



ENVIRONMENTAL
PROTECTION

99 JAN 22 PM 3:01

January 20, 1999

Mr. Larry Seto
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Well Installation and Quarterly
Groundwater Monitoring Report
1750 Webster Street
Oakland, California
ACHCSA File No. 4617

Dear Mr. Seto:

Enclosed is a copy of ATC Associates, Inc.'s **Quarterly Groundwater Monitoring Report for the Fourth Quarter 1998** for the Prentiss Properties site located at 1750 Webster Street in the City of Oakland, Alameda County. A final groundwater monitoring report will be provided to you in the future covering the first quarter 1999.

If you have any questions regarding this report, you may contact either me at (916) 646-0760 or Jim Lehrman of ATC Associates at (925) 460-5300.

Sincerely,

PRENTISS PROPERTIES LIMITED, INC.

Charles A. Sumner II
Vice President
Development & Asset Management

CAS:ew

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September 25, 1998

Prepared For:

Prentiss Properties LTD, Inc.
2485 Natomas Park Drive, Suite 350
Sacramento, CA 95833

WELL INSTALLATION AND
QUARTERLY GROUNDWATER
MONITORING REPORT

SECOND AND THIRD QUARTER 1998

FOR
1750 WEBSTER STREET
OAKLAND, CALIFORNIA

Submitted By:

ATC Associates Inc.
6666 Owens Drive
Pleasanton, CA 94588

Project No. 61877.0004

Prepared By:
Bahram Zanganeh-Azam
Assistant Project Geologist

Approved By:
James A. Lehrman, RG, CHG
Senior Project Manager

92-460-5300

CERTIFICATION

This Quarterly Groundwater Monitoring Report was prepared under the direction of a California Registered Geologist.



James A. Lehrman, RG, CHG
Senior Project Manager



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**WELL INSTALLATION AND
QUARTERLY GROUNDWATER MONITORING
SECOND AND THIRD QUARTERS 1998
PRENTISS PROPERTIES LTD. INC.
1750 WEBSTER STREET
OAKLAND, CALIFORNIA**

1. INTRODUCTION

ATC Associates Inc. is pleased to present this report for well installation and groundwater monitoring conducted in the second and third quarters of 1998, at 1750 Webster Street in the City of Oakland, Alameda County, California (Figure 1). The site plan (Figure 2) shows the location of adjacent streets, monitoring wells, and other site-specific features.

A work plan for the installation of three groundwater monitoring wells and quarterly groundwater monitoring at 1750 Webster Street was submitted to the Alameda County Health Care Services Agency (ACHCSA) on April 13, 1998 and approved verbally by the ACHCSA on April 14, 1998 and by letter on May 28, 1998. On April 25 and 26, the three groundwater monitoring wells were installed, and on April 28 and August 4, 1998, the wells were sampled.

The monitoring wells are sampled quarterly to monitor the groundwater underlying the site. The program objectives are listed below:

- Measure depth of groundwater.
- Sample and analyze groundwater samples for specified petroleum hydrocarbon and halogenated volatile organic constituents.
- Construct a groundwater elevation contour map within the study area.
- Construct a total petroleum hydrocarbons as gasoline (TPH-G), and benzene concentration in groundwater map.

- Compare current and past data.

The existence and degree of petroleum hydrocarbons in the groundwater underlying a site is evaluated by (1) the presence of free-floating product and (2) laboratory analyses of groundwater samples. Samples are analyzed for TPH-G, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). In accordance with the request made by the ACHCSA on May 28, 1998, groundwater samples are also analyzed for halogenated volatile organic compounds (HVOCs). Also, in compliance with the request of the California Regional Water Quality Control Board (State of California, May 2, 1995), we are including reporting of methyl tert-butyl ether (MTBE) (a non-metallic antiknock and oxygenating compound used in gasoline).

2. WELL INSTALLATION

In order to determine the groundwater gradient at the site, and to perform regular groundwater monitoring, three groundwater monitoring wells were installed at the site on April 26, 1998. Figure 2 shows the well locations, and Appendix A contains the boring logs and well details. Two wells (A-2 and A-3) are located along the southern boundary of the site property adjacent to an apartment building. The third well (A-1) is located in the northeastern portion of the site property, approximately 30 feet from the eastern boundary of the site property. Well installation permits were approved by, and obtained from the Alameda County Public Works Agency (ACPWA) on April 23, 1998. The boreholes were drilled and the wells installed by V&W Drilling, Inc. of Rio Vista, California, a drilling contractor with a current C-57 license.

The borehole locations were marked and cleared for underground utilities prior to drilling. The three borings were advanced with 8-inch outside diameter (O.D.) hollow stem augers to a depth of approximately 30 feet below ground surface (bgs). A-1 was advanced to 31.5 feet bgs, A-2 was advanced to 31.5 feet bgs, and A-3 was advanced to 30 feet bgs. The augers were steam cleaned prior to commencing each boring. Two soil samples were collected from each boring at approximately five foot intervals for lithologic logging, and screened with a photo ionization detector (PID) for evidence of petroleum hydrocarbon and/or HVOC vapors. Soil samples were classified in accordance with the Unified Soil Classification System (USCS). The soil samples collected were analyzed by Curtis & Tompkins, Ltd., a California-certified laboratory in Berkeley, California for TPH-G by Environmental Protection Agency (EPA) Method 8015M, and for BTEX, and MTBE by EPA Method 8020. The soil cuttings generated during the drilling were drummed and left on site pending chemical analysis.

The wells were constructed of 2-inch diameter schedule 40 PVC with approximately 15 feet of 0.01-inch slotted casing for well screen. The three wells were installed through the center of the augers while the augers were in place. The sand pack consisted of size 2/16 Lone Star sand placed from 30 feet bgs to two feet above the top of the well screen (approximately 17 feet of sand pack). The sand was poured through the annulus of the well and the auger, and more sand was added and tapped down as the auger was gradually removed from the borehole. When sufficient sand had been placed in the borehole, the sand pack and wells were developed to ensure that the sand had settled in place and more sand was added to achieve the desired sand pack thickness. A three-foot layer of bentonite seal was

placed above the sand pack, and the wells were grouted from the bentonite seal to the surface with neat cement in accordance with California Well Standards. The wells were completed with flush mounted traffic-rated well boxes and locking well caps. LUFT guidelines for well installation were followed.

Soil cuttings and decontamination water generated during the well installation, and from the subsurface investigation activities performed by ATC in April 1998, will be disposed of following receipt of the laboratory analytical results. The cuttings and decontamination water will be transported for disposal or recycling by a licensed hazardous waste hauler.

The site wells were surveyed by Ron Archer Civil Engineer, Inc. of Pleasanton, California, a professional licensed surveyor, on April 28, 1998, in order to accurately determine the groundwater gradient at the site. The well head elevations were measured to within one hundredth of a foot relative to mean sea level, and tied into a United States Geological Survey (USGS) benchmark. The well survey data is included as Appendix B.

3. GROUNDWATER SAMPLING

Groundwater samples were collected on April 28 and August 4, 1998 from Monitoring Wells A-1 through A-3, in accordance with ATC Associates' Groundwater Sampling Protocol (Appendix C). Groundwater purged from the wells and equipment decontamination water was placed into labeled 55-gallon California Department of Transportation (D.O.T). approved 17H drums for storage on site. The contents of these drums will be transported off site by a licensed hazardous waste hauler for disposal or recycling. The volume of groundwater removed from each well and other measured sampling parameters are noted on the water sampling logs included in Appendix D.

4. LABORATORY ANALYSIS

The groundwater and soil samples were transported in a cooler chilled with ice and under chain of custody to Curtis Tompkins, Ltd. (C&T), a state-certified analytical laboratory, located in Berkeley, California. After receipt at the laboratory, the samples were inspected for sample integrity and temperature. The groundwater and soil samples were analyzed for the presence of TPH-G following modified EPA Method 8015, and BTEX and MTBE by EPA Method 8020. In addition, the groundwater samples were analyzed for HVOCs by EPA Method 8010. The laboratory analytical report and chain of custody records are attached in Appendix E.

5. SUMMARY OF RESULTS

5.1 Laboratory Analysis of Soil Samples

A summary of the analytical results from the April 25 1998 soil sampling event is presented in Table 1. Based on the results of laboratory analyses for samples collected on April 25, 1998, TPH-G, BTEX, and MTBE were not detected in the soil samples collected from borings A-1, A-2, and A-3.

5.2 Groundwater Flow Direction and Gradient

Figure 3 shows the groundwater elevation contours based on the water-level data in Table 1 for the second quarter of 1998, and Figure 4 shows the groundwater elevation contours based on data for the third quarter of 1998. For the second quarter of 1998, groundwater elevations averaged 11.44 feet mean sea level (MSL), ranging from 10.75 feet MSL in Monitoring Well A-1 to 11.90 feet MSL in Monitoring Well A-3. The apparent groundwater flow direction was northeast with a gradient of approximately 0.0097. For the third quarter 1998, groundwater elevations averaged 11.13 feet MSL, ranging from 10.40 feet MSL in A-1 to 11.66 in A-3. The apparent groundwater flow direction was northeast with a gradient of approximately 0.01.

5.3 Laboratory Analysis of Groundwater Samples

A summary of the analytical results from the second and third quarter 1998 monitoring events are presented in Table 2. Based on the results of laboratory analyses for samples collected on April 28, 1998, TPH-G, BTEX, and HVOCs were detected in the groundwater samples collected from Monitoring Wells A-1, A-2, and A-3. MTBE was not detected at or above the detection limit in any of the wells. Monitoring well A-3 showed the lowest concentrations of TPH-G and BTEX, and with the exception of benzene, A-2 showed generally the highest concentrations. Results from A-1 showed concentrations of Cis-1,2-DCE, 1,2-DCA, TCE, and PCE. The groundwater sample collected from Monitoring Well A-2 showed concentrations of Cis-1,2-DCE, TCE, and PCE. The sample from Monitoring Well A-3 showed concentrations of TCE and PCE.

Based on the results of laboratory analyses for samples collected on August 4, 1998, TPH-G, BTEX, and HVOCs were detected in the groundwater samples collected from Monitoring wells A-1, A-2, and

A-3. MTBE was not detected at or above the detection limit in any of the wells. Monitoring well A-3 showed the lowest concentrations of TPH-G and BTEX. Monitoring Well A-2 showed the highest concentrations of TPH-G.

Detectable concentrations of TPH-G and BTEX have remained generally unchanged from the second to third quarters in all monitoring wells. Concentrations of HVOCs have generally remained unchanged in the wells, with the exception of certain compounds in Monitoring Wells A-1 and A-2. 1,2-DCA decreased in well A-1 from 13 ug/l in the second quarter to non-detectable levels in the third quarter of 1998. Concentrations of TCE increased in well A-2 from 3.1 ug/l in the second quarter to 52 ug/l in the third quarter 1998.

Figure 5 shows the distribution of TPH-G and BTEX concentrations detected in the groundwater for samples collected on April 28, 1998. Figure 6 shows the distribution of TPH-G and BTEX concentrations detected in the groundwater for samples collected on August 4, 1998. The next quarterly groundwater sampling is scheduled for the fourth quarter of 1998.

6.0 DISCUSSION

During the advancement of the boreholes, the soil strata beneath the site was noted to generally consist primarily of clays, clayey sands, and sands. From the ground surface to approximately 10 feet bgs, the material generally consisted of clay. From 10 feet bgs to approximately 25 feet bgs, the strata consisted primarily of clayey sand and sand mixtures. Groundwater was encountered from approximately 18 feet bgs (A-1 and A-3) to 20 feet bgs (A-2) in the borings. The boring logs and well construction details are included as Appendix A. Based on the topography of the area, the groundwater flow direction at the site is expected to be towards the northeast.

Two soil samples were collected for chemical analysis from each boring at depths of approximately 10 feet and 15 feet bgs, with the deepest sample just above the water table. Soil samples collected from all borings did not contain detectable concentrations of TPH-G, BTEX, or MTBE. Therefore, no direct evidence of a surface spill of gasoline at the site was detected during this investigation.

7.0 CONCLUSIONS

Soil beneath the site does not appear to be effected by TPH-G, BTEX, or MTBE. Concentrations of TPH-G, BTEX, MTBE, and HVOCs were detected in the groundwater samples from all three monitoring wells. The concentrations of TPH-G and BTEX in groundwater for samples collected in the second and third quarters of 1998 were generally lowest in Monitoring Well A-3, and, except for benzene, generally greatest in Monitoring Well A-2. Both wells are located along the southwestern upgradient-boundary of the site. Concentrations of HVOCs detected in the monitoring wells remained generally unchanged from the second to third quarters of 1998. Cis-1,2-DCE remained generally the same in Monitoring Wells A-1 and A-2, and continued to be non-detectable in Well A-3. 1,2-DCA was non-detectable in Wells A-2 and A-3, and decreased to non-detectable levels in Well A-1 in the third quarter. Concentrations of TCE increased in Well A-2 and remained generally unchanged in Wells A-1 and A-2. Concentrations of TCE were highest in Well A-2. Concentrations of PCE remained generally unchanged in all three wells.

Based on the fact that none of the contaminants have been detected in the vadose zone soils, and on the northeasterly directed groundwater gradient at the site, the concentrations detected in the site groundwater monitoring wells appear to be from an upgradient source.

8.0 RECOMMENDATIONS

Based on the non-detectable concentrations of TPH-G, BTEX, and MTBE in vadose zone soils beneath the site, and the apparent upgradient source of the TPH-G, BTEX, MTBE, and HVOCs in groundwater at the 1750 Webster Street site, ATC recommends continued quarterly monitoring only.

