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Subsurface Consultants, Inc.

PROTECTION
99 APR -5 PM 4:04

March 31, 1999
SCI 1039.007

Ms. Madhulla Logan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Transmittal of January 1999 Quarterly Monitoring Report
327 34th Street
Oakland, California

Dear Ms. Logan:

Transmitted herewith is the January 1999 Groundwater Monitoring report. This report requests a reduction in the sampling program frequency at the site. Please review the attached report and provide a response to the Recommended Modifications to the Sampling Program.

If you have any questions, please call either myself or Jeriann Alexander at (925) 299-7960.

Yours very truly,

Subsurface Consultants, Inc.

Meg Mendoza

Meg Mendoza
Project Engineer
MM:JNA: 1039.007\cvracehs.doc

1 copies submitted

Attachment: Groundwater Monitoring, January 1999 Quarterly Event and Monthly Free Product Removal, 327 34th Street, Oakland, California, report dated March 31,1999.

cc: Mr. Don Strough, Strough Family Trust of 1983
Mr. Jonathan Redding, Esq., Fitzgerald, Abbott & Beardsley, LLP

3736 Mt. Diablo Boulevard ■ Suite 200 ■ Lafayette, California 94549-3659 ■ 925.299.7960 ■ FAX 925.299.7970

171 – 12th Street ■ Suite 202 ■ Oakland, California 94607-4911 ■ 510.268.0461 ■ FAX 510.268.0137

Subsurface Consultants, Inc.

March 31, 1999
SCI 1039.007

Strough Family Trust of 1983
c/o Mr. Don Strough
P.O. Box 489
Orinda, California 94563

Groundwater Monitoring
January 1999 Quarterly Event and
Monthly Free Product Removal
327 34th Street
Oakland, California

Dear Mr. Strough:

This letter records the results of the January 1999 groundwater monitoring and monthly free product removal events performed by Subsurface Consultants, Inc. (SCI) at 327 34th Street in Oakland, California. The location of the property is shown on the Vicinity Map, Plate 1. The site configuration is shown on the Site Plan, Plate 2.

BACKGROUND

On March 4 and 5, 1993, one 1,000-gallon underground storage tank (UST) containing unleaded gasoline and one 1,000-gallon UST containing waste oil were removed by KTW & Associates/ Subsurface Environmental Corporation under the direction of Alameda County Health Care Services Agency (ACHCSA). Results of chemical analyses on soil samples collected beneath the ends of the gasoline UST indicated impacts by total petroleum hydrocarbons (TPH) as gasoline, and toluene, ethylbenzene, and xylenes. Soil samples from the waste oil UST excavation showed only relatively low concentrations of TPH as diesel, ethylbenzene, and xylenes.

A soil and groundwater investigation was conducted by GeoPlexus, Inc. in 1993 to assess petroleum hydrocarbon impacts to groundwater. GeoPlexus, Inc. installed three groundwater monitoring wells (MW-1 through MW-3; see Plate 2). Analytical testing of soil and groundwater samples from the wells identified impacts from gasoline-range hydrocarbons at two of the wells (MW-2 and MW-3) located downgradient of the former gasoline UST. Approximately 1/4 inch of free floating product was observed in well MW-3. The product was reportedly gasoline.

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SCI was retained in September 1997 to evaluate the presence of free floating and dissolved phase petroleum hydrocarbons in existing wells MW-1 through MW-3. SCI prepared a Work Plan, dated January 16, 1998, to install two additional wells. This work was conducted in June 1998. Results of the subsurface investigation were presented in the Report of Groundwater Monitoring Activities and Additional Subsurface Investigation, dated November 17, 1998. Quarterly groundwater monitoring of the 5 on-site wells has been performed by SCI since June 1998.

MONITORING ACTIVITIES

Monthly Free Product Removal

In accordance with the approved Work Plan, separate-phase product thickness and depth-to-water is measured in all the site wells on a monthly basis. Field forms for the December 1998, January and February 1999 monthly events are attached. Future reporting of the monthly measurements will continue on a quarterly basis.

Groundwater Monitoring Event

On January 25 and 26, 1999, the quarterly monitoring event was performed. Depth-to-water and free product thickness were measured in site wells MW-1 through MW-5. Groundwater and free product elevation data are summarized in Table 1. All site wells were then purged by removing water with new disposable bailers. The wells were purged until measurements of pH, temperature, and conductivity had stabilized. After the wells recharged to within 80 percent of their initial level, they were sampled with new disposable bailers. Field measurements for carbon dioxide (CO_2) and dissolved oxygen (DO) levels were recorded at the time of sampling. Purge water was placed in labeled 55-gallon steel drums and left on-site for later disposal.

Groundwater samples were retained in pre-cleaned containers supplied by the analytical laboratory, which were placed in ice-filled coolers and remained iced until delivery to the analytical laboratory. Chain-of-custody records accompanied the samples to the laboratory. Copies of the records are presented with the analytical test report.

CHEMICAL ANALYSES

Chemical analyses of samples were performed by Curtis & Tompkins, Ltd., a state-certified chemical testing laboratory. A summary of sample preparation and test methods is presented below.

Analysis	Sample Preparation Method	Analysis Method
Total Volatile Hydrocarbons (TVH)	EPA 5030	EPA 8015 Mod.
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and Methyl Tertiary Butyl Ether (MTBE)	EPA 5030	EPA 8260

Groundwater analytical test results are summarized in Table 2. Field sampling forms, analytical test reports, and chain-of-custody documents are attached.

DISCUSSION OF RESULTS

Groundwater Gradient and Flow Direction

The gradient near wells MW-1, MW-2, MW-3, and MW-4 is relatively flat with a 0.17-foot difference in elevation between the four points. Well MW-5 located approximately 100 feet southwest of these wells has a groundwater surface elevation about 2 feet lower than those of wells MW-1 through MW-4; however, we do not believe that the direction of groundwater flow can be estimated based on this data which is inconsistent with other data available to SCI. Based on studies conducted by SCI at other sites in the area, the regional groundwater flow direction in the site vicinity is easterly. Moreover, the change in topography from Pill Hill to Glen Echo Creek, located approximately 700' east of the site, also suggests the groundwater flow direction is toward the east-southeast. Finally, a review of the analytical data for petroleum hydrocarbons in wells MW-2, MW-3 and MW-4 shows a decreasing trend from the source area (MW-2) to MW-4. Accordingly, given the apparent preferential transport of petroleum hydrocarbons in groundwater and the absence of petroleum hydrocarbons in wells MW-1 and MW-5, it is our professional opinion that groundwater likely moves from the site in an easterly direction.

Free Product

Historically, free product has been detected in two of the site wells MW-2 and MW-3. Free product was measured only in well MW-2 during this quarter at thicknesses of 0.02 and 0.01 feet during the December and January events, respectively. A sheen was observed during the February event. Free product was removed by bailing and placed in a labeled 55-gallon or 10-gallon container for later disposal. Measurable free product was not detected in the four other site wells.

Groundwater Test Results

Elevated levels of gasoline-range petroleum hydrocarbons (or TVH), BTEX, and MTBE were detected in groundwater samples from wells MW-2, MW-3, and MW-4 during this event. Concentrations of TVH, BTEX, and MTBE are consistent with results obtained during the previous event (Table 2). Groundwater samples collected from wells MW-1 and MW-5 did not detect the presence of TVH, BTEX nor MTBE.

