis date) do not exist within the data. A stand-alone format consistency-checking program (EDCC) is also available and can be downloaded free from SWRCB and run locally on a desktop machine within the commercial laboratory to verify the EDF data structure.

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6. How would Responsible Parties (RPs) or their agents submit EDF to GeoTracker?

The analytical laboratory will forward the EDF file to the responsible party. The responsible party can submit the EDF file to GeoTracker. Given the volume of data that will be received via the LUST program in California, the SWRCB will utilize a web upload GeoTracker tool for submission of EDF data (note that emailing EDF or sending EDF on disk to the SWRCB will NOT be accepted). In this approach, the RP (or their authorized agent) would use a security identification and GeoTracker web upload tools to submit analytical and site data by clicking on a browse or an attach button to choose among files on their local machine. (This is analogous to how one attaches a file to a Yahoo email.)

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7. Who will authorize the final movement of data into GeoTracker?

The analytical data will reside within a holding center within GeoTracker until the lead regulatory agency reviews the data and authorizes movement of data into GeoTracker. Once the data is within the holding center, the analytical data is available (read only) to the lead regulatory agency for the site. Once the regulatory agency accepts the data, the data will be displayed and fully available to the public via the GeoTracker system. As was stated in SB 1189 and AB 592 (1997), GeoTracker must collect, store, retrieve, analyze, and display environmental geographic data in a database that is accessible to the public. Therefore, all data will be accessible to the public, RPs and other interested parties, unless it is information that may be already restricted by state law, in which case only those with password authority would have access.

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8. How will agencies download EDF Lab data from GeoTracker?

The GeoTracker includes web download tools and query/export functions for regulatory users. Additionally, many of the web reports will be available for download as excel spreadsheets.

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9. Can agencies load the EDF data into their own custom databases?

Regulatory users can download GeoTracker analytical data for custom analysis. GeoTracker also offers web-based reports and tools (on-line graphing) to review and analyze analytical data for LUST monitoring wells.

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10. How much will it cost analytical Labs to produce electronic data in the EDF format?

Some laboratories in California will not incur any new costs because they already are capable of producing EDF format. For other laboratories with a standard Laboratory Information Management System (LIMS), the cost to the laboratory is no more than one week of a technician's time. Costs are estimated to be up to ~$2,000.

There are also laboratories that do not have a standard LIMS or a that may not engaged in

any reporting or tracking of electronic laboratory data, therefore, implementation time for producing any type of detailed electronic format can take several months. We do not have an estimate as to how much this might cost, as it will be very lab specific. The cost for these labs to transition to electronic reporting is not a function of EDF, but due to infrastructure costs related to being able to report any data electronically.

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11. How much will it cost for RPs to implement EDF reporting?

RPs costs will originate from several sources. First, the laboratory may charge a service fee to produce EDF on a per report basis. This fee may be as much as 5-15 % higher than the laboratory's standard reporting cost. Second, the RPs will need to pay other minor "hidden" costs for the management of meeting EDF regulatory requirements. These costs will include writing and enforcing contract language that meets the EDF regulations. And third, the RPs/consultants will probably wish to engage in some orientation or training. These items are difficult to quantify.

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12. Who will support and provide training for EDF data Transfer?

A help desk will be available for EDF and supported by the SWRCB. Additional support will include:

1. On-going Help desk support for commercial labs, agencies, and responsible parties.
2. On-going security identification and tracking for regulators, responsible parties, and commercial labs.
3. Training sessions for commercial laboratories.
4. Outreach for all clean-up agencies (Regional Boards, LIAs, and LOPs).
5. Training/Outreach for Responsible Parties and Consultants.