REFERENCES

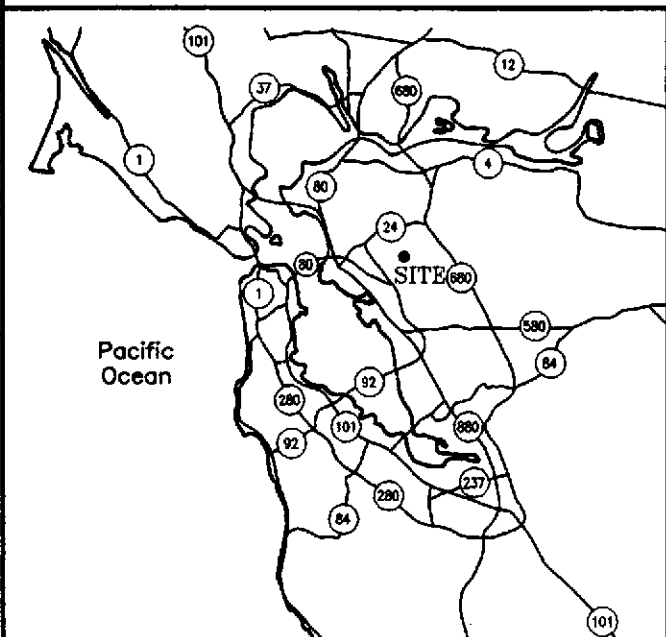
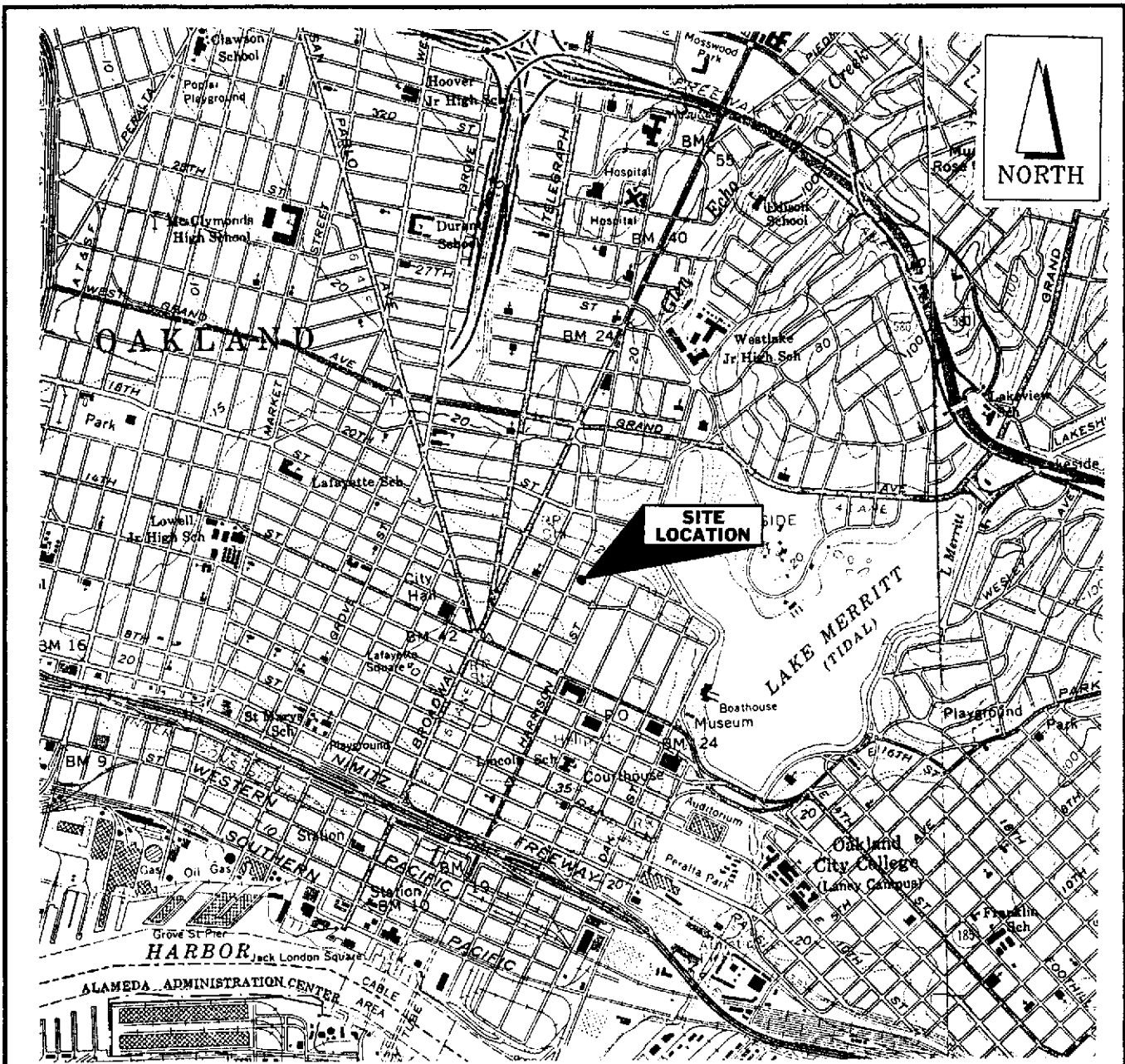
ATC Associates Inc., April 13, 1998, Work Plan for Well Installation and Quarterly Groundwater Monitoring at 1750 Webster Street, Oakland, California

TABLE 1

SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
 PRENTISS PROPERTIES LTD. INC.
 1750 WEBSTER STREET SITE
 OAKLAND, CA 94612

Sample ID	Date Sampled	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)
A-1-10.5FT	04/25/98	<1	<5	<5	<5	<5	<20
A-1-15FT	04/25/98	<1	<5	<5	<5	<5	<20
A-2-11FT	04/25/98	<1	<5	<5	<5	<5	<20
A-2-16FT	04/25/98	<1	<5	<5	<5	<5	<20
A-3-11.5FT	04/25/98	<1	<5	<5	<5	<5	<20
A-3-17.5FT	04/25/98	<1	<5	<5	<5	<5	<20

Notes:
 TPH-G denotes total petroleum hydrocarbons as gasoline
 MTBE denotes methyl-tert-butyl ether
 mg/kg denotes milligrams per kilogram (ppm)
 <1 denotes not detected at or above method detection limit of 1 mg/kg



Notes:

- 1) All locations and dimensions are approximate.
- 2) Base map from USGS Oakland West (1959) Quadrangle, 7.5 Series Topographic, photorevised in 1968.

APPROXIMATE SCALE: 1" = 2000'

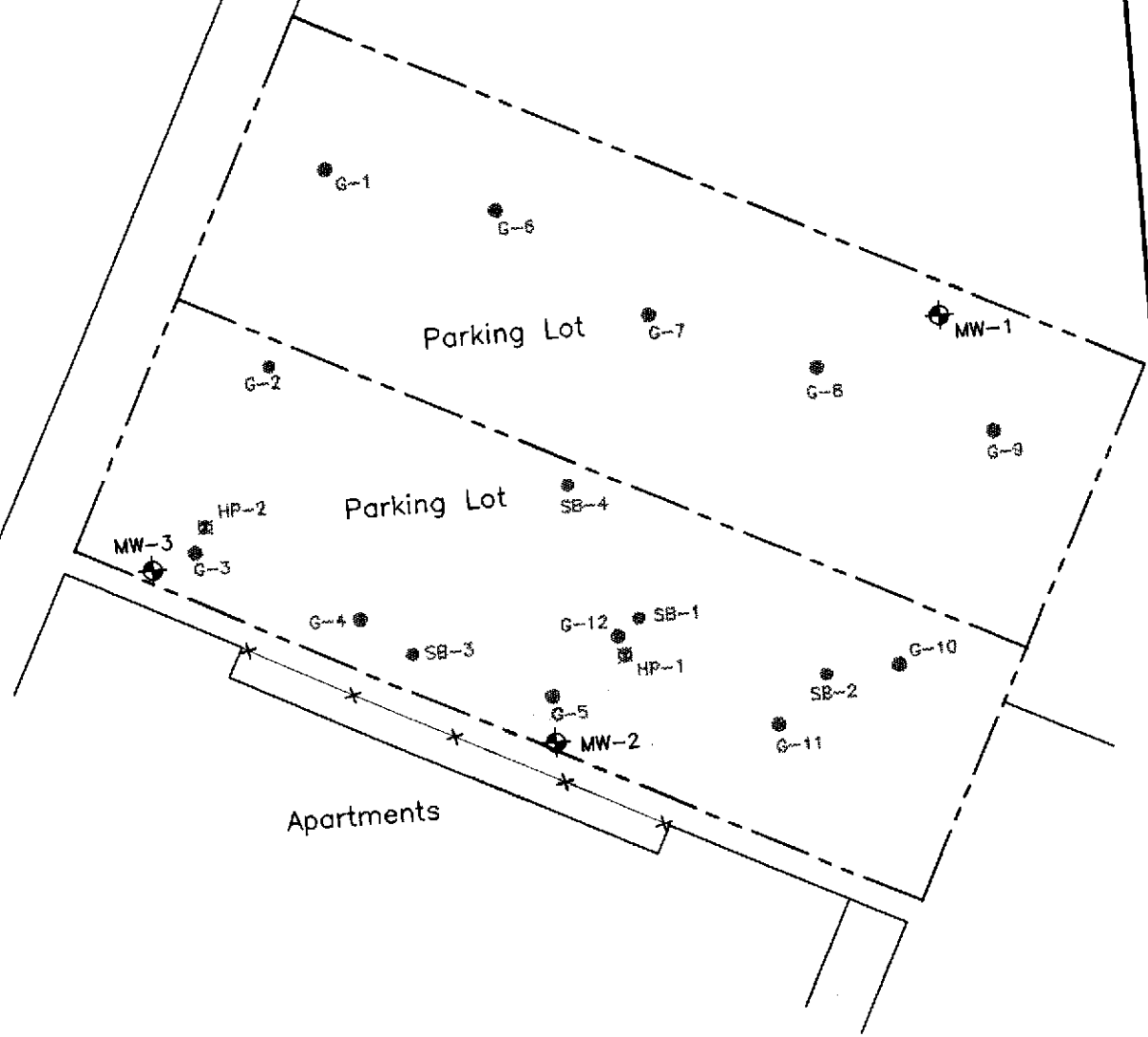
ATC ASSOCIATES INC.
Environmental, Geotechnical and Materials Professionals

SITE LOCATION MAP
1750 WEBSTER STREET
OAKLAND, CALIFORNIA




PROJECT NO. 61877.0004 FIGURE 1



Webster Street

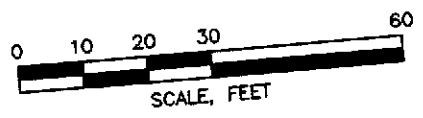


EXPLANATION

-  MW-3 GROUNDWATER MONITORING WELL
-  HP-2 PREVIOUS HYDROPUNCH LOCATION AND DESIGNATION
-  G-11 PREVIOUS SOIL BORING LOCATION AND DESIGNATION

NOTES

1) All locations and dimensions are approximate.



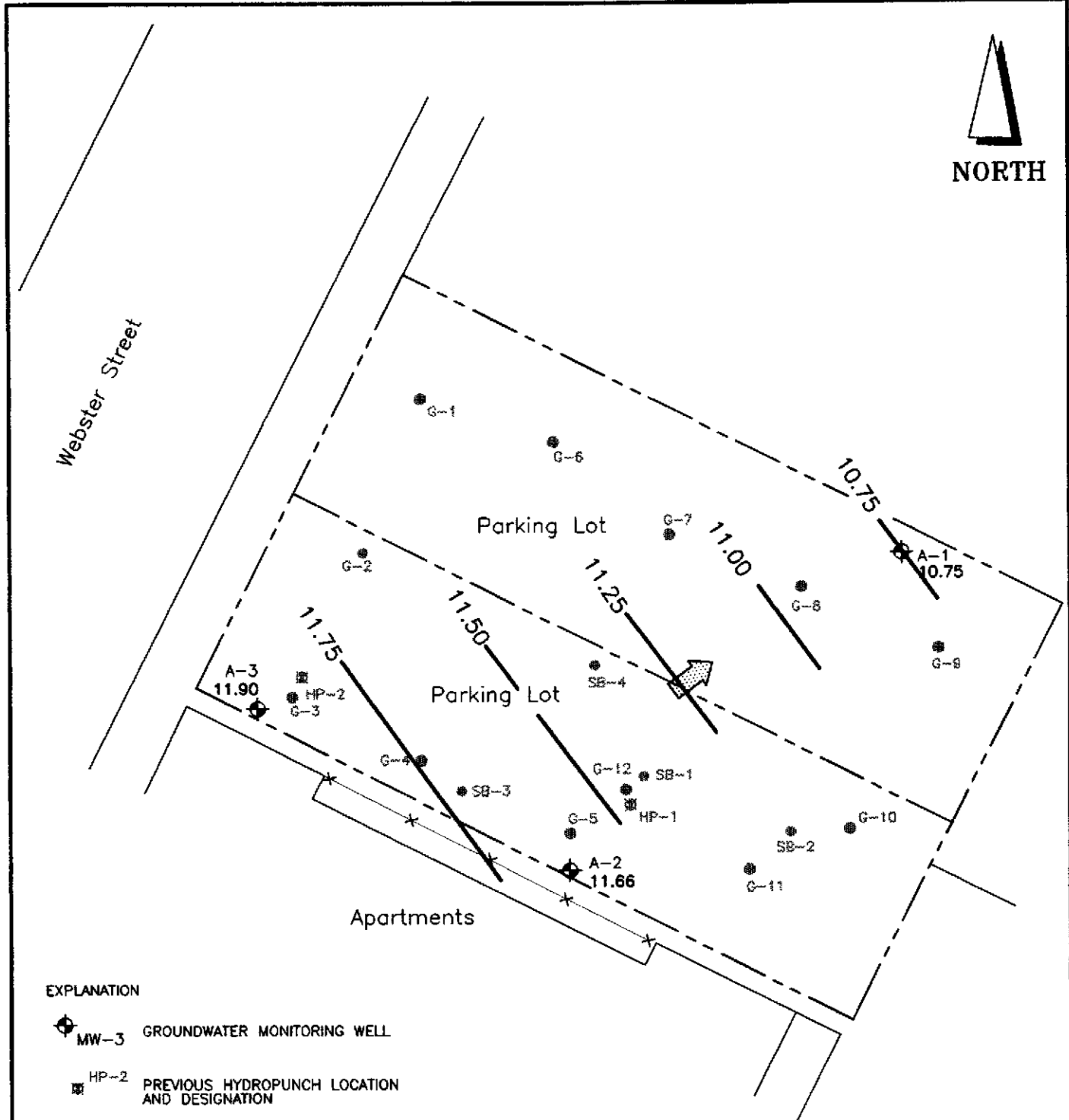
VATC ASSOCIATES INC.
 ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS

SITE PLAN
 1750 WEBSTER STREET
 OAKLAND, CALIFORNIA




PROJECT NO. 61877.0004

SOURCE: SITE SURVEY BY RON ARCHER
CIVIL ENGINEER, INC., APRIL 28, 1998

FIGURE



EXPLANATION

-  MW-3 GROUNDWATER MONITORING WELL
-  HP-2 PREVIOUS HYDROPUNCH LOCATION AND DESIGNATION
-  G-11 PREVIOUS SOIL BORING LOCATION AND DESIGNATION

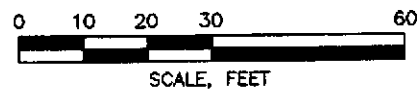
11.90 GROUNDWATER ELEVATION IN FEET (DATUM: MEAN SEA LEVEL)

11.75 GROUNDWATER ELEVATION CONTOUR IN FEET (DATUM: MEAN SEA LEVEL)

 APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTES

- 1) All locations and dimensions are approximate.