DO readings in all site wells appear to be high enough to support aerobic degradation. CO_2 measurements are variable, although levels in well MW-2 have been increasing as measurable free product levels decrease, which is evidence of active natural biodegradation of petroleum hydrocarbons. Additionally, pH levels in MW-2 are generally lower than those in other site wells indicating potential production of organic acids through biological processes. The data trends of these parameters are supporting evidence of biological processes occurring at the site. These parameters are summarized in Table 3.

CONCLUSIONS

Concentrations of petroleum hydrocarbon compounds are detected in wells with extensive sand and gravel layers (wells MW-2, MW-3, and MW-4). Free product appears to be currently localized in the area of well MW-2. Since commencing with monthly free product removal in June 1998, the amount of free product detected shows a decreasing trend. Based on the analytical testing results and DO/CO_2 data, subsurface conditions at the site appear to indicate that biodegradation is occurring.

RECOMMENDED MODIFICATIONS TO THE SAMPLING PROGRAM

Based on a review of analytical data generated to date, SCI recommends reducing the sampling frequency at the site. The data from all wells has been relatively consistent over time. Since FP on-site has been reduced to a sheen in MW-2, SCI recommends changing the FP removal schedule from monthly to quarterly. Additionally, SCI recommends that the sampling frequency of wells MW-1, MW-4 and MW-5 be reduced from quarterly to semi-annually, and that the sampling frequency of wells MW-2 and MW-3 be reduced from quarterly to annually as it is not cost effective to continue monitoring a known condition. If approved, the next free product removal event will occur in April 1999 and the next groundwater sampling event will occur in July 1999. The recommended sampling program is outlined in Table 4.

Please review the data in this report and prepare a letter commenting on the requested modification to the monitoring program. If you have any questions, please call either of the undersigned at (925) 299-7960.

Yours very truly,

Subsurface Consultants, Inc.

Meg Mendoza
Engineer in Training XE100785

For Jeriann N. Alexander, PE, REA
Civil Engineer 40469 (expires 3/31/03)
Registered Environmental Assessor 03130 (expires 6/30/99)

MM:JNA:rm 1039.007\qtr199.doc

Attachments:

Table 1 - Groundwater and Free Product Elevation Data
Table 2 - Summary of Petroleum Hydrocarbon Concentrations in Groundwater
Table 3 - Summary of Carbon Dioxide, Dissolved Oxygen and pH in Groundwater
Table 4 - Proposed Groundwater Sampling Program
Plate 1 - Vicinity Map
Plate 2 - Site Plan
Field Forms- December 1998 through February 1999
Analytical Test Reports
Chain-of-Custody Documents

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

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

TABLE 2
SUMMARY OF PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUNDWATER
327 34TH STREET
OAKLAND, CALIFORNIA

Location	Date	Groundwater Elevation† (feet)	TVH (µg/l)	TEH (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)	Oil & Grease (mg/l)
MW-1	7/27/93	79.21	<50	<50	<0.5	<0.5	<0.5	<0.5	--	<5
	10/2/97	78.78	<50	--	<0.5	<0.5	<0.5	<0.5	<2	--
	6/30/98	81.79	84	--	<0.5	<0.5	2.1	0.55	2.1	--
	10/1/98	80.07	<50	--	<1.0	<1.0	<1.0	<1.0	<2.0	--
	1/25/99	**80.38**	**<50**	--	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<2.0**	--
MW-2	7/27/93	79.17	120,000	--	10,000	27,000	2,900	20,000	--	--
	10/2/97	78.36	*	--	*	*	*	*	*	*
	6/30/98	81.58	72,000	--	7,300	18,000	2,500	15,600	5,500	--
	10/1/98	79.75	84,000	--	6,400	17,000	2,600	17,000	2,000	--
	1/25/99	**80.48**	**130,000**	--	**9,000**	**26,000**	**3,800**	**27,500**	**5,800**	--
MW-3	7/27/93	79.01	330,000	--	9,100	24,000	5,300	33,000	--	--
	10/2/97	78.58	36,000	--	4,200	11,000	1,800	10,600	3,500	--
	6/30/98	81.82	51,000	--	4,800	11,000	1,200	7,100	3,900	--
	10/1/98	79.96	38,000	--	3,900	8,500	1,200	6,000	2,300	--
	1/25/99	**80.50**	**51,000**	--	**4,000**	**10,000**	**1,200**	**6,700**	**2,900**	--
MW-4	6/30/98	81.72	10,000	--	2,200	930	850	2,100	1,800	--
	10/1/98	79.91	1,100	--	570	46	130	36	1,300	--
	1/26/99	**80.33**	**290**	--	**230**	**<8.3**	**<8.3**	**<8.3**	**1,300**	--
MW-5	6/30/98	78.69	<50	--	<0.5	<0.5	<0.5	<0.5	23	--
	10/1/98	77.95	<50	--	<1.0	<1.0	<1.0	<1.0	<2.0	--
	1/26/99	**78.29**	**<50**	--	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**<2.0**	--

NOTES:
TVH = Total volatile hydrocarbons as gasoline
TEH = Total extractable hydrocarbons as diesel
MTBE= Methyl tertiary butyl ether
-- = Not analyzed
mg/l = milligrams per liter
µg/l = micrograms per liter
ND = Not detected at concentrations above reporting limits
* = This sample contained free-product which was found to resemble weathered gasoline as determined by fuel fingerprint analysis.
†= Arbitrary datum

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
327 34TH STREET
OAKLAND, CALIFORNIA

Monitoring Well	Date	Elevation[1]	Depth to Groundwater (feet)	Product Thickness (feet)	Groundwater Elevation (feet)	Product Elevation (feet)
MW-1	7/27/93	100.00	20.79[2]	NA	79.21	NA
	10/2/97		21.22	--	78.78	--
	6/30/98		18.21	--	81.79	--
	7/29/98		18.74	--	81.26	--
	8/26/98		19.28	--	80.72	--
	10/1/98		19.93	--	80.07	--
	10/30/98		20.22	--	79.78	--
	11/30/98		19.99	--	80.01	--
	12/28/98		19.81	--	80.19	--
	1/25/99		19.62	--	80.38	--
	2/26/99		17.18	--	82.82	--
MW-2	7/27/93	101.27	22.10[2]	NA	79.17	NA
	10/2/97		22.91	0.43	78.36	78.79
	6/30/98		19.69	0.45	81.58	82.03
	7/29/98		20.11	0.29	81.16	81.45
	8/26/98		20.54	0.08	80.73	80.81
	10/1/98		21.52	0.42	79.75	80.17
	10/30/98		21.54	0.10	79.73	79.83
	11/30/98		21.21	0.04	80.06	80.10
	12/28/98		21.10	0.02	80.17	80.19
	1/25/99		20.80	0.01	80.47	80.48
	2/26/99		18.00	sheen	83.27	--
MW-3	7/27/93	101.29	22.28[2]	0.02	79.01	79.03
	10/2/97		22.71	0.03	78.58	78.61
	6/30/98		19.47	--	81.82	--
	7/29/98		20.01	--	81.28	--
	8/26/98		20.62	--	80.67	--
	10/1/98		21.33	--	79.96	--
	10/30/98		21.62	--	79.67	--
	11/30/98		21.31	--	79.98	--
	12/28/98		21.15	0.06	80.14	80.20
	1/25/99		20.79	--	80.50	--
	2/26/99		18.02	--	83.27	--

TABLE 1
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
327 34TH STREET
OAKLAND, CALIFORNIA

Monitoring Well	Date	Elevation[1]	Depth to Groundwater (feet)	Product Thickness (feet)	Groundwater Elevation (feet)	Product Elevation (feet)
MW-4	6/30/98	98.65	16.93	--	81.72	--
	7/29/98		17.48	--	81.17	--
	8/26/98		18.65	--	80.00	--
	10/1/98		18.74	--	79.91	--
	10/30/98		19.02	--	79.63	--
	11/30/98		18.74	--	79.91	--
	12/28/98		18.60	--	80.05	--
	1/25/99		18.32	--	80.33	--
	2/26/99		15.81	--	82.84	--
MW-5	6/30/98	100.9	20.60	--	80.30	--
	7/29/98		21.52	--	79.38	--
	8/26/98		22.21	--	78.69	--
	10/1/98		22.95	--	77.95	--
	10/30/98		23.23	--	77.67	--
	11/30/98		23.13	--	77.77	--
	12/28/98		23.18	--	77.72	--
	1/25/99		22.61	--	78.29	--
	2/26/99		19.78	--	81.12	--

[1] Elevations are referenced to monitoring well MW-1, with an assumed datum of 100.00 feet.

[2] Measurements by others

-- Product not observed

NA = Data not available

TABLE 3
UMMARY OF CARBON DIOXIDE, DISSOLVED OXYGEN AND pH IN GROUNDWATER
327 34TH STREET
OAKLAND, CALIFORNIA

Location	Date	Carbon Dioxide Field (mg/l)	Dissolved Oxygen Field (mg/l)	Dissolved Oxygen Laboratory (mg/l)	pH Field (mg/l)	pH Laboratory (mg/l)
MW-1	6/30/98	204	5	5.1	6.16	6.4
	10/1/98	192	3.6	--	6.49	--
	1/25/99	--	3.4	--	6.72	--
MW-2	6/30/98	185	2.2	--	5.98	--
	10/1/98	230	2.7	--	6.47	--
	1/25/99	386	0.3	--	6.69	--
MW-3	6/30/98	300	2.2	3.2	6.03	6.6
	10/1/98	240	2.1	--	6.65	--
	1/25/99	238	1.2	--	7.01	--
MW-4	6/30/98	222	2.6	3.5	6.18	6.6
	10/1/98	320	3.4	--	6.71	--
	1/26/99	475	6.7	--	7.00	--
MW-5	6/30/98	220	4.3	--	6.1	--
	10/1/98	256	4.8	--	6.71	--
	1/26/99	305	9.7	--	7.04	--

NOTES:
mg/l = milligrams per liter
-- = test not requested

TABLE 4
PROPOSED GROUNDWATER SAMPLING PROGRAM
327 34TH STREET
OAKLAND, CALIFORNIA

Well ID	TVH EPA 8015	TEH EPA 8015	BTEX/MTBE EPA 8260	Water Levels and FP Removal
MW-1	SA	SA	SA	Q
MW-2	A	A	A	Q
MW-3	A	A	A	Q
MW-4	SA	SA	SA	Q
MW-5	SA	SA	SA	Q

NOTES:
TVH = total volatile hydrocarbons
TEH = total extractable hydrocarbons
BTEX = benzene, toluene, ethylbenzene and total xylenes
MTBE = methyl tertiary butyl ether
SA = semiannually (July, January)
A = annually (January)
Q = quarterly (April, July, October, January)

N

APPROXIMATE SCALE (feet)

0 800 1600

VICINITY MAP

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

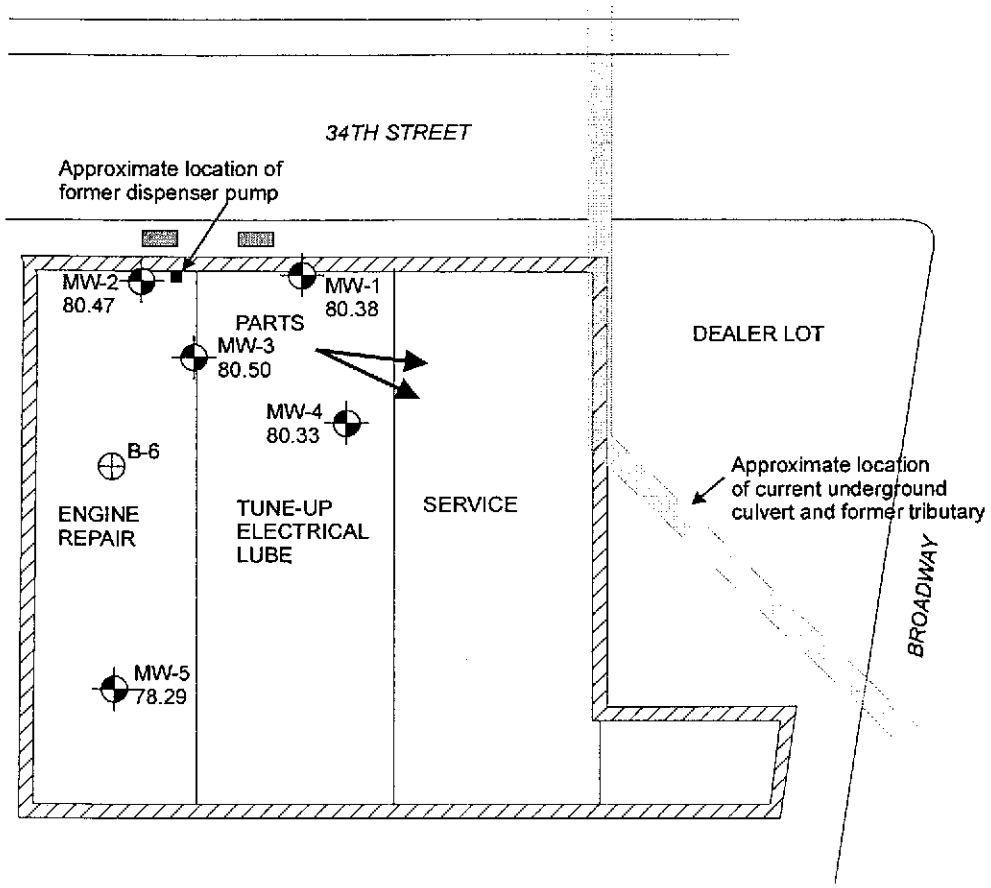
327 34TH STREET
OAKLAND, CALIFORNIA

JOB NUMBER	DATE	APPROVED
1039.007	3/1/99	

PLATE 1

LEGEND

- Limits of site structures
- Monitoring well location
- 80.38 — Groundwater elevation (1/25/99)
- Boring location
- Approximate location of former underground storage tank
- Inferred groundwater flow direction



N

APPROXIMATE SCALE (feet)

0 60 120

SITE PLAN

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

327 34TH STREET
OAKLAND, CALIFORNIA

JOB NUMBER	DATE	APPROVED
1039.007	1/3/99	

PLATE 2

GROUNDWATER DEPTHS

Project Name: 327 34th St, Oakland

Job No.: 1039.007

Measured by: TW

Well	Date	Time	Groundwater Depth (feet)	Comments
MW-1	12/28/98	1505	19.81	no product
MW-2		1510	21.10	1/4" of product by paste. bail 1 gallon H2O
MW-3		1520	21.15	1/16" of product by paste " " " "
MW-4		1523	18.60	no product
MW-5		1530	23.18	no product