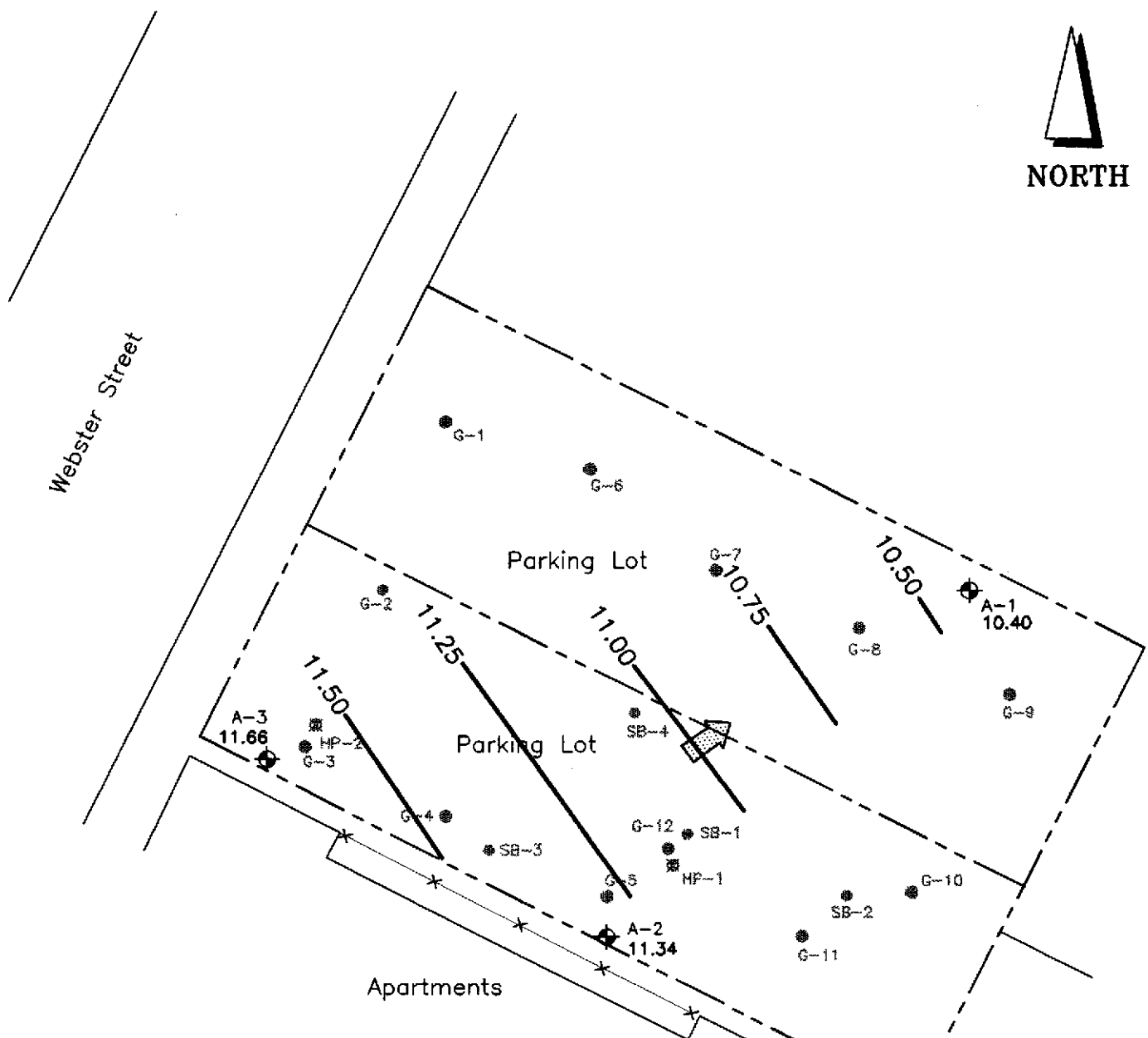
VATC ASSOCIATES INC. ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS	
GROUNDWATER ELEVATION CONTOUR MAP (4-28-98) PRENTISS 1750 WEBSTER STREET OAKLAND, CALIFORNIA	
PROJECT NO. 61877.0004	FIGURE 3

SOURCE: SITE SURVEY BY RON ARCHER
CIVIL ENGINEER, INC., APRIL 28, 1998



NORTH

Webster Street



EXPLANATION

- MW-3 GROUNDWATER MONITORING WELL
- HP-2 PREVIOUS HYDROPUNCH LOCATION AND DESIGNATION
- G-11 PREVIOUS SOIL BORING LOCATION AND DESIGNATION

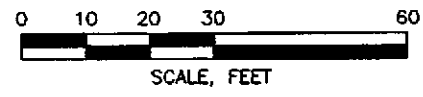
11.66 GROUNDWATER ELEVATION IN FEET (DATUM: MEAN SEA LEVEL)

11.50 GROUNDWATER ELEVATION CONTOUR IN FEET (DATUM: MEAN SEA LEVEL)

APPROXIMATE GROUNDWATER FLOW DIRECTION

NOTES

1) All locations and dimensions are approximate.



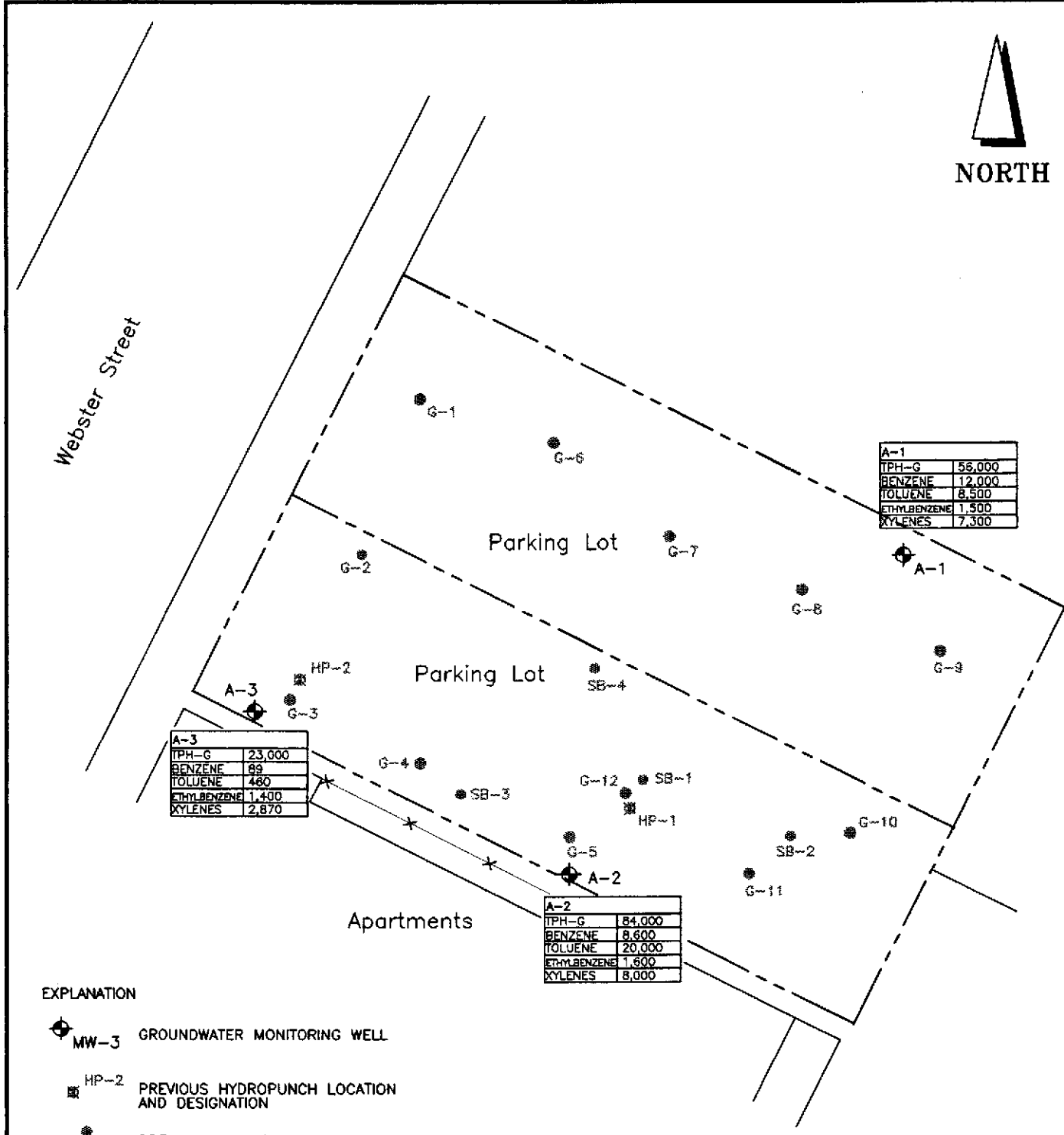
VATC ASSOCIATES INC. ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS	
GROUNDWATER ELEVATION CONTOUR MAP (8-4-98) PRENTISS 1750 WEBSTER STREET OAKLAND, CALIFORNIA	
PROJECT NO. 61877.0004	FIGURE 4

SOURCE: SITE SURVEY BY RON ARCHER
CIVIL ENGINEER, INC., APRIL 28, 1998



NORTH

Webster Street



A-1	
TPH-G	56,000
BENZENE	12,000
TOLUENE	8,500
ETHYLBENZENE	1,500
XYLENES	7,300

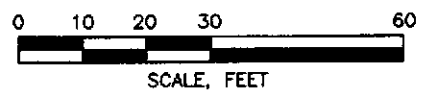
A-3	
TPH-G	23,000
BENZENE	89
TOLUENE	460
ETHYLBENZENE	1,400
XYLENES	2,870

A-2	
TPH-G	84,000
BENZENE	8,600
TOLUENE	20,000
ETHYLBENZENE	1,600
XYLENES	8,000

EXPLANATION

- MW-3 GROUNDWATER MONITORING WELL
- HP-2 PREVIOUS HYDROPUNCH LOCATION AND DESIGNATION
- G-11 PREVIOUS SOIL BORING LOCATION AND DESIGNATION

ALL CONCENTRATIONS IN PARTS PER BILLION (ppb)



NOTES

- 1) All locations and dimensions are approximate.

SOURCE: SITE SURVEY BY RON ARCHER CIVIL ENGINEER, INC., APRIL 28, 1998

VATC ASSOCIATES INC.
 ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS

**TPH-G/BENZENE CONCENTRATIONS
 IN GROUNDWATER (4-28-98)
 PRENTISS
 1750 WEBSTER STREET
 OAKLAND, CALIFORNIA**

PROJECT NO. 61877.0004 | FIGURE 5



NORTH

Webster Street

A-3	
TPH-G	23,000
BENZENE	65
TOLUENE	270
ETHYLBENZENE	1,300
XYLENES	2,650

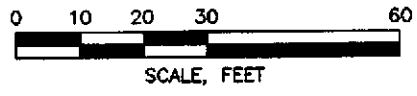
A-1	
TPH-G	59,000
BENZENE	12,000
TOLUENE	9,200
ETHYLBENZENE	1,700
XYLENES	8,400

A-2	
TPH-G	73,000
BENZENE	7,700
TOLUENE	18,000
ETHYLBENZENE	1,400
XYLENES	7,400

EXPLANATION

- MW-3 GROUNDWATER MONITORING WELL
- HP-2 PREVIOUS HYDROPUNCH LOCATION AND DESIGNATION
- G-11 PREVIOUS SOIL BORING LOCATION AND DESIGNATION

ALL CONCENTRATIONS IN PARTS PER BILLION (ppb)



NOTES

1) All locations and dimensions are approximate.

SOURCE: SITE SURVEY BY RON ARCHER
CIVIL ENGINEER, INC., APRIL 28, 1998

VATC ASSOCIATES INC.
 ENVIRONMENTAL, GEOTECHNICAL AND MATERIALS PROFESSIONALS
**TPH-G/BENZENE CONCENTRATIONS
 IN GROUNDWATER (8-4-98)**
PRENTISS
1750 WEBSTER STREET
OAKLAND, CALIFORNIA

PROJECT NO. 61877.0004	FIGURE 6
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APPENDIX A

SOIL BORING LOGS AND

WELL CONSTRUCTION DETAILS

ATC Environmental, Inc.

WELL LOG

BORING NO: A-1

PROJECT NO: 61877.0004

PROJECT NAME: Prentiss Properties Ltd. Inc.

CLIENT: Charles Sumner

PROJECT LOCATION: 1750 Webster St., Oakland, CA

DRILLING CONTRACTOR: V&W

DRILLING MTHD: Hollow Stem Auger

SAMPLE MTHD: Split Spoon; 6 inch sleeves

DATE STARTED: Apr 25, 1998

DATE FINISHED: Apr 26, 1998

DRILLER: Frank

INSPECTOR: None

DEPTH (FT)	SPT BLOWS PER 6"	REC (%)	PID (ppm)	PROFILE	SURFACE ELEVATION: NA		WELL CONST	REMARKS	
					LITHOLOGIC DESCRIPTION				
0.0								Background PID = 0.4 ppm	
5.0	6 11 17	95	42.5		Sandy Clay, CL, orange-brown with orange & brown mottling, slightly moist, medium plasticity, stiff, no odor, few rounded gravels				
10.0	12 20 22	80	78		Fine grained Clayey Sand, SC, orange-brown, moist, loose, no odor			Soil Sample A-1-10.5FT collected @09:10	
15.0	20 50/5"	75	61		Fine grained Sand, SP, light orange-brown, moist, loose, no odor. Wet from 18ft-20 ft; color changes to grey at 19.5ft			Soil sample A-1-15FT collected @ 09:25	
	30 50/3"	38	950						
	30 50/5"	70							Initial water level: 18ft
20.0	8 8 12	100	525		Sandy Clay, CL, orange-brown to grey, wet, soft, low plasticity, some orange-brown mottling; 3-in lens of grey wet sand; hard at 20.5-21ft, odor; color changes to grey at 20.5ft			Final water level: 20.1ft	
25.0	8 12 15	100	82		Silty Clay, CL, light brown with grey mottling, wet, stiff, medium plasticity, odor; very wet at 28ft; 2-in layer of sand at 28.33ft			At 23 Ft on 4/25/98 auger seal blew out; stopped drilling; could not repair; continued on 4/26/98	
	9 10 8	100	107						
30.0	12 12	100			Sandy Clay, CL, light orange-brown, moist, very stiff, low plasticity, odor				
	10 7	100	234						

BOTTOM OF TEST BORING: 31.00'

SPT = STANDARD PENETRATION TEST
 REC = SAMPLE RECOVERY
 ND = NON-DETECTABLE
 FID = FLAME IONIZATION DETECTOR
 PID = PHOTO-IONIZATION DETECTOR

WELL CONSTRUCTION

WELL DIAM.: 2 inch
 CASING MATERIAL: Schedule 40 PVC
 SCREEN MATERIAL: Schedule 40 PVC
 SLOT SIZE: 0.01 inch
 METHOD: Hollow Stem Auger
 MONITORING WELL INSTALLED UPON COMPLETION

- OUTER CASING
- GROUT
- BENTONITE
- SAND
- SCREEN


ATC Environmental, Inc.