GROUNDWATER DEPTHS

Project Name: 327 34th St

Job No.: 9/4198

Measured by: John Wolfe

Well	Date	Time	Groundwater Depth (feet)	Comments
MW-1	1/25/99	1100	14.62	check for product w/ paste
MW-2	1/25/99	1110	20.80	"
MW-3	1/25/99	1115	20.79	"
MW-4.	1/25/99	1125	18.32	"
MW-5	1/25/99	1130	22.61	"

WELL SAMPLING FORM

Project Name: 327 34th Street, Oakland Well Number: MW-1

Job No.: 1039.007 Well Casing Diameter: 2.0 inch

Sampled By: John Wolfe Date: 1/25/99

TOC Elevation: ______ Weather: Overcast

Depth to Casing Bottom (below TOC) 32.0 feet

Depth to Groundwater (below TOC) 19.62 feet

Feet of Water in Well 12.38 feet

Depth to Groundwater When 80% Recovered 22.09 feet

Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 2.02 gallons

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

Free Product ______

Purge Method Teflon bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°C)	Conductivity (micromhos/cm)	Salinity S%	Comments
0	6.49	~~63.5~~ 20.5	14.1x100		
2	6.48	~~22.3~~ 17.2	13.94 "		
4	6.61	17.2	"		
6	6.72	17.2	1000 "	~~[illegible]~~	
			"		

O_2 = 3.4 ppm

CO_2 = 389 ppm

Total Gallons Purged 6.5 gallons

Depth to Groundwater Before Sampling (below TOC) 19.99 feet

Sampling Method Teflon bailer

Containers Used 7 (40 ml) ______ liter ______ pint

Subsurface Consultants

JOB NUMBER | DATE | APPROVED | PLATE

WELL SAMPLING FORM

Project Name: 327 34th St
Well Number: MW-2
Job No.: 1039.007
Well Casing Diameter: 2.0 inch
Sampled By: John Wolfe
Date: 1/25/99
TOC Elevation:
Weather: cool

Depth to Casing Bottom (below TOC) 33.0 feet
Depth to Groundwater (below TOC) 20.80 feet
Feet of Water in Well 12.20 feet
Depth to Groundwater When 80% Recovered 23.24 feet
Casing Volume (feet of water x Casing DIA ² x 0.0408) 1.99 gallons
Depth Measurement Method (Tape & Paste) / (Electronic Sounder) / Other
Free Product
Purge Method

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
0	7.63	19.0	290		1/8" product in bailer Strong odor
2	7.02	18.5	400		clear
4	6.86	19.5	420		
6	6.69	19.3	450		

Total Gallons Purged 6 gallons
Depth to Groundwater Before Sampling (below TOC) 22.22 feet
Sampling Method Teflon bailer
Containers Used 7 (40 ml) ____ (liter) ____ (pint)

O_2 = 0.3 ppm
CO_2 = 386 ppm

Subsurface Consultants

JOB NUMBER DATE APPROVED PLATE

WELL SAMPLING FORM

Project Name: 327 34th St
Well Number: MW-3
Job No.: 1039.007
Well Casing Diameter: 2.0 inch
Sampled By: John Wolfe
Date: 1/25/99
TOC Elevation:
Weather: clear, cool

Depth to Casing Bottom (below TOC) 33.0 feet
Depth to Groundwater (below TOC) 20.79 feet
Feet of Water in Well 12.21 feet
Depth to Groundwater When 80% Recovered 23.23 feet
Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 1.99 gallons
Depth Measurement Method (Tape & Paste) / (Electronic Sounder) / Other
Free Product None
Purge Method Teflon bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
0	7.14	18.1	5100		clear, VSTrong HC odor
2	6.95	18.9	6000		
4	7.02	18.9	6100		
6	7.01	18.9	6500		
				CO_2 = 238 ppm	
				O_2 = 1.2 ppm	

Total Gallons Purged 6 gallons
Depth to Groundwater Before Sampling (below TOC) 21.61 feet
Sampling Method Teflon bailer
Containers Used 7 (40 ml) ____ (liter) ____ (pint)

Subsurface Consultants

JOB NUMBER DATE APPROVED

PLATE

WELL SAMPLING FORM

Project Name: 327 34th St Well Number: MW-4

Job No.: 1039.007 Well Casing Diameter: 2. inch

Sampled By: QTW Date: 1/26/99

TOC Elevation: _____ Weather: Heavy Overnight Rainfall

Depth to Casing Bottom (below TOC) 31.00 feet

Depth to Groundwater (below TOC) 18.32 feet

Feet of Water in Well 12.68 feet

Depth to Groundwater When 80% Recovered 20.85 feet

Casing Volume (feet of water x Casing DIA ² x 0.0408) 2.07 gallons

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

Free Product no

Purge Method Teflon bailer

FIELD MEASUREMENTS

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
0	6.46	19.8	720		clear slight odor yellow turbid
2	7.15	19.9	750		
4	7.00	20.5	780		↓
6	7.00	21.5	790		

Total Gallons Purged 6 gallons

Depth to Groundwater Before Sampling (below TOC) 16.25 feet

Sampling Method Teflon bailer

Containers Used 7 (40 ml) _____ (liter) _____ (pint)

O^2 = 6.7 ppm
CO_2 = 475 ppm

Subsurface Consultants	JOB NUMBER	DATE	APPROVED	PLATE

WELL SAMPLING FORM

Project Name: 327 34th St Well Number: MW-5

Job No.: 1039.007 Well Casing Diameter: 2.0 inch

Sampled By: John Wolfe Date: 1/26/98

TOC Elevation: _____ Weather: Heavy overnight Rainfall

Depth to Casing Bottom (below TOC) 31.00 feet

Depth to Groundwater (below TOC) 22.61 feet

Feet of Water in Well 8.38 feet

Depth to Groundwater When 80% Recovered 24.28 feet

Casing Volume (feet of water x Casing DIA ^{2} x 0.0408) 1.37 gallons

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

Free Product no

Purge Method Teflon bailer

FIELD MEASUREMENTS

mod Slow Recharge

Gallons Removed	pH	Temp (°c)	Conductivity (micromhos/cm)	Salinity S%	Comments
0	7.76	18.7	300		Clear, no odor
2	7.46	18.9	300		Yellowish Brown Turbid
4	6.92	19.6	310		
5	7.04	19.6	390		

Total Gallons Purged 5 gallons

Depth to Groundwater Before Sampling (below TOC) 23.01 feet

Sampling Method Teflon bailer

Containers Used 7 (40 ml) _____ (liter) _____ (pint)

CO_2 = 305 ppm

O_2 = 9.7 ppm

Subsurface Consultants

JOB NUMBER DATE APPROVED PLATE

Subsurface Consultants

FIELD REPORT

Sheet 1 of 1

REPORT NO.

PROJECT: 327 34th St JOB NO: 1039.007

PERSONNEL PRESENT: J Rasmussen DATE: 2/26/99

HOURS - From: ____ To: ____ From: ____ To: ____ TOTAL HRS: 3.75

EQUIPMENT IN USE: WLI, ~~Top~~ bailers

TYPE OF SERVICES PROVIDED: ☐ Exploration ☐ Field Density Testing

☐ Site Meeting ☐ Construction Observation ☒ MFPR

0900 Gear up

0915 Depart for site

0935 arrive site

Meet John Collins, mgr - waste wells, drums

Commence WLs / FPR check for FP in bailer

mw-1 17.18 (no prod)

mw-2 18.00 (sheen on bailer - bail 1 gal of water/prod)

mw-3 18.02 (no prod)

mw-4 15.81 (no prod)

mw-5 19.78 (no prod)

Any drums that had been present are now removed.