WELL LOG

BORING NO: A-1

PROJECT NO: 61877.0004

PROJECT NAME: Prentiss Properties Ltd. Inc. CLIENT: Charles Sumner
 PROJECT LOCATION: 1750 Webster St., Oakland, CA DRILLING CONTRACTOR: V&W
 DRILLING MTHD: Hollow Stem Auger SAMPLE MTHD: Split Spoon; 6 inch sleeves
 DATE STARTED: Apr 25, 1998 DATE FINISHED: Apr 26, 1998 DRILLER: Frank INSPECTOR: None

DEPTH (FT)	SPT BLOWS PER 5"	REC (%)	PID (ppm)	FID/PHOTO	SURFACE ELEVATION: NA	WELL CONST	REMARKS
					LITHOLOGIC DESCRIPTION		
30.0	10	20 22	100	234			Silty Clay, CL, light orange-brown, slightly moist, medium stiff, medium plasticity, some angular to subangular white&red gravels, slight odor
35.0							
40.0							
45.0							
50.0							
55.0							
60.0							

Geologist: Bahram Zanganeh-Azom

BOTTOM OF TEST BORING: 31.00'
 SPT = STANDARD PENETRATION TEST
 REC = SAMPLE RECOVERY
 ND = NON-DETECTABLE
 FID = FLAME IONIZATION DETECTOR
 PID = PHOTO-IONIZATION DETECTOR

WELL CONSTRUCTION
 WELL DIAM.: 2 inch
 CASING MATERIAL: Schedule 40 PVC
 SCREEN MATERIAL: Schedule 40 PVC
 SLOT SIZE: 0.01 inch
 METHOD: Hollow Stem Auger
 MONITORING WELL INSTALLED UPON COMPLETION

-  OUTER CASING
-  GROUT
-  BENTONITE
-  SAND
-  SCREEN

ATC Environmental, Inc.

WELL LOG

BORING NO: A-2

PROJECT NO: 61877.0004

PROJECT NAME: Prentiss Properties Ltd. Inc.

CLIENT: Charles Sumner

PROJECT LOCATION: 1750 Webster St., Oakland, CA

DRILLING CONTRACTOR: V&W

DRILLING MTHD: Hollow Stem Auger

SAMPLE MTHD: Split Spoon; 6-inch sleeves

DATE STARTED: Apr 26, 1998

DATE FINISHED: Apr 26, 1998

DRILLER: Frank

INSPECTOR: None

DEPTH (FT)	SPT BLOWS PER 6"	REC (%)	PID (ppm)	RECOVERY	SURFACE ELEVATION: NA		WELL CONST	REMARKS
					LITHOLOGIC DESCRIPTION			
0.0								Background PID = 0.4 ppm
5.0	1	95	716					
	6 9 11							
10.0	2	75	1017					Soil sample A-2-11FT collected @10:45
	9 15 25							
15.0	3	30	569					Soil sample A-2-16FT collected @10:55
	208 50/3"							
20.0	4	90	320					Initial water level: 20 ft
	8 25 37							
25.0	5	100	376					
	29 32 20							
30.0								
BOTTOM OF TEST BORING: 31.50'					WELL CONSTRUCTION WELL DIAM.: 2 inch CASING MATERIAL: Schedule 40 PVC SCREEN MATERIAL: Schedule 40 PVC SLOT SIZE: 0.01 inch METHOD: Hollow Stem Auger MONITORING WELL INSTALLED UPON COMPLETION			
SPT = STANDARD PENETRATION TEST REC = SAMPLE RECOVERY ND = NON-DETECTABLE FID = FLAME IONIZATION DETECTOR PID = PHOTO-IONIZATION DETECTOR					■ OUTER CASING ▨ GROUT ▩ BENTONITE ▤ SAND ▧ SCREEN			

ATC Environmental, Inc.

WELL LOG

BORING NO: A-2

PROJECT NO: 61877.0004

PROJECT NAME: Prentiss Properties Ltd. Inc.

CLIENT: Charles Sumner

PROJECT LOCATION: 1750 Webster St., Oakland, CA

DRILLING CONTRACTOR: V&W

DRILLING MTHD: Hollow Stem Auger

SAMPLE MTHD: Split Spoon; 6-inch sleeves

DATE STARTED: Apr 26, 1998

DATE FINISHED: Apr 26, 1998

DRILLER: Frank

INSPECTOR: None

DEPTH (FT)	SPT BLOWS PER 6"	REC (%)	PID (ppm)	METHOD	SURFACE ELEVATION: NA	WELL CONST	REMARKS
					LITHOLOGIC DESCRIPTION		
30.0	9 12 15	100	177	LIQUID	Clayey Silt, MH, blue-grey, very wet, soft, slightly plastic, odor		
					Silty Clay, CL, light grey, wet, stiff, high plasticity, some orange mottling		
35.0							
40.0							
45.0							
50.0							
55.0							
-60.0							Geologist: Bahram Zangeneh-Azam

BOTTOM OF TEST BORING: 31.50'

WELL CONSTRUCTION

WELL DIAM.: 2 inch

CASING MATERIAL: Schedule 40 PVC

SCREEN MATERIAL: Schedule 40 PVC

SLOT SIZE: 0.01 inch

METHOD: Hollow Stem Auger

MONITORING WELL INSTALLED UPON COMPLETION

OUTER CASING

GROUT

BENTONITE

SAND

SCREEN

SPT = STANDARD PENETRATION TEST

REC = SAMPLE RECOVERY

ND = NON-DETECTABLE

FID = FLAME IONIZATION DETECTOR

PID = PHOTO-IONIZATION DETECTOR

ATC Environmental, Inc.

WELL LOG

BORING NO: A-3

PROJECT NO: 61877.0004

PROJECT NAME: Prentiss Properties Ltd. Inc.

CLIENT: Charles Sumner

PROJECT LOCATION: 1750 Webster St., Oakland, CA

DRILLING CONTRACTOR: V&W

DRILLING MTHD: Hollow Stem Auger

SAMPLE MTHD: Split Spoon; 6 inch sleeves

DATE STARTED: Apr 26, 1998

DATE FINISHED: Apr 26, 1998

DRILLER: Frank

INSPECTOR: None

DEPTH (FT)	SPT BLOMS PER 6"	REC (%)	PID (ppm)	REMARKS	SURFACE ELEVATION: NA		WELL CONST	REMARKS
					LITHOLOGIC DESCRIPTION			
0.0								Background PID = 0.4 ppm
5.0	6 8 10	95	414	LIQID	Fine grained Sand, SM, orange-brown, very moist (wet), loose, no odor, some clay, well sorted			
					Sandy Clay, CL, orange-brown, moist, slightly stiff, some orange black mottling, no odor			
10.0	6 12 20	100	1713		Fine grained Clayey Sand, SC, light brown, moist, moderately loose, well sorted			Soil Sample A-3-11.5FT collected @12:30
15.0	30 50/3"	50	756		Fine grained Sand, SM, orange-brown, moist, loose, no odor, well sorted. At 16 Ft: wet, color changes to grey-brown, no odor			Soil sample A-3-17.5FT collected @12:37 Initial water level: 18 Ft
	12 50/5"	50	246					
	18 50/5"	35	722					
20.0	10 27 50/5"	70	257		Fine grained Clayey Sand, SC, light brown, very wet, loose, well sorted, odor			
25.0	5 10 15	100	912		Sandy Clay, CL, light blue-grey, very wet, stiff, high plasticity, some well rounded gravels, some orange mottling, slight odor			
	5 7 13	100	722		Sandy Clay, CL, light brown, very wet, soft to very stiff, high plasticity, some gravels, slight odor			Geologist: Bahrom Zanganeh-Azam
BOTTOM OF TEST BORING: 30.00'					WELL CONSTRUCTION WELL DIAM.: 2 inch CASING MATERIAL: Schedule 40 PVC SCREEN MATERIAL: Schedule 40 PVC SLOT SIZE: 0.01 inch METHOD: Hollow Stem Auger MONITORING WELL INSTALLED UPON COMPLETION			
SPT = STANDARD PENETRATION TEST REC = SAMPLE RECOVERY ND = NON-DETECTABLE PID = FLAME IONIZATION DETECTOR PID = PHOTO-IONIZATION DETECTOR					■ OUTER CASING ▨ GROUT ▩ BENTONITE ▤ SAND ▧ SCREEN			

APPENDIX B

WELL SURVEY DATA

RON ARCHER

CIVIL ENGINEER, INC.

CONSULTING • PLANNING • DESIGN • SURVEYING

4133 Mohr Ave., Suite E • Pleasanton, CA 94586
(510) 462-9372 • FAX (510) 462-4454



APRIL 28, 1998

JOB No.2601

ELEVATIONS OF EXISTING MONITORING WELLS AT THE PROPERTY LOCATED AT 1750,
1734 / 1732, WEBSTER STREET, CITY OF OAKLAND, ALAMEDA COUNTY CALIFORNIA.

FOR: ATC ASSOCIATES INC.

BENCHMARK:

A FOUND SQUARE CUT IN THE TOP OF THE CONCRETE CURB AT MID RETURN, AT THE
SOUTHWESTERLY CORNER OF THE INTERSECTION OF 17TH STREET WITH HARRISON
STREET. ELEVATION TAKEN AS 32.25 M.S.L. (N.G.V.D.)

MONITORING WELL DATA TABLE

WELL DESIGNATION	TOP OF CASING ELEVATION	TOP OF BOX ELEVATION
MW-1	30.20	30.89
MW-2	31.31	31.84
MW-3	30.71	31.42

WEBSTER STREET



APPROXIMATE PROPERTY LINE

APPROXIMATE PROPERTY LINE

ADDRESS 1750
WEBSTER ST.

MW-1

135.3'

94.0'

MW-3

ADDRESS 1734 / 1732
WEBSTER STREET

71.9'

EXISTING FENCE

MW-2

APPROX. PROP. LINE

APPROXIMATE PROPERTY LINE

EXISTING BUILDING
ADDRESS 1700 WEBSTER

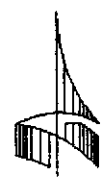
GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.

DATE OF SURVEY: 4-28-98

WEBSTER STREET



APPROXIMATE PROPERTY LINE

APPROXIMATE PROPERTY LINE

ADDRESS 1750 WEBSTER ST.

MW-1

MW-3

ADDRESS 1734 / 1732 WEBSTER STREET

EXISTING FENCE

MW-2

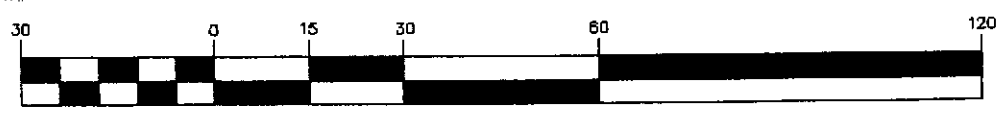
APPROXIMATE PROPERTY LINE

EXISTING BUILDING ADDRESS 1700 WEBSTER

APPROX. PROP. LINE



GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.

DATE OF SURVEY: 4-28-98

APPENDIX C

GROUNDWATER SAMPLING PROTOCOL

FIELD PROTOCOL

The static water level and floating product level, if present, in each well that contained water was measured with an ORS Interphase Probe Model No. 1068018 or Solonist Water Level Indicator; these instruments are accurate to the nearest 0.01 foot. These groundwater depths were subtracted from wellhead elevations, including corrections for product thickness, when necessary, for gradient evaluation by multiplying product thickness (PT) by a correction factor 0.8 and subtracting from the DTW (Adjusted DTW = DTW - [PT x 0.8]).

Water samples collected for subjective evaluation were collected by gently lowering approximately half the length of a new disposable or Teflon® bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples were checked for measurable floating hydrocarbon product. All Teflon® bailers are triple washed with Alconox® and triple rinsed with distilled water prior to use.

Before water samples were collected from the groundwater Monitoring Wells, the wells were purged until stabilization of the temperature, pH, and conductivity were obtained. Approximately three well casing volumes were purged before those characteristics stabilized. The quantity of water purged from each well was calculated as follows:

1 well casing volume = $\pi r^2 h (7.48)$ where:

r = radius of the well casing in feet.

h = column of water in the well in feet
(depth to bottom - depth to water).

7.48 = conversion constant from cubic feet to gallons

Gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

After purging, each well was allowed to recharge to at least 80% of the initial water level. Water samples were collected with a new disposable or Teflon® bailer, and carefully poured into 40-milliliter (ml) glass vials, which were filled so as to produce a positive meniscus. Each vial was preserved with hydrochloric acid, sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace which would allow volatilization to occur. The samples were promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain of Custody Record, to a California-certified laboratory.

APPENDIX D

FIELD SAMPLING LOGS

FIELD REPORT/DATA SHEET

Date: 4/28/98

Project Number: 61877.0004

Field Technician: J. SALA

Day: M (Tu) W Th F

DTW Order	Well ID	Diam.	Lock	Exp. Cap	Total Depth	DTW Initial	DTW Final	Time Sampled	Comments
1	A-1	2	good	good	29.63	19.45	-	-	
2	A-2	↓	↓	↓	28.05	19.65	-	-	
3	A-3	↓	↓	↓	28.97	18.81	-	-	

NOTES:

of Drums on Site 2 with purge water
 6 Drums of Soil cuttings
 1 Drum of Plastic ~~drums~~ Soil TUBES & GARBAGE

Number of Drums Onsite

Full	Empty	TOTAL
		9

Estimated Value: _____

ARE ALL DRUMS LABELLED WITH THE LABELS FACING OUT

ATC ASSOCIATES INC. WATER SAMPLING LOG

WELL DESIGNATION A-1

SITE: Prentiss

SAMPLE DESIGNATION A-1

DATE 4/28/98

PROJECT# 61877 0004

SAMPLER J. SALA

AMBIENT CONDITIONS

WATER LEVEL INFORMATION

MEASURING POINT TOC GROUND SURFACE
 W.L. BEFORE PURGE 19.45 TIME W.L. AFTER PURGE TIME
 W.L. FOR 80% RECOVERY W.L. TIME OF SAMPLE 19:30 DATE TIME

MONITORING WELL PURGE INFORMATION MONITORING WELL PURGE METHOD

WELL DEPTH 29.63 DIAMETER 2 #CASING VOLUMES
 SCREENED INTERVAL PUMP SETTING 26 to 27 feet
 PURGE VOLUME CALCULATION 29.63 - 19.45 = 10.18 x .16 = 1.62 x 10 volumes = 16.2
 TIME PURGE BEGINS 10:19 ACTUAL AMOUNT PURGED 20

TIME	VOLUME	pH	COND.	TEMP	COLOR	TURBIDITY	D.O.	O.R.P.
1019	0	6.70	9.64	67.7	Tan	400	—	—
1022	3.5	6.73	9.23	67.7	↓	400	—	—
1025	7.0	6.74	9.27	67.9	↓	↓	—	—
1027	10	6.73	9.33	67.8	↓	↓	—	—
1030	13	6.74	9.28	67.8	↓	↓	—	—
1032	16.5	6.75	9.20	67.9	↓	↓	—	—
1034	20	6.76	9.17	67.9	↓	↓	—	—

WATER SAMPLING INFORMATION MONITORING WELL SAMPLE METHOD

SAMPLING TIME 1053 DATE 4/28/98
 BOTTLE TYPE NO. VOLUME ANALYSIS LAB PRESERVATION FILTRATION
VOAS 42ml TPH/G/BTEX CRT HCU
MTBE/HVOC

SAMPLING EQUIPMENT INFORMATION

PURGE EQUIPMENT SAMPLING EQUIPMENT
 SUBMERSIBLE PUMP BAILER (TEFLON) SUBMERSIBLE PUMP BAILER (TEFLON) BAILER (DISPOSABLE)
 BAILER (PVC) HONDA PUMP DEDICATED BAILER (PVC) DIPPER PRESSURIZED DISPOSABLE BAILER
 OTHER: OTHER:
 PREVIOUSLY USED IN WELL PREVIOUSLY USED IN WELL
 SITE SITE
 DECON METHOD ALCONOX LIQUINOX DECON METHOD ALCONOX LIQUINOX

QA/QC INFORMATION

TEMP. BLANK YES NO
 TRAVEL BLANK YES NO ID QA/QC SPIKE YES NO ID
 DUPLICATE YES NO ID FIELD BLANK YES NO ID

WELL INTEGRITY: 900 LOCK#: DOLPHIN
 NOTES Draw Down water has strong odor no sheen
22.8 @ 1024 not much silt just milky
23.35 @ 1026
23.90 @ 1029 25.6 @ 1034

SIGNATURE: J. Sala

ATC ASSOCIATES INC. WATER SAMPLING LOG

WELL DESIGNATION A-2 SITE: PRENTISS
 DATE 4/28/98
 SAMPLE DESIGNATION A-2 PROJECT# 61877.0004
 SAMPLER J. SACA

AMBIENT CONDITIONS

WATER LEVEL INFORMATION

MEASURING POINT TDC GROUND SURFACE —
 W.L. BEFORE PURGE 19.65 TIME — W.L. AFTER PURGE — TIME —
 W.L. FOR 80% RECOVERY — W.L. TIME OF SAMPLE 10:04 DATE — TIME —

MONITORING WELL PURGE INFORMATION MONITORING WELL PURGE METHOD

WELL DEPTH 28.05 DIAMETER 2 #CASING VOLUMES —
 SCREENED INTERVAL — PUMP SETTING —
 PURGE VOLUME CALCULATION 28.05 - 19.65 = 8.4 x 16 = 1.34 x 10 volumes = 13.44

TIME PURGE BEGINS 11:19 ACTUAL AMOUNT PURGED 20

TIME	VOLUME	pH	x100 COND.	TEMP	COLOR	TURBIDITY	D.O.	O.R.P.
11:19	0	6.86	7.70	68.2	Teal	Mod	—	—
11:22	3.5	6.73	7.20	67.6	↓	↓	—	—
11:25	8.0	6.71	6.77	66.2	↓	↓	—	—
11:27	10.0	6.70	6.60	66.3	↓	↓	—	—
11:29	15.0	6.69	6.48	66.3	↓	↓	—	—
11:31	17.5	6.68	6.40	66.1	↓	↓	—	—
11:33	20	6.70	6.39	66.1	↓	↓	—	—

WATER SAMPLING INFORMATION MONITORING WELL SAMPLE METHOD

SAMPLING TIME 11:50 DATE 4/28/98
 BOTTLE TYPE VOAS NO. 40MIL VOLUME TPHG/BICX LAB C&T PRESERVATION HCL FILTRATION —
MBE/HOC

SAMPLING EQUIPMENT INFORMATION

PURGE EQUIPMENT: SUBMERSIBLE PUMP — BAILER (TEFLON) — BAILER (PVC) — HONDA PUMP — DEDICATED —
 OTHER: —
 PREVIOUSLY USED IN WELL —
 SITE —
 DECON METHOD ALCONOX LIQUINOX —

SAMPLING EQUIPMENT: — SUBMERSIBLE PUMP — BAILER (TEFLON) BAILER (DISPOSABLE) —
— BAILER (PVC) — DIPPER — PRESSURIZED DISPOSABLE BAILER —
 OTHER: —
 PREVIOUSLY USED IN WELL —
 SITE —
 DECON METHOD ALCONOX — LIQUINOX —

QA/QC INFORMATION

TEMP. BLANK YES NO —
 TRAVEL BLANK YES NO ID — QA/QC SPIKE YES NO ID —
 DUPLICATE YES NO ID — FIELD BLANK YES NO ID —

WELL INTEGRITY: good LOCK#: Dolphin

NOTES Draw Down Not much Silt Just Milky
23.15 @ 11:24
23.7 @ 11:26
24.25 @ 11:29

SIGNATURE: J. Saca

ATC ASSOCIATES INC. WATER SAMPLING LOG

WELL DESIGNATION A-3

SITE: PRENTISS

DATE 4/28/98

SAMPLE DESIGNATION A-3

PROJECT# 61977.0004

SAMPLER J. SALA

AMBIENT CONDITIONS

WATER LEVEL INFORMATION

MEASURING POINT TOC GROUND SURFACE ---
 W.L. BEFORE PURGE 18.51 TIME --- W.L. AFTER PURGE --- TIME ---
 W.L. FOR 80% RECOVERY --- W.L. TIME OF SAMPLE 1995 DATE --- TIME ---

MONITORING WELL PURGE INFORMATION MONITORING WELL PURGE METHOD

WELL DEPTH 28.97 DIAMETER 2 #CASING VOLUMES ---
 SCREENED INTERVAL --- PUMP SETTING ---
 PURGE VOLUME CALCULATION 28.97 - 18.81 = 10.16 x 1.6 = 16.2 x 10 volumes = 16.25
 TIME PURGE BEGINS 1241 ACTUAL AMOUNT PURGED 20

TIME	VOLUME	pH	X100 COND.	TEMP	COLOR	TURBIDITY	D.O.	O.R.P.
1241	0	6.97	7.96	68.9	TAN	MOD	---	---
1243	3	6.88	7.74	68.1	↓	↓	---	---
1245	7	6.81	7.42	67.9	↓	↓	---	---
1247	10	6.91	7.16	67.6	↓	↓	---	---
1249	13	6.80	7.10	67.6	↓	↓	---	---
1252	16	6.78	6.96	67.6	↓	↓	---	---
1255	20	6.77	6.91	67.6	↓	↓	---	---

WATER SAMPLING INFORMATION MONITORING WELL SAMPLE METHOD

SAMPLING TIME 1305 DATE 4/28/98
 BOTTLE TYPE GBAS NO. --- VOLUME 40 MIL ANALYSIS TPHG/BTEX LAB C&T PRESERVATION HCL FILTRATION ---
MTBE/HVOC

SAMPLING EQUIPMENT INFORMATION

PURGE EQUIPMENT: SUBMERSIBLE PUMP --- BAILER (TEFLON) ---
 BAILER (PVC) --- HONDA PUMP --- DEDICATED ---
 OTHER: ---
 PREVIOUSLY USED IN WELL ---
 SITE ---
 DECON METHOD ALCONOX LIQUINOX ---

SAMPLING EQUIPMENT: --- SUBMERSIBLE PUMP --- BAILER (TEFLON) BAILER (DISPOSABLE)
 BAILER (PVC) --- DIPPER --- PRESSURIZED DISPOSABLE BAILER ---
 OTHER: ---
 PREVIOUSLY USED IN WELL ---
 SITE ---
 DECON METHOD ALCONOX --- LIQUINOX ---

QA/QC INFORMATION

TEMP. BLANK --- YES NO ---
 TRAVEL BLANK --- YES NO --- ID --- QA/QC SPIKE --- YES NO --- ID ---
 DUPLICATE --- YES NO --- ID --- FIELD BLANK --- YES NO --- ID ---

WELL INTEGRITY: 9000 LOCK#: DOLPHIN
 NOTES: 21.11 @ 1243 well sandy slt good amount of sand
22.30 @ 1246
22.80 @ 1249
23.05 @ 1253

SIGNATURE: J. Sala

ATC ENVIRONMENTAL INC.

Chain of Custody

6666 OWENS DRIVE

PLEASANTON, CA.
94588

2880 Gume Drive, Suite C
San Jose, CA 95191
Tel: (408) 474-0280
Fax: (408) 434-6662

PH (510) 460 5300

FAX 510 463 2559

Project Name PRENTISS										Turn Around Time Standard 5 to 10 Business Days <input checked="" type="checkbox"/> Priority Rush ___ Business Day(s) <input type="checkbox"/>															
Project Number 61877.0004																									
ATC Environmental Inc. Contact JIM LEHRMAN																									
Laboratory Name CURTIS & TOMPKIN																									
Sample Number	Location	Date	Time	Matrix			Preservative	No. of Containers	Type of Containers	TPH as gas, EPA 8015H	TPH as diesel, EPA 8015M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	BTEX/MTSE EPA 8020	HVOCS EPA 8010	Remarks	
				Soil	Water	Other																			
A-1		4/24/98	1055	X			Hcl		VOAS	X												X	X		
A-2		↓	1150	X			↓			X												X	X		
A-3		↓	1305	X			↓			X												X	X		
Relinquished by sampler <i>[Signature]</i>										Date	4/24/98	Time	1441	Received by <i>[Signature]</i>											
Relinquished by <i>[Signature]</i>										Date		Time		Received by											
Relinquished by										Date		Time		Received by laboratory											
														Date										Time	

FIELD REPORT/DATA SHEET

Date: 8/4/98

Project Number: 61877.0024

Field Technician: J. SALA

Day: (M) Tu W Th F

DTW Order	Well ID	Diam.	Lock	Exp. Cap	Total Depth	DTW Initial	DTW Final	Time Sampled	Comments
	MWA-2	2	good	good	28.40	19.97	-	-	
	A-1	2	↓	↓	29.97	19.80	-	-	
	A-3	2	↓	↓	29.92	19.05	-	-	

NOTES:

Number of Drums Onsite

Full	Empty	TOTAL

Estimated Value: _____

ARE ALL DRUMS LABELLED WITH THE LABELS FACING OUT

ATC ASSOCIATES INC. WATER SAMPLING LOG

WELL DESIGNATION A-01

SITE: Prentiss

SAMPLE DESIGNATION A-01

DATE 8/4/98

PROJECT# 61877.0004

SAMPLER J. SALA

AMBIENT CONDITIONS

WATER LEVEL INFORMATION

MEASURING POINT TOC GROUND SURFACE J
 W.L. BEFORE PURGE 19.97 TIME - W.L. AFTER PURGE - TIME -

W.L. FOR 80% RECOVERY - W.L. TIME OF SAMPLE 20.07 DATE 8/4/98 TIME 1200

MONITORING WELL PURGE INFORMATION

MONITORING WELL PURGE METHOD

WELL DEPTH 28.40 DIAMETER 2 #CASING VOLUMES 3

SCREENED INTERVAL - PUMP SETTING -

PURGE VOLUME CALCULATION 28.40 - 19.97 = 8.43 x .49 = 4.13

TIME PURGE BEGINS 1240 ACTUAL AMOUNT PURGED -

TIME	VOLUME	pH	COND.	TEMP	COLOR	TURBIDITY	D.O.	O.R.P.
1241	0	6.67	883	73.9	clear	Slight	-	-
1245	1.5	6.66	659	70.4	↓	↓	-	-
1247	3.0	6.70	660	69.4	↓	↓	-	-
1249	4.8	6.71	680	68.9	↓	↓	-	-

WATER SAMPLING INFORMATION

MONITORING WELL SAMPLE METHOD

SAMPLING TIME 1310 DATE 8/4/98

BOTTLE TYPE NO. VOLUME ANALYSIS LAB PRESERVATION FILTRATION

VOAS 3 40 MIL TPH G BTEX METS CRP HeL -
↓ 3 ↓ HVOCs ↓ ↓ -

SAMPLING EQUIPMENT INFORMATION

PURGE EQUIPMENT

SUBMERSIBLE PUMP - BAILER (TEFLON)
 BAILER (PVC) - HONDA PUMP - DEDICATED

OTHER: -

PREVIOUSLY USED IN WELL -

SITE -

DECON METHOD ALCONOX LIQUINOX

SAMPLING EQUIPMENT

- SUBMERSIBLE PUMP - BAILER (TEFLON) BAILER (DISPOSABLE)
- BAILER (PVC) - DIPPER - PRESSURIZED DISPOSABLE BAILER

OTHER: -

PREVIOUSLY USED IN WELL -

SITE -

DECON METHOD ALCONOX - LIQUINOX

QA/QC INFORMATION

TEMP. BLANK - YES NO

TRAVEL BLANK - YES NO ID - QA/QC SPIKE - YES NO ID -

DUPLICATE - YES NO ID - FIELD BLANK - YES NO ID -

WELL INTEGRITY: 9000 LOCK#: 9001

NOTES

SIGNATURE: Jeffrey D. Sala

ATC ASSOCIATES INC. WATER SAMPLING LOG

WELL DESIGNATION A-2 SITE: Prentiss
 SAMPLE DESIGNATION A-2 DATE: 8/4/98
 PROJECT# 61877.0004
 SAMPLER J. SALA

AMBIENT CONDITIONS SUNNY w/SLIGHT WIND

WATER LEVEL INFORMATION

MEASURING POINT TOC GROUND SURFACE -
 W.L. BEFORE PURGE 19.80 TIME - W.L. AFTER PURGE - TIME -
 W.L. FOR 80% RECOVERY - W.L. TIME OF SAMPLE 29.97 DATE - TIME -

MONITORING WELL PURGE INFORMATION MONITORING WELL PURGE METHOD

WELL DEPTH 29.97 DIAMETER 2 #CASING VOLUMES 3
 SCREENED INTERVAL - PUMP SETTING -
 PURGE VOLUME CALCULATION 29.97 - 19.80 = 10.17 x .49 = 4.98
 TIME PURGE BEGINS 1124 ACTUAL AMOUNT PURGED 5.0

TIME	VOLUME	pH	COND.	TEMP	COLOR	TURBIDITY	D.O.	O.R.P.
1129	0	6.64	592	70.5	Clear	Slight	-	-
1127	1.5	6.60	542	68.6	↓	↓	-	-
1149	3.0	6.63	553	68.6	↓	Slight	-	-
1155	5.0	6.63	544	68.6	↓	↓	-	-

WATER SAMPLING INFORMATION MONITORING WELL SAMPLE METHOD

BOTTLE TYPE	NO.	VOLUME	ANALYSIS	LAB	PRESERVATION	FILTRATION
USA	3	40ml	TDH4/BTEX/MTBE	CET	HCl	-
↓	3	↓	HVOCs 3010	↓	↓	-

SAMPLING EQUIPMENT INFORMATION

PURGE EQUIPMENT SUBMERSIBLE PUMP - BAILER (TEFLON) - BAILER (PVC) - HONDA PUMP - DEDICATED
 OTHER: -
 PREVIOUSLY USED IN WELL -
 SITE -
 DECON METHOD ALCONOX LIQUINOX

SAMPLING EQUIPMENT - SUBMERSIBLE PUMP - BAILER (TEFLON) BAILER (DISPOSABLE) - BAILER (PVC) - DIPPER - PRESSURIZED DISPOSABLE BAILER
 OTHER: -
 PREVIOUSLY USED IN WELL -
 SITE -
 DECON METHOD ALCONOX - LIQUINOX