Placed 1 gal of purge from mw-2 in 10 gal steel pong box on west side of bldg.

1200 offsite

1220 arrive off. / unload / clean buckets

1230 end

Prepared by: JRR Reviewed by: ____

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

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

Prepared for:

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

Date: 03-FEB-99
Lab Job Number: 137677
Project ID: 1039.007
Location: 327 34th St.

Reviewed by: _____

Reviewed by: _____

TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 1039.007
Location: 327 34th St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
137677-001	MW-1	46006	01/25/99	01/30/99	01/30/99	
137677-002	MW-2	46044	01/25/99	02/02/99	02/02/99	
137677-003	MW-3	46044	01/25/99	02/02/99	02/02/99	
137677-004	MW-4	46006	01/26/99	01/30/99	01/30/99	

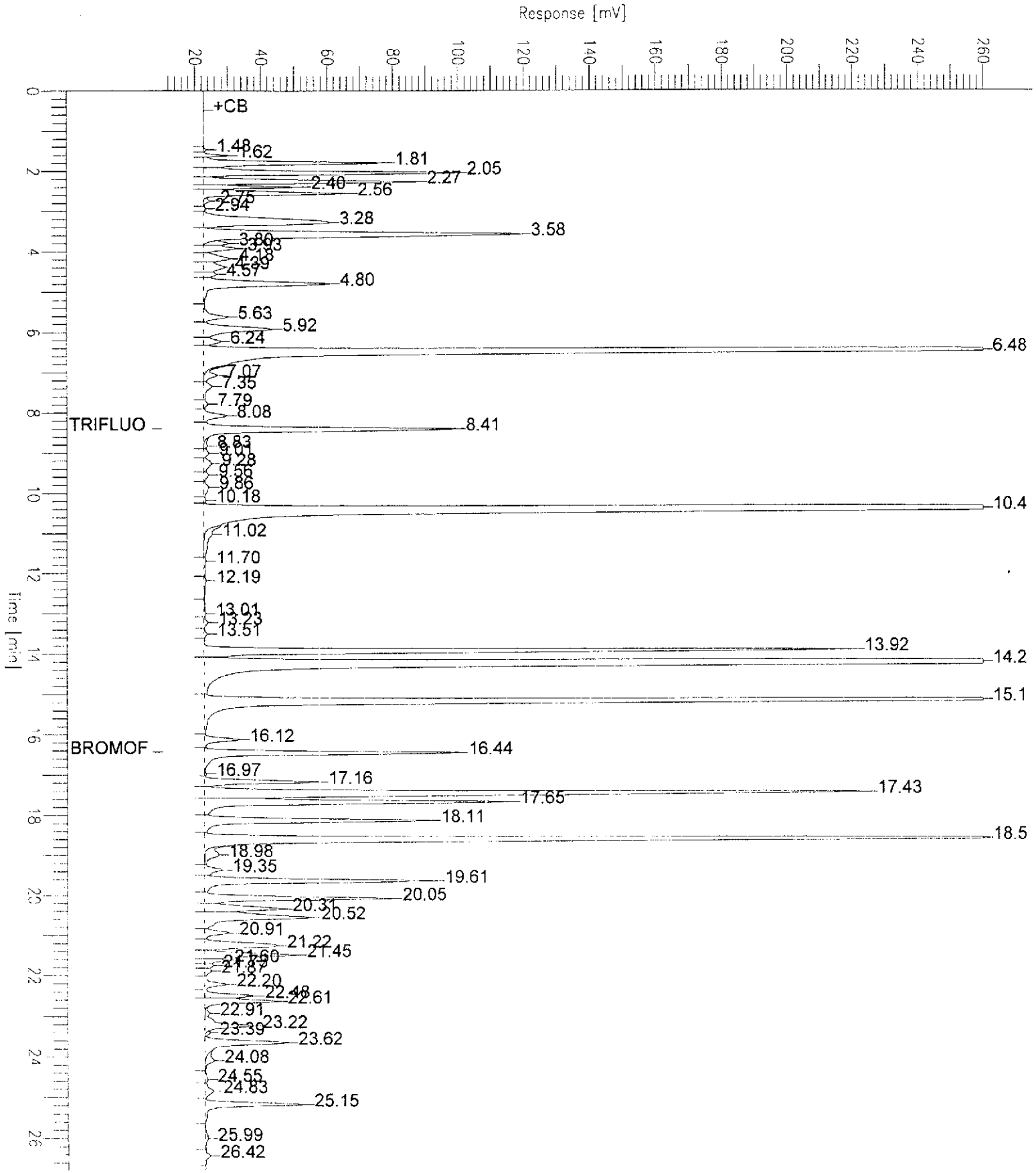
Matrix: Water

Analyte	Units	137677-001	137677-002	137677-003	137677-004
Diln Fac:		1	25	25	1
Gasoline C7-C12	ug/L	<50	130000	51000	290
Surrogate					
Trifluorotoluene	%REC	106	83	89	104
Bromofluorobenzene	%REC	122	108	103	122

Chromatogram

Sample Name : RR,137677-002D,46044,TVH ONLY,
FileName : G:\GC05\DATA\033G010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 10 mV

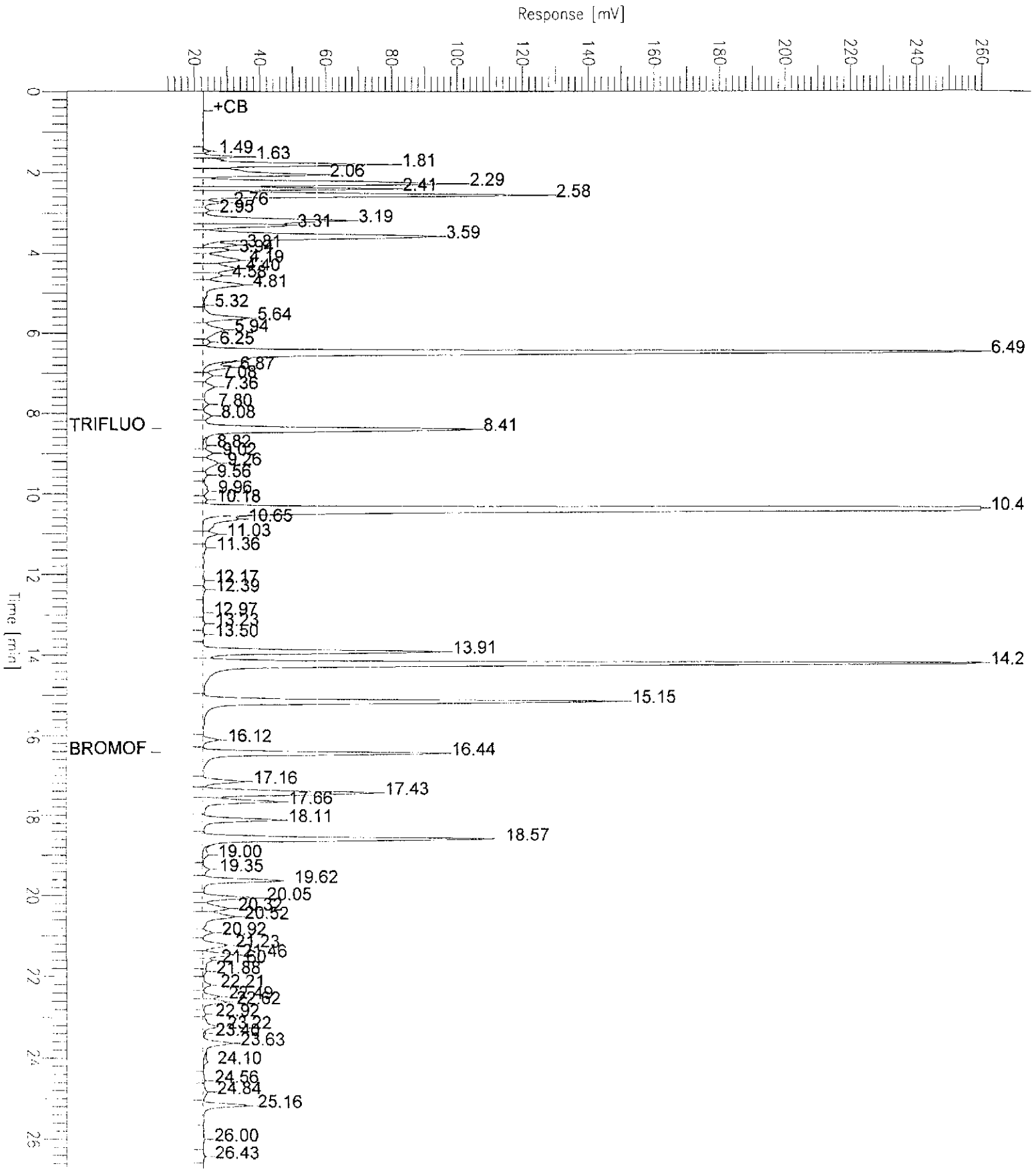
Sample #: pH=1 Page 1 of 1
Date : 2/2/99 06:19 PM
Time of Injection: 2/2/99 05:52 PM
Low Point : 10.04 mV High Point : 260.04 mV
Plot Scale: 250.0 mV



Chromatogram

Sample Name : RR,137677-003D,46044,TVH ONLY,
FileName : G:\GC05\DATA\033G011.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 10 mV

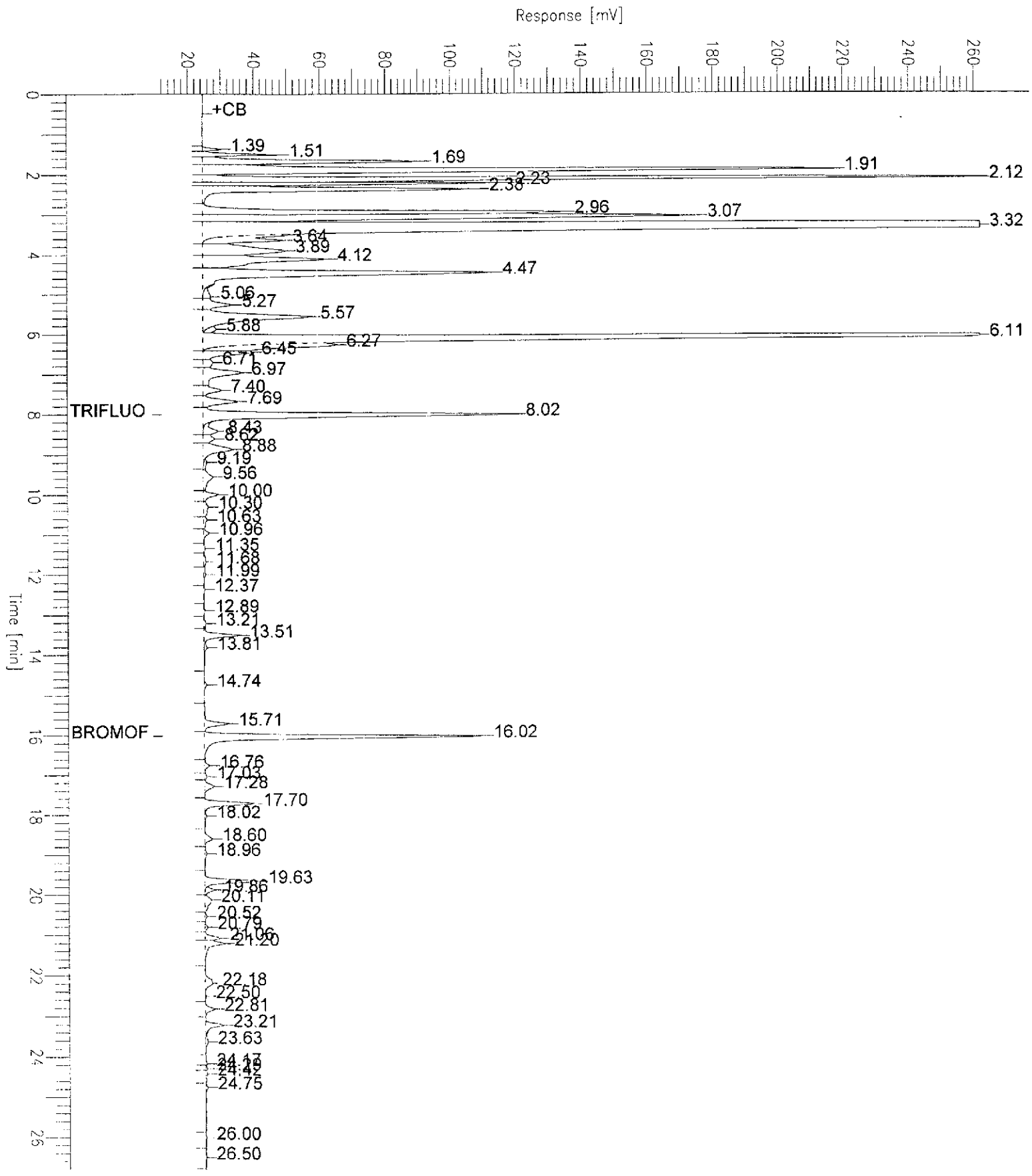
Sample #: pH=1
Date : 2/2/99 06:59 PM
Time of Injection: 2/2/99 06:31 PM
Low Point : 10.06 mV High Point : 260.06 mV
Plot Scale: 250.0 mV



Chromatogram

Sample Name : W,137677-004F,46006,TVH ONLY
FileName : G:\GC05\DATA\029G029.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 12 mV

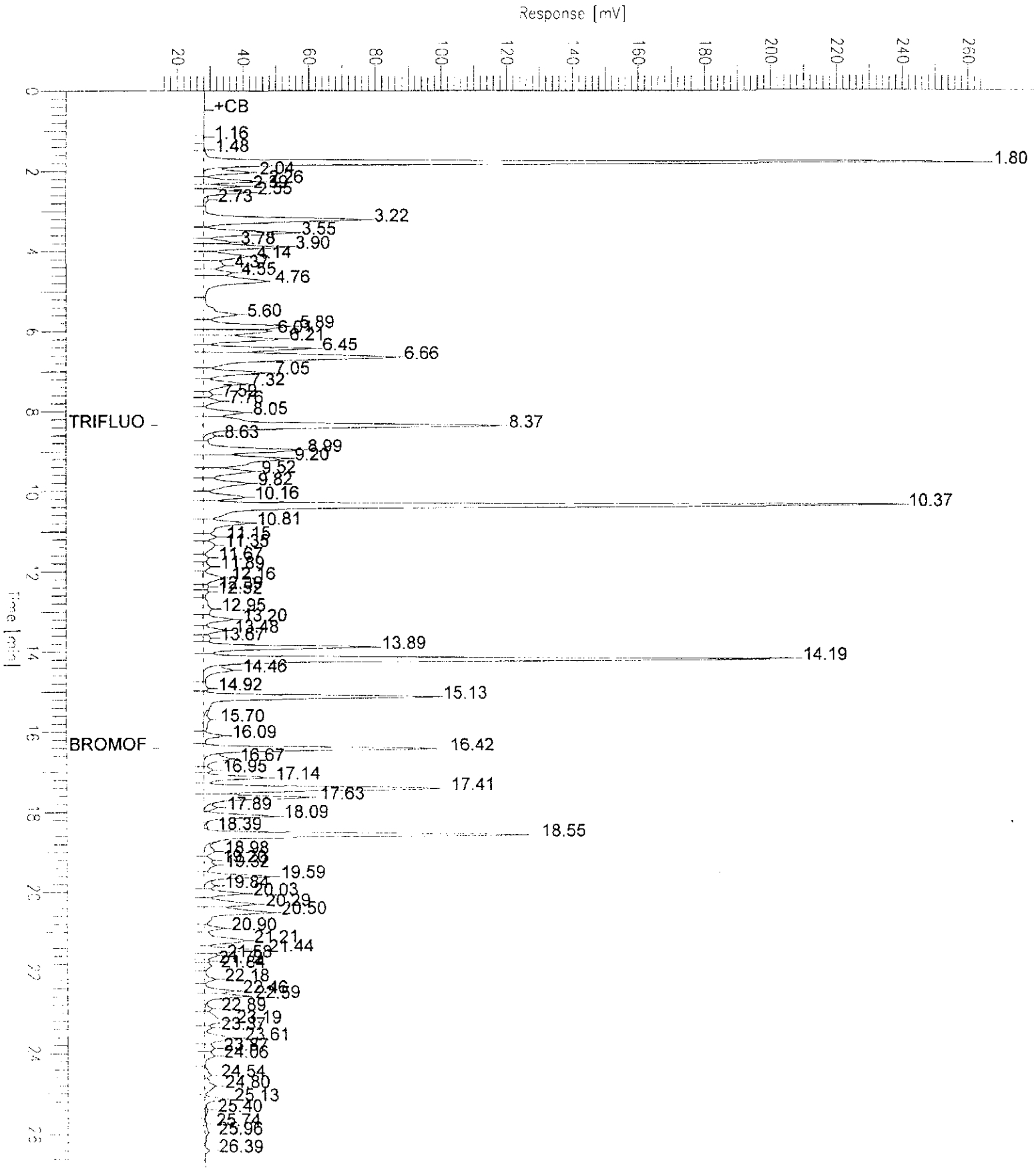
Sample #: PH<2
Date : 1/30/99 10:15 PM
Time of Injection: 1/30/99 09:48 PM
Low Point : 11.92 mV High Point : 261.92 mV
Plot Scale: 250.0 mV



Chromatogram

Sample Name : CCV/LCS,QC90059,98WS6813,46044,
FileName : G:\GC05\DATA\033G001.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: -1.0 Plot Offset: 15 mV

Sample #: GAS Page 1 of 1
Date : 2/2/99 05:00 PM
Time of Injection: 2/2/99 10:46 AM
Low Point : 15.14 mV High Point : 265.14 mV
Plot Scale: 250.0 mV



TVH-Total Volatile Hydrocarbons

Client: Subsurface Consultants
Project#: 1039.007
Location: 327 34th St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
137677-005	MW-5	46006	01/26/99	01/30/99	01/30/99	

Matrix: Water

Analyte	Units	137677-005
Diln Fac:		1
Gasoline C7-C12	ug/L	<50
Surrogate		
Trifluorotoluene	%REC	70
Bromofluorobenzene	%REC	107

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/29/99
Batch#:	46006	Analysis Date:	01/29/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC89921

Analyte	Result
Gasoline C7-C12	<50

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	95	59-162
Bromofluorobenzene	107	59-162

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

METHOD BLANK

Matrix:	Water	Prep Date:	02/02/99
Batch#:	46044	Analysis Date:	02/02/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC90060

Analyte	Result
Gasoline C7-C12	<50

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	98	59-162
Bromofluorobenzene	117	59-162

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

LABORATORY CONTROL SAMPLE

Matrix:	Water	Prep Date:	01/29/99
Batch#:	46006	Analysis Date:	01/29/99
Units:	ug/L		
Diln Fac:	1		

LCS Lab ID: QC89920

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	2030	2000	102	80-119

Surrogate	%Rec	Limits
Trifluorotoluene	126	59-162
Bromofluorobenzene	114	59-162

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

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

LABORATORY CONTROL SAMPLE

Matrix:	Water	Prep Date:	02/02/99
Batch#:	46044	Analysis Date:	02/02/99
Units:	ug/L		
Diln Fac:	1		

LCS Lab ID: QC90059

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1867	2000	93	80-119

Surrogate	%Rec	Limits
Trifluorotoluene	116	59-162
Bromofluorobenzene	98	59-162

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

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	MW-5	Sample Date:	01/26/99
Lab ID:	137677-005	Received Date:	01/26/99
Matrix:	Water	Prep Date:	01/30/99
Batch#:	46006	Analysis Date:	01/30/99
Units:	ug/L		
Diln Fac:	1		

MS Lab ID: QC89924

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	<50	1988	99	71-131

Surrogate	%Rec	Limits
Trifluorotoluene	106	59-162
Bromofluorobenzene	113	59-162

MSD Lab ID: QC89925

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	2105	105	71-131	6	26

Surrogate	%Rec	Limits
Trifluorotoluene	93	59-162
Bromofluorobenzene	111	59-162

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

TVH-Total Volatile Hydrocarbons

Client:	Subsurface Consultants	Analysis Method:	EPA 8015M
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	01/31/99
Lab ID:	137755-002	Received Date:	02/01/99
Matrix:	Water	Prep Date:	02/03/99
Batch#:	46044	Analysis Date:	02/03/99
Units:	ug/L		
Diln Fac:	1		

MS Lab ID: QC90063

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	2000	<50	1749	87	71-131

Surrogate	%Rec	Limits
Trifluorotoluene	119	59-162
Bromofluorobenzene	107	59-162

MSD Lab ID: QC90064

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	1832	92	71-131	5	26

Surrogate	%Rec	Limits
Trifluorotoluene	124	59-162
Bromofluorobenzene	109	59-162

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

Curtis & Tompkins, Ltd.