QA/QC INFORMATION

TEMP. BLANK - YES NO
 TRAVEL BLANK - YES NO ID - QA/QC SPIKE - YES NO ID -
 DUPLICATE - YES NO ID - FIELD BLANK - YES NO ID -

WELL INTEGRITY good LOCK# good

NOTES
1230 stopped pumping at 2.5 gals. had to switch Batteries to get pump to work

SIGNATURE J. Sala

ATC ASSOCIATES INC. WATER SAMPLING LOG

WELL DESIGNATION A-3 SITE: Prentiss
 SAMPLE DESIGNATION A-3 DATE: 8/4/98
 PROJECT# 61877.0004
 SAMPLER J. Sala

AMBIENT CONDITIONS Sunny Slight wind

WATER LEVEL INFORMATION

MEASURING POINT 10C GROUND SURFACE ---
 W.L. BEFORE PURGE 19.05 TIME --- W.L. AFTER PURGE --- TIME ---
 W.L. FOR 80% RECOVERY --- W.L. TIME OF SAMPLE --- DATE --- TIME ---

MONITORING WELL PURGE INFORMATION MONITORING WELL PURGE METHOD

WELL DEPTH 29.92 DIAMETER 2 #CASING VOLUMES 3
 SCREENED INTERVAL --- PUMP SETTING 25
 PURGE VOLUME CALCULATION 29.92 - 19.05 = 10.87 X .49 = 5.32
 TIME PURGE BEGINS 1031 ACTUAL AMOUNT PURGED 6.0

TIME	VOLUME	pH	COND.	TEMP	COLOR	TURBIDITY	D.O.	O.R.P.
1332	0	6.71	621	70.8	Clear	Slight	---	---
1335	1.5	6.71	604	69.3	Tan	Slight	---	---
1336	3.0	6.67	608	68.1	↓	↓	---	---
1338	4.5	6.64	693	68.0	↓	↓	---	---
1339	6.0	6.60	581	67.9	↓	↓	---	---

WATER SAMPLING INFORMATION MONITORING WELL SAMPLE METHOD

SAMPLING TIME 1347 DATE 8/4/98
 BOTTLE TYPE NO. VOLUME ANALYSIS LAB PRESERVATION FILTRATION
10AS 3 40ML TPHG/BTEX/MTBE CRT He-L ---
↓ 3 ↓ HVOCs ↓ ↓ ---

SAMPLING EQUIPMENT INFORMATION

PURGE EQUIPMENT SAMPLING EQUIPMENT
 SUBMERSIBLE PUMP BAILER (TEFLON) SUBMERSIBLE PUMP BAILER (TEFLON) BAILER (DISPOSABLE)
 BAILER (PVC) HONDA PUMP DEDICATED BAILER (PVC) DIPPER PRESSURIZED DISPOSABLE BAILER
 OTHER: _____ OTHER: _____
 PREVIOUSLY USED IN WELL _____ PREVIOUSLY USED IN WELL _____
 SITE _____ SITE _____
 DECON METHOD ALCONOX LIQUINOX DECON METHOD ALCONOX _____ LIQUINOX _____

QA/QC INFORMATION

TEMP. BLANK YES NO
 TRAVEL BLANK YES NO ID _____ QA/QC SPIKE YES NO ID _____
 DUPLICATE YES NO ID _____ FIELD BLANK YES NO ID _____
 WELL INTEGRITY: good LOCK#: good
 NOTES _____

SIGNATURE: Jeffrey D. Sala

ATC ENVIRONMENTAL INC.

Chain of Custody

2380 Qume Drive, Suite C
 San Jose, CA 95131
 Tel: (408) 474-0280
 Fax: (408) 434-6662

Project Name PRENTISS WEBSTER ST.									MTE TPH as gas/BTEX, EPA 815M VOCs, EPA 8010 VOCs, EPA 8240 VOCs, EPA 8020 VOCs, EPA 8010/8020 SVOCs, EPA 8270 TRPH, SM 5520F TOG, SM 5520B Title 22 Metals, EPA PP (13) Metals, EPA Pesticides Only, EPA 8080	Turn Around Time																
Project Number 61877.0004										Standard 5 to 10 Business Days <input checked="" type="checkbox"/>																
ATC Environmental Inc. Contact JIM LEHRMAN										Priority Rush Business Day(s) <input type="checkbox"/>																
Laboratory Name CURTIS & TOMPKINS																										
Sample Number	Location	Date	Time	Matrix			Preservative	No. of Containers	Type of Containers	TPH as gas/BTEX, EPA 815M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	Soil	CAM 17	BTEX	TPH-MO	Remarks	
				Soil	Water	Other																				
A-2		8-4-98			X		HCL	6	↓	X																
A-1		↓			X		↓	6	↓	X																
A-3		↓			X		↓	6	↓	X																
DRUM Pore water		↓			X		HNO3	1	500 mL PLASTIC glass jar													X			} COMPOSIT Soil samples	
Soil DRUM 2		↓		X			-	1														X				
Soil DRUM 1		↓		X			-	1	↓													X				
Relinquished by sampler Jerry D. Bala									Date	2/4/96	Time	10:10	Received by													
Relinquished by									Date		Time		Received by													
Relinquished by									Date		Time		Received by laboratory ATC Date _____ Time _____													

APPENDIX E

**GROUNDWATER ANALYTICAL LABORATORY REPORT
AND CHAIN OF CUSTODY RECORDS**



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

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

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

Prepared for:

ATC Associates, Inc.
6666 Owens Dr.
Pleasanton, CA 94588

Date: 11-MAY-98
Lab Job Number: 133345
Project ID: 61877.0004
Location: 1750 Webster St.

Reviewed by: Damara Moore

Reviewed by: Teresa K. Morris

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TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133345-001	A-1-10.5FT	40554	04/25/98	04/30/98	04/30/98	
133345-002	A-1-15FT	40554	04/25/98	04/29/98	04/29/98	
133345-003	A-2-11FT	40554	04/26/98	04/30/98	04/30/98	
133345-004	A-2-16FT	40554	04/26/98	04/29/98	04/29/98	

Matrix: Soil

Analyte	Units	133345-001	133345-002	133345-003	133345-004
Diln Fac:		1	1	1	1
Gasoline C7-C12	mg/Kg	<1	<1	<1	<1
Surrogate					
Trifluorotoluene	%REC	102	100	104	103
Bromofluorobenzene	%REC	109	109	111	111

BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133345-001	A-1-10.5FT	40554	04/25/98	04/30/98	04/30/98	
133345-002	A-1-15FT	40554	04/25/98	04/29/98	04/29/98	
133345-003	A-2-11FT	40554	04/26/98	04/30/98	04/30/98	
133345-004	A-2-16FT	40554	04/26/98	04/29/98	04/29/98	

Matrix: Soil

Analyte	Units	133345-001	133345-002	133345-003	133345-004
Diln Fac:		1	1	1	1
MTBE	ug/Kg	<20	<20	<20	<20
Benzene	ug/Kg	<5	<5	<5	<5
Toluene	ug/Kg	<5	<5	<5	<5
Ethylbenzene	ug/Kg	<5	<5	<5	<5
m,p-Xylenes	ug/Kg	<5	<5	<5	<5
o-Xylene	ug/Kg	<5	<5	<5	<5
Surrogate					
Trifluorotoluene	%REC	100	100	103	103
Bromofluorobenzene	%REC	109	110	112	112

TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133345-005	A-3-11.5FT	40554	04/26/98	04/30/98	04/30/98	
133345-006	A-3-17.5FT	40554	04/26/98	04/29/98	04/29/98	

Matrix: Soil

Analyte	Units	133345-005	133345-006
Diln Fac:		1	1
Gasoline C7-C12	mg/Kg	<1	<1
Surrogate			
Trifluorotoluene	%REC	102	105
Bromofluorobenzene	%REC	111	114



BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133345-005	A-3-11.5FT	40554	04/26/98	04/30/98	04/30/98	
133345-006	A-3-17.5FT	40554	04/26/98	04/29/98	04/29/98	

Matrix: Soil

Analyte	Units	133345-005	133345-006
Diln Fac:		1	1
MTBE	ug/Kg	<20	<20
Benzene	ug/Kg	<5	<5
Toluene	ug/Kg	<5	<5
Ethylbenzene	ug/Kg	<5	<5
m,p-Xylenes	ug/Kg	<5	<5
o-Xylene	ug/Kg	<5	<5
Surrogate			
Trifluorotoluene	%REC	102	105
Bromofluorobenzene	%REC	111	115



Lab #: 133345

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 40554
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/29/98
Analysis Date: 04/29/98

MB Lab ID: QC69509

Analyte	Result	
Gasoline C7-C12	<1.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	99	53-157
Bromofluorobenzene	108	53-157



Lab #: 133345

BATCH QC REPORT

BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 40554
Units: ug/Kg
Diln Fac: 1

Prep Date: 04/29/98
Analysis Date: 04/29/98

MB Lab ID: QC69509

Analyte	Result	
MTBE	<20	
Benzene	<5.0	
Toluene	<5.0	
Ethylbenzene	<5.0	
m,p-Xylenes	<5.0	
o-Xylene	<5.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	97	53-126
Bromofluorobenzene	108	35-144



Lab #: 133345

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.	Analysis Method: EPA 8015M
Project#: 61877.0004	Prep Method: EPA 5030
Location: 1750 Webster St.	

LABORATORY CONTROL SAMPLE

Matrix: Soil	Prep Date: 04/29/98
Batch#: 40554	Analysis Date: 04/29/98
Units: mg/Kg	
Diln Fac: 1	

LCS Lab ID: QC69508

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	9.3	10	93	78-120
Surrogate	%Rec	Limits		
Trifluorotoluene	111	53-157		
Bromofluorobenzene	137	53-157		

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

BTXE			
Client: ATC Associates, Inc.	Analysis Method: EPA 8020A		
Project#: 61877.0004	Prep Method: EPA 5030		
Location: 1750 Webster St.			
BLANK SPIKE/BLANK SPIKE DUPLICATE			
Matrix: Soil	Prep Date: 04/29/98		
Batch#: 40554	Analysis Date: 04/29/98		
Units: ug/Kg			
Diln Fac: 1			

BS Lab ID: QC69510

Analyte	Spike Added	BS	%Rec #	Limits
MTBE	100	88.04	88	65-135
Benzene	100	92.73	93	69-118
Toluene	100	91.32	91	73-118
Ethylbenzene	100	90.27	90	68-124
m,p-Xylenes	100	84.7	85	67-124
o-Xylene	100	88.33	88	73-127
<hr/>				
Surrogate		%Rec		Limits
Trifluorotoluene		101		53-126
Bromofluorobenzene		112		35-144

BSD Lab ID: QC69511

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
MTBE	100	91.92	92	65-135	4	20
Benzene	100	94.86	95	69-118	2	14
Toluene	100	93.44	93	73-118	2	21
Ethylbenzene	100	92.58	93	68-124	3	22
m,p-Xylenes	100	86.68	87	67-124	2	22
o-Xylene	100	90.61	91	73-127	3	26
<hr/>						
Surrogate		%Rec		Limits		
Trifluorotoluene		99		53-126		
Bromofluorobenzene		111		35-144		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits



TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
Lab ID: 133366-003
Matrix: Soil
Batch#: 40554
Units: mg/Kg dry weight
Diln Fac: 1

Sample Date: 04/27/98
Received Date: 04/27/98
Prep Date: 04/30/98
Analysis Date: 04/30/98
Moisture: 15%

MS Lab ID: QC69512

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	11.76	<1.176	10.26	87	38-132
Surrogate	%Rec	Limits			
Trifluorotoluene	117	53-157			
Bromofluorobenzene	139	53-157			

MSD Lab ID: QC69513

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	11.76	10.34	88	38-132	1	26
Surrogate	%Rec	Limits				
Trifluorotoluene	118	53-157				
Bromofluorobenzene	140	53-157				

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

ATC ENVIRONMENTAL INC.

Chain of Custody

133345

6666 OWENS Dr
Pleasanton, CA 94588
Tel: 925-460-5300
FAX: 925-463-2559

2980 Gume Drive, Suite C
San Jose, CA 95131
Tel: (408) 474-8280
Fax: (408) 434-6662

Project Name 1750 Webster St.										TPH as gas/BTEX, EPA	TPH as diesel, EPA 8015M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020 MTBE	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	Turn Around Time Standard 5 to 10 Business Days <input checked="" type="checkbox"/> Priority Rush Business Day(s) <input type="checkbox"/>	
Project Number 61877-0004																							
ATC Environmental Inc. Contact James A. Lehrman																							
Laboratory Name Curtis & Tompkins																							
Sample Number	Location	Date	Time	Matrix			Preservative	No. of Containers	Type of Containers	TPH as gas/BTEX, EPA	TPH as diesel, EPA 8015M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020 MTBE	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	Remarks	
				Soil	Water	Other																	
-1 A-1-10.5 ft	Dakland	4-25-98	9:10	X			NONE	1	stainless steel tube	X				X									Analyses: BTEX TPH G MTBE
-2 A-1-15 ft		✓	9:25	X			↓	1	↓	X				X									
-3 A-2-11 ft		4-26-98	10:45	X			NONE	1	stainless steel tube	X				X									
-4 A-2-16 ft		4-26-98	10:55	X			↓	↓	↓	X				X									
-5 A-3-11.5 ft		↓	12:30	X			↓	↓	↓	X				X									
-6 A-3-17.5 ft	✓	↓	12:37	X			↓	↓	↓	X				X									
Relinquished by sampler Bob Wagon										Date 4-26-98		Time 1355		Received by									
Relinquished by										Date		Time		Received by									
Relinquished by										Date		Time		Received by laboratory Dianne Moore									
										Date 4/26/98		Time 1355											



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

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

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

Prepared for:

ATC Associates, Inc.
6666 Owens Dr.
Pleasanton, CA 94588

Date: 12-MAY-98
Lab Job Number: 133379
Project ID: 61877.0004
Location: 1750 Webster St.

Reviewed by: Damara Moore

Reviewed by: _____

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Laboratory Number: **133379**
Client: **ATC Associates, Inc.**
Location: **Prentiss**
Project #: **61877.0004**

Receipt Date: **5/16/98**  Curtis & Tompkins, Ltd.

Case Narrative

This hardcopy data package contains sample results and batch QC for three water samples which were received on April 28th, 1998. All samples were received cold and intact.

VOC's by EPA 8010MS: Samples A-1 (133379-001) and A-2 (133379-002) are reported herein with the surrogate 1,2-Dichlorethane-d4 outside of laboratory QC limits. The samples were not re-analyzed due to high levels of non-target analytes which would have necessitated re-analysis at diluted levels and increased reporting limits. The low surrogate recoveries may be due to matrix effects. Sample chromatograms are enclosed. No other problems were encountered.



TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133379-001	A-1	40709	04/28/98	05/07/98	05/07/98	
133379-002	A-2	40709	04/28/98	05/07/98	05/07/98	
133379-003	A-3	40709	04/28/98	05/07/98	05/07/98	

Matrix: Water

Analyte	Units	133379-001	133379-002	133379-003
Diln Fac:		100	125	20
Gasoline C7-C12	ug/L	56000	84000	23000
Surrogate				
Trifluorotoluene	%REC	118	117	119
Bromofluorobenzene	%REC	115	115	121



BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133379-001	A-1	40709	04/28/98	05/07/98	05/07/98	
133379-002	A-2	40709	04/28/98	05/07/98	05/07/98	
133379-003	A-3	40709	04/28/98	05/07/98	05/07/98	

Matrix: Water

Analyte	Units	133379-001	133379-002	133379-003
Diln Fac:		100	125	20
MTBE	ug/L	<200	<250	<40
Benzene	ug/L	12000	8600	89
Toluene	ug/L	8500	20000	460
Ethylbenzene	ug/L	1500	1600	1400
m,p-Xylenes	ug/L	5300	5400	2500
o-Xylene	ug/L	2000	2600	370
Surrogate				
Trifluorotoluene	%REC	100	98	98
Bromofluorobenzene	%REC	103	101	106



Lab #: 133379

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 40709
Units: ug/L
Diln Fac: 1

Prep Date: 05/07/98
Analysis Date: 05/07/98

MB Lab ID: QC70064

Analyte	Result	
Gasoline C7-C12	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	107	59-162
Bromofluorobenzene	97	59-162



Lab #: 133379

BATCH QC REPORT

BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 40709
Units: ug/L
Diln Fac: 1

Prep Date: 05/07/98
Analysis Date: 05/07/98

MB Lab ID: QC70064

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

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	89	53-124
Bromofluorobenzene	82	41-142

Lab #: 133379

BATCH QC REPORT



Curtis & Tompkins, Ltd.
Page 1 of 1

TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 40709
Units: ug/L
Diln Fac: 1

Prep Date: 05/07/98
Analysis Date: 05/07/98

LCS Lab ID: QC70062

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1946	2000	97	80-119
Surrogate	%Rec	Limits		
Trifluorotoluene	138	59-162		
Bromofluorobenzene	106	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

Lab #: 133379

BATCH QC REPORT



Curtis & Tompkins, Ltd.
Page 1 of 1

BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 40709
Units: ug/L
Diln Fac: 1

Prep Date: 05/07/98
Analysis Date: 05/07/98

LCS Lab ID: QC70063

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	18.44	20	92	65-135
Benzene	17.75	20	89	69-109
Toluene	18.28	20	91	72-116
Ethylbenzene	17.4	20	87	67-120
m,p-Xylenes	19.25	20	96	69-117
o-Xylene	18.32	20	92	75-122
Surrogate	%Rec	Limits		
Trifluorotoluene	92	53-124		
Bromofluorobenzene	91	41-142		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

BTXE

Client: ATC Associates	Analysis Method: EPA 8020A
Project#: 61877.0004	Prep Method: EPA 5030
Location: 1750 Webster St.	

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ	Sample Date: 04/28/98
Lab ID: 133397-025	Received Date: 04/28/98
Matrix: Water	Prep Date: 05/07/98
Batch#: 40709	Analysis Date: 05/07/98
Units: ug/L	
Diln Fac: 1	

MS Lab ID: QC70065

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Benzene	20	<0.5	18.04	90	55-125
Toluene	20	<0.5	18.75	94	65-126
Ethylbenzene	20	<0.5	17.84	89	60-129
m,p-Xylenes	20	<0.5	19.43	97	68-116
o-Xylene	20	<0.5	18.84	94	69-129
Surrogate					
	%Rec	Limits			
Trifluorotoluene	99	53-124			
Bromofluorobenzene	99	41-142			

MSD Lab ID: QC70066

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Benzene	20	18.87	94	55-125	4	11
Toluene	20	19.19	96	65-126	2	11
Ethylbenzene	20	18.45	92	60-129	3	12
m,p-Xylenes	20	20.13	101	68-116	4	11
o-Xylene	20	19.68	98	69-129	4	12
Surrogate						
	%Rec	Limits				
Trifluorotoluene	100	53-124				
Bromofluorobenzene	103	41-142				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

Halogenated Volatile Organics
 EPA 8010 Analyte List

 Client: ATC Associates, Inc.
 Project#: 61877.0004
 Location: 1750 Webster St.

 Analysis Method: EPA 8260
 Prep Method: EPA 5030

 Field ID: A-1
 Lab ID: 133379-001
 Matrix: Water
 Batch#: 40737
 Units: ug/L
 Diln Fac: 1

 Sampled: 04/28/98
 Received: 04/28/98
 Extracted: 05/08/98
 Analyzed: 05/08/98

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Vinyl Chloride	ND	2.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	21	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	13	1.0
Trichloroethene	5.5	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	4.8	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	84*	85-121
Toluene-d8	103	92-110
Bromofluorobenzene	100	84-115

* Values outside of QC limits

Halogenated Volatile Organics
EPA 8010 Analyte ListClient: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.Analysis Method: EPA 8260
Prep Method: EPA 5030Field ID: A-2
Lab ID: 133379-002
Matrix: Water
Batch#: 40737
Units: ug/L
Diln Fac: 1Sampled: 04/28/98
Received: 04/28/98
Extracted: 05/08/98
Analyzed: 05/08/98

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Vinyl Chloride	ND	2.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	18	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	3.1	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	2.7	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	69*	85-121
Toluene-d8	102	92-110
Bromofluorobenzene	105	84-115

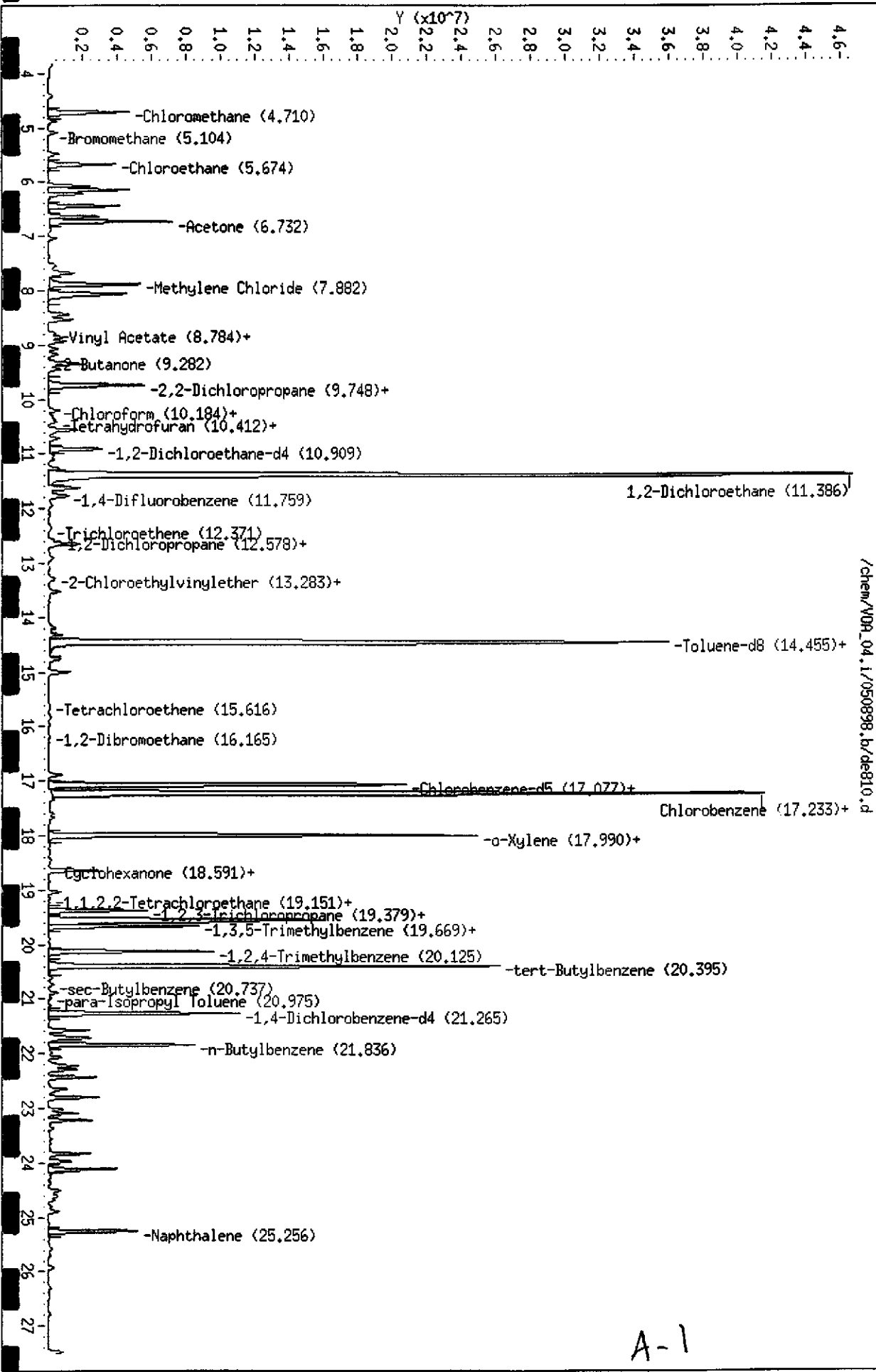
* Values outside of QC limits

Halogenated Volatile Organics
EPA 8010 Analyte ListClient: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.Analysis Method: EPA 8260
Prep Method: EPA 5030Field ID: A-3
Lab ID: 133379-003
Matrix: Water
Batch#: 40764
Units: ug/L
Diln Fac: 1Sampled: 04/28/98
Received: 04/28/98
Extracted: 05/09/98
Analyzed: 05/09/98

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Vinyl Chloride	ND	2.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	10	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	2.5	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	94	85-121
Toluene-d8	101	92-110
Bromofluorobenzene	101	84-115

Data File: /chem/VDR_04.1/050898.b/de810.d
Date: 08-MAY-98 16:36
Client ID: DYNA Pet
Sample Info: S.133379-001
Purge Volume: 5.0
Column phase: RTX Volatiles

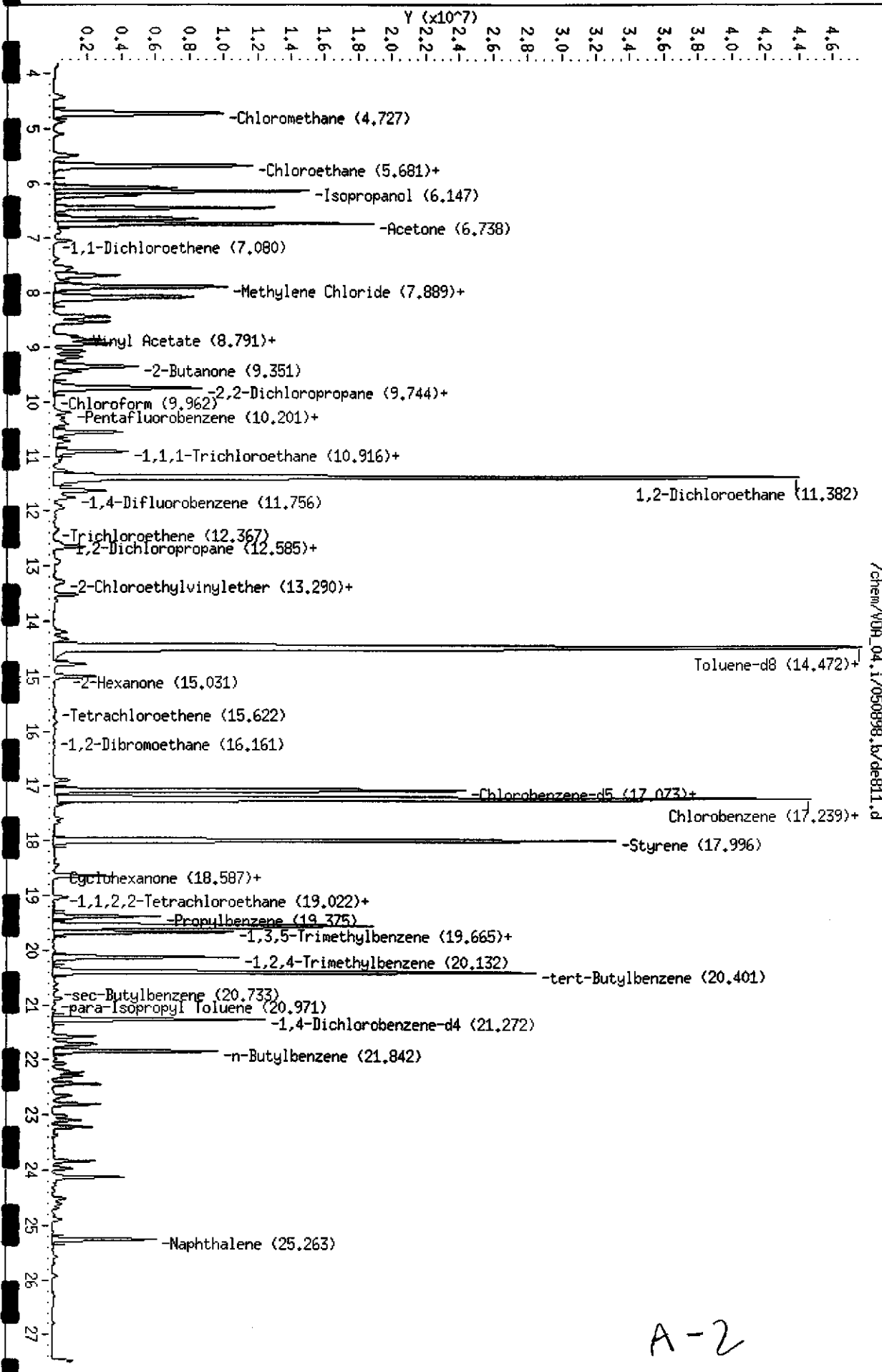
Instrument: VDR_04.1
Operator: DM
Column diameter: 0.32



A-1

Data File: /chem/V09_04.i/050898.b/de811.d
Date: 08-MAY-98 17:10
Client ID: DYNR P&T
Sample Info: S,133379-002
Purge Volume: 5.0
Column phase: RTX Volatiles

Instrument: V09_04.i
Operator: DM
Column diameter: 0.32



A-2

Lab #: 133379

BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 40737
Units: ug/L
Diln Fac: 1

Prep Date: 05/08/98
Analysis Date: 05/08/98

MB Lab ID: QC70167

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Vinyl Chloride	ND	2.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	100	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	106	84-115



Lab #: 133379

BATCH QC REPORT

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 40764
Units: ug/L
Diln Fac: 1

Prep Date: 05/09/98
Analysis Date: 05/09/98

MB Lab ID: QC70256

Analyte	Result	Reporting Limit
Chloromethane	ND	2.0
Vinyl Chloride	ND	2.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	0.59J	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	101	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	100	84-115

Halogenated Volatile Organics

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 40737
Units: ug/L
Diln Fac: 1

Prep Date: 05/08/98
Analysis Date: 05/08/98

BS Lab ID: QC70165

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	46.83	94	69-137
Trichloroethene	50	48.72	97	83-116
Chlorobenzene	50	49.44	99	87-117
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	98	85-121		
Toluene-d8	96	92-110		
Bromofluorobenzene	97	84-115		

BSD Lab ID: QC70166

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	47.03	94	69-137	0	14
Trichloroethene	50	48.88	98	83-116	0	10
Chlorobenzene	50	49.51	99	87-117	0	10
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	96	85-121				
Toluene-d8	100	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 3 outside limits

Spike Recovery: 0 out of 6 outside limits



Halogenated Volatile Organics

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 40764
Units: ug/L
Diln Fac: 1

Prep Date: 05/09/98
Analysis Date: 05/09/98

BS Lab ID: QC70254

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	46.81	94	69-137
Trichloroethene	50	49.32	99	83-116
Chlorobenzene	50	49.64	99	87-117
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	98	85-121		
Toluene-d8	100	92-110		
Bromofluorobenzene	101	84-115		

BSD Lab ID: QC70255

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	47.17	94	69-137	1	14
Trichloroethene	50	51.1	102	83-116	4	10
Chlorobenzene	50	51.1	102	87-117	3	10
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	98	85-121				
Toluene-d8	100	92-110				
Bromofluorobenzene	100	84-115				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

133399

6666 OWENS DRIVE

ATC ENVIRONMENTAL INC.