Aromatic Volatile Organics
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

Field ID:	MW-1	Sampled:	01/25/99
Lab ID:	137677-001	Received:	01/26/99
Matrix:	Water	Extracted:	01/27/99
Batch#:	45933	Analyzed:	01/27/99
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
MTBE	ND	2.0
Benzene	ND	1.0
Toluene	ND	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	ND	1.0
o-Xylene	ND	1.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	120	85-121
Toluene-d8	101	92-110
Bromofluorobenzene	95	84-115

Aromatic Volatile Organics
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

Field ID:	MW-2	Sampled:	01/25/99
Lab ID:	137677-002	Received:	01/26/99
Matrix:	Water	Extracted:	01/28/99
Batch#:	45958	Analyzed:	01/28/99
Units:	ug/L		
Diln Fac:	200		

Analyte	Result	Reporting Limit
MTBE	5800	400
Benzene	9000	200
Toluene	26000	200
Ethylbenzene	3800	200
m,p-Xylenes	19000	200
o-Xylene	8500	200

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	121	85-121
Toluene-d8	98	92-110
Bromofluorobenzene	92	84-115

Curtis & Tompkins Ltd.

Aromatic Volatile Organics
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

Field ID:	MW-3	Sampled:	01/25/99
Lab ID:	137677-003	Received:	01/26/99
Matrix:	Water	Extracted:	01/28/99
Batch#:	45983	Analyzed:	01/28/99
Units:	ug/L		
Diln Fac:	66.67		

Analyte	Result	Reporting Limit
MTBE	2900	130
Benzene	4000	67
Toluene	10000	67
Ethylbenzene	1200	67
m,p-Xylenes	4500	67
o-Xylene	2200	67

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	121	85-121
Toluene-d8	104	92-110
Bromofluorobenzene	91	84-115

Curtis & Tompkins, Ltd.

Aromatic Volatile Organics
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

Field ID:	MW-4	Sampled:	01/26/99
Lab ID:	137677-004	Received:	01/26/99
Matrix:	Water	Extracted:	01/28/99
Batch#:	45983	Analyzed:	01/28/99
Units:	ug/L		
Diln Fac:	8.333		

Analyte	Result	Reporting Limit
MTBE	1300	17
Benzene	230	8.3
Toluene	ND	8.3
Ethylbenzene	ND	8.3
m,p-Xylenes	ND	8.3
o-Xylene	ND	8.3

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	120	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	94	84-115

Aromatic Volatile Organics
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

Field ID:	MW-5	Sampled:	01/26/99
Lab ID:	137677-005	Received:	01/26/99
Matrix:	Water	Extracted:	01/27/99
Batch#:	45958	Analyzed:	01/27/99
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
MTBE	ND	2.0
Benzene	ND	1.0
Toluene	ND	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	ND	1.0
o-Xylene	ND	1.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	108	85-121
Toluene-d8	101	92-110
Bromofluorobenzene	95	84-115

Lab #: 137677 BATCH QC REPORT Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/26/99
Batch#:	45933	Analysis Date:	01/26/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC89623

Analyte	Result	Reporting Limit
MTBE	ND	2.0
Benzene	ND	1.0
Toluene	ND	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	ND	1.0
o-Xylene	ND	1.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	115	85-121
Toluene-d8	104	92-110
Bromofluorobenzene	97	84-115

Lab #: 137677 BATCH QC REPORT Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/27/99
Batch#:	45958	Analysis Date:	01/27/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC89729

Analyte	Result	Reporting Limit
MTBE	ND	2.0
Benzene	ND	1.0
Toluene	ND	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	ND	1.0
o-Xylene	ND	1.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	105	85-121
Toluene-d8	101	92-110
Bromofluorobenzene	95	84-115

Lab #: 137677 BATCH QC REPORT Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

METHOD BLANK

Matrix:	Water	Prep Date:	01/28/99
Batch#:	45983	Analysis Date:	01/28/99
Units:	ug/L		
Diln Fac:	1		

MB Lab ID: QC89818

Analyte	Result	Reporting Limit
MTBE	ND	2.0
Benzene	ND	1.0
Toluene	ND	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	ND	1.0
o-Xylene	ND	1.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	120	85-121
Toluene-d8	102	92-110
Bromofluorobenzene	95	84-115

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client: Subsurface Consultants
Project#: 1039.007
Location: 327 34th St.

Analysis Method: EPA 8260A
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 45933
Units: ug/L
Diln Fac: 1

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

BS Lab ID: QC89620

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	50	47.98	96	87-117
Toluene	50	51.48	103	88-116

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	111	85-121
Toluene-d8	102	92-110
Bromofluorobenzene	95	84-115

BSD Lab ID: QC89621

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	50	47.34	95	87-117	1	10
Toluene	50	52.26	105	88-116	2	10

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	109	85-121
Toluene-d8	104	92-110
Bromofluorobenzene	96	84-115

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

Lab #: 137677 BATCH QC REPORT Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client:	Subsurface Consultants	Analysis Method:	EPA 8260A
Project#:	1039.007	Prep Method:	EPA 5030
Location:	327 34th St.		

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix:	Water	Prep Date:	01/27/99
Batch#:	45958	Analysis Date:	01/27/99
Units:	ug/L		
Diln Fac:	1		

BS Lab ID: QC89726

Analyte	Spike Added	BS	%Rec	#	Limits
Benzene	50	50.61	101		87-117
Toluene	50	54.66	109		88-116

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	85-121
Toluene-d8	102	92-110
Bromofluorobenzene	97	84-115

BSD Lab ID: QC89727

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
Benzene	50	49.28	99		87-117	3		10
Toluene	50	53.09	106		88-116	3		10

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	85-121
Toluene-d8	102	92-110
Bromofluorobenzene	97	84-115

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS
EPA 8020 Analyte List

Client: Subsurface Consultants
Project#: 1039.007
Location: 327 34th St.

Analysis Method: EPA 8260A
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 45983
Units: ug/L
Diln Fac: 1

Prep Date: 01/28/99
Analysis Date: 01/28/99

BS Lab ID: QC89815

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	50	47.2	94	87-117
Toluene	50	52.32	105	88-116

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	115	85-121
Toluene-d8	105	92-110
Bromofluorobenzene	94	84-115

BSD Lab ID: QC89816

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	50	46.55	93	87-117	1	10
Toluene	50	53.01	106	88-116	1	10

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	119	85-121
Toluene-d8	105	92-110
Bromofluorobenzene	95	84-115

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 2 outside limits
Spike Recovery: 0 out of 4 outside limits

B7677

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

PROJECT NAME: 327 34th ST.

JOB NUMBER: 1039.007 LAB: C+T

PROJECT CONTACT: Meg Mendoza TURNAROUND: N

SAMPLED BY: John Wolfe REQUESTED BY: Meg Mendoza

LABORATORY I.D. NUMBER	SCI SAMPLE NUMBER	MATRIX: WATER	SOIL	WASTE	AIR			CONTAINERS: VOA	LITER	PINT	TUBE		METHOD PRESERVED: HCL	H_2SO_4	HNO_3	ICE	NONE	SAMPLING DATE: MONTH	DAY	YEAR	TIME	NOTES	ANALYSIS REQUESTED: TVH (8015)	BTEX/MTBE 8260
1	MW-1	\						7					\			\		1	25	99	1430		\	\
2	MW-2	\						7					\			\		1	25	99	1530		\	\
3	MW-3	\						7					\			\		1	25	99	1630		\	\
4	MW-4	\						7					\			\		1	26	99	0730		\	\
5	MW-5	\						7					\			\		1	26	99	0830		\	\

Other handwritten analysis notes: oxygenates MTBE; TVH per TCB

CHAIN OF CUSTODY RECORD

RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
John Wolfe	1/26/99 915	[signature]	0126 0915
RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
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RELEASED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME

COMMENTS & NOTES:

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