Chain of Custody

PLEASANTON, CA. 2388 Gurne Drive, Suite C
 94588 San Jose, CA 95131
 Tel: (408) 474-0280
 Fax: (408) 434-6662
 PH (510) 460 5300
 FAX 510 463 2559

Project Name PRENTISS										Turn Around Time Standard 5 to 10 Business Days <input checked="" type="checkbox"/> Priority Rush _____ Business Day(s) <input type="checkbox"/>																
Project Number 61877.0004																										
ATC Environmental Inc. Contact JIM LEHRMAN																										
Laboratory Name CURTIS & TOMPKIN																										
Sample Number	Location	Date	Time	Matrix			Preservative	No. of Containers	Type of Containers	TPH as gas, EPA 8015M	TPH as diesel, EPA 8015M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	BTEX/MTBE EPA 8020	HVOCs EPA 8010	Remarks		
				Soil	Water	Other																				
1 A-1		4/28/98	1053		X		HCL		VOAS	X																
2 A-2		↓	1150		X		↓			X																
3 A-3		↓	1305		X		↓			X																
Relinquished by sampler <i>[Signature]</i>										Date	4/28/98	Time	1441	Received by		J GUERRERO		4-28-98 / 14:41 pm								
Relinquished by										Date		Time		Received by												
Relinquished by										Date		Time		Received by laboratory				Date		Time						



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:

ATC Associates, Inc.
6666 Owens Dr.
Pleasanton, CA 94588

Date: 20-AUG-98
Lab Job Number: 134897
Project ID: 61877.0004
Location: 1750 Webster St.

Reviewed by: _____

Reviewed by: _____

This package may be reproduced only in its entirety.

TEH-Tot Ext Hydrocarbons

 Client: ATC Associates, Inc.
 Project#: 61877.0004
 Location: 1750 Webster St.

 Analysis Method: EPA 8015M
 Prep Method: CA LUFT

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134897-007	COMP SOIL DRUM-(1,2)	42625	08/04/98	08/11/98	08/13/98	

Matrix: Soil

Analyte	Units	134897-007
Diln Fac:		1
Diesel C12-C22	mg/Kg	5.2YH
Motor Oil C22-C50	mg/Kg	46 YH
Surrogate		
Hexacosane	%REC	94

 Y: Sample exhibits fuel pattern which does not resemble standard
 H: Heavier hydrocarbons than indicated standard

Chromatogram

Sample Name : 134897-007,42625

Sample #: 42625

Page 1 of 1

FileName : D:\GC13\CHB\223B026.RAW

Date : 8/19/98 11:54 AM

Method : BTEH224.MTH

Time of Injection: 8/13/98 04:53 AM

Start Time : 0.07 min

End Time : 31.91 min

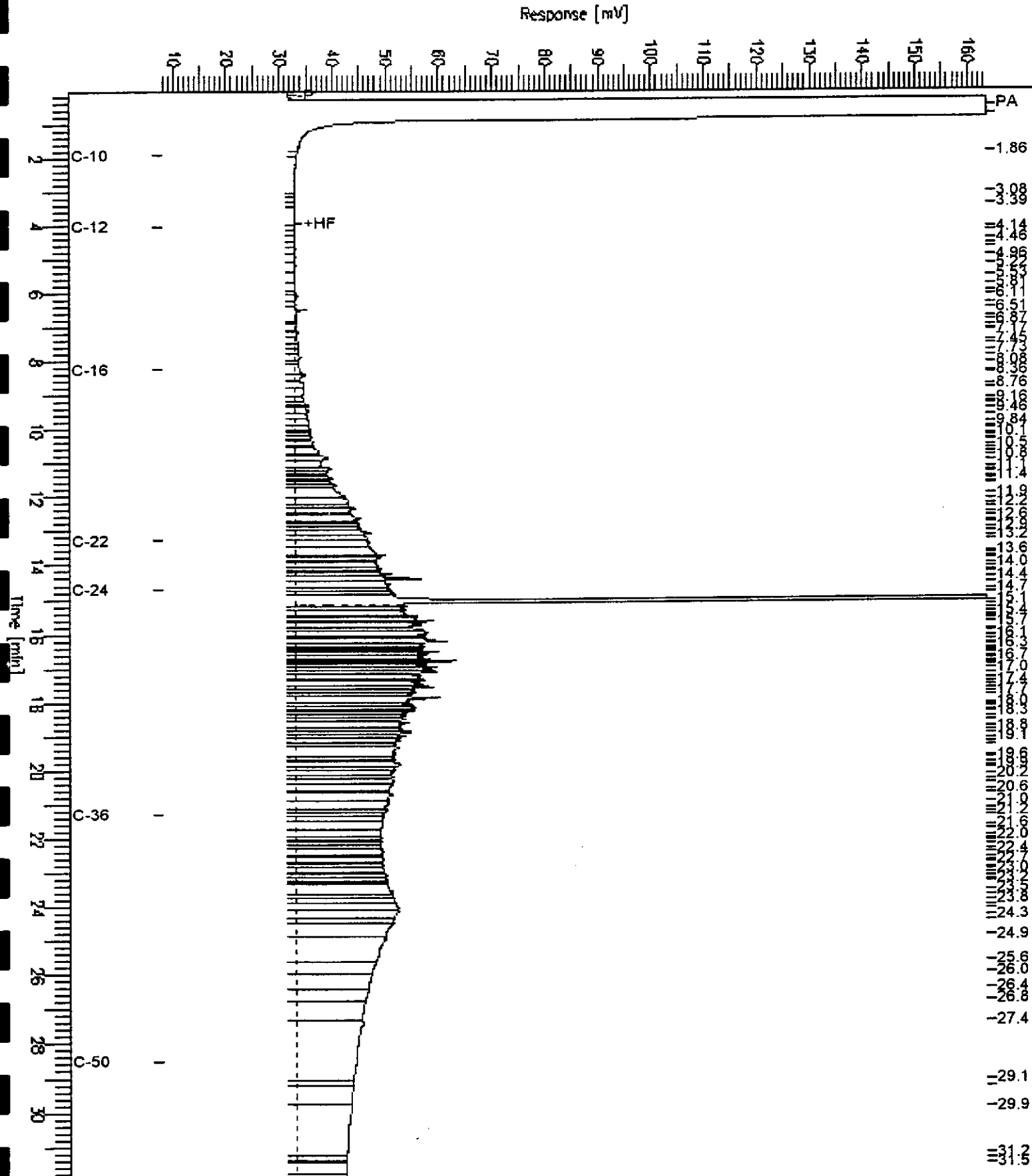
Low Point : 7.78 mV

High Point : 163.68 mV

Scale Factor: 0.0

Plot Offset: 8 mV

Plot Scale: 155.9 mV



Chromatogram

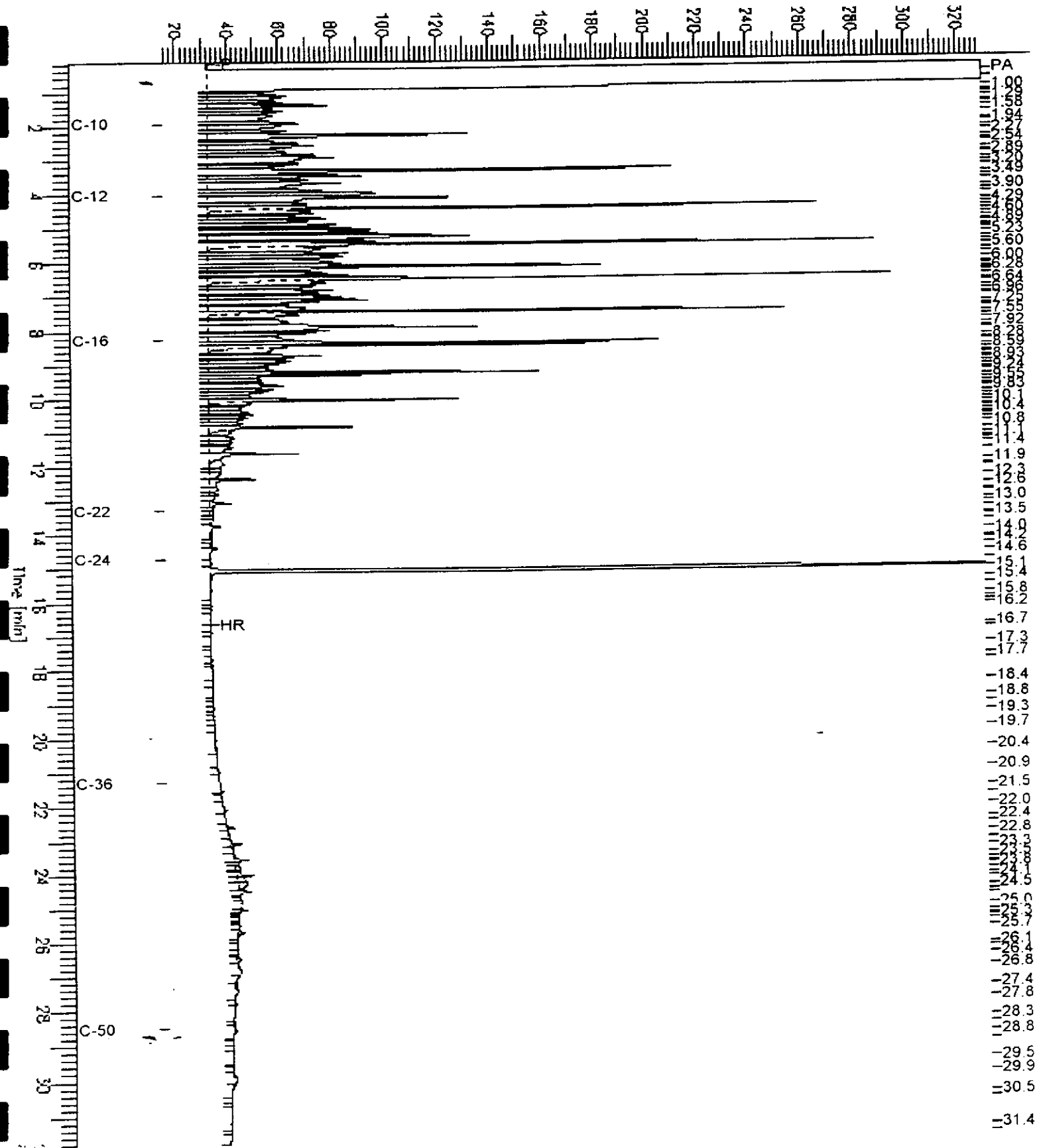
Sample Name : CCV, 98WS6167, DS
FileName : C:\GC13\CHB\223B002.RAW
Method : BTEH181.MTH
Start Time : 0.12 min
Scale Factor: 0.0

End Time : 31.85 min
Plot Offset: 15 mV

Sample #: 500MG/L
Date : 8/12/98 12:27 PM
Time of Injection: 8/12/98 10:24 AM
Low Point : 14.97 mV
Plot Scale: 314.7 mV

Page 1 of 1

Response [mV]



Lab #: 134897

BATCH QC REPORT



Curtis & Associates, Inc.

TEH-Tot Ext Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: CA LUFT

METHOD BLANK

Matrix: Soil
Batch#: 42625
Units: mg/Kg
Diln Fac: 1

Prep Date: 08/11/98
Analysis Date: 08/12/98

MB Lab ID: QC77104

Analyte	Result	
Diesel C12-C22	<1.0	
Motor Oil C22-C50	<5.0	
Surrogate	%Rec	Recovery Limits
Hexacosane	93	48-142

Lab #: 134897

BATCH QC REPORT



Curtis & Associates, Inc.

TEH-Tot Ext Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: CA LUFT

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 42625
Units: mg/Kg
Diln Fac: 1

Prep Date: 08/11/98
Analysis Date: 08/13/98

LCS Lab ID: QC77105

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	39.4	49.5	80	49-108
Surrogate	%Rec	Limits		
Hexacosane	96	48-142		

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



BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134897-007	COMP SOIL DRUM-(1,2)	42552	08/04/98	08/07/98	08/07/98	

Matrix: Soil

Analyte	Units	134897-007
Diln Fac:		1
MTBE	ug/Kg	<20
Benzene	ug/Kg	<5
Toluene	ug/Kg	<5
Ethylbenzene	ug/Kg	<5
m,p-Xylenes	ug/Kg	<5
o-Xylene	ug/Kg	<5
Surrogate		
Trifluorotoluene	%REC	104
Bromofluorobenzene	%REC	108



BTXE

Client: ATC Associates, Inc.
 Project#: 61877.0004
 Location: 1750 Webster St.

Analysis Method: EPA 8020A
 Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
 Batch#: 42552
 Units: ug/Kg
 Diln Fac: 1

Prep Date: 08/07/98
 Analysis Date: 08/07/98

MB Lab ID: QC76849

Analyte	Result	
MTBE	<20	
Benzene	<5.0	
Toluene	<5.0	
Ethylbenzene	<5.0	
m,p-Xylenes	<5.0	
o-Xylene	<5.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	98	53-126
Bromofluorobenzene	107	35-144



BTXE

Client: ATC Associates, Inc.
 Project#: 61877.0004
 Location: 1750 Webster St.

Analysis Method: EPA 8020A
 Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
 Batch#: 42552
 Units: ug/Kg
 Diln Fac: 1

Prep Date: 08/07/98
 Analysis Date: 08/07/98

LCS Lab ID: QC76848

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	86.93	100	87	65-135
Benzene	80.82	100	81	69-118
Toluene	91.62	100	92	73-118
Ethylbenzene	85.96	100	86	68-124
m,p-Xylenes	200.4	200	100	67-124
o-Xylene	97.17	100	97	73-127
Surrogate	%Rec	Limits		
Trifluorotoluene	101	53-126		
Bromofluorobenzene	111	35-144		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

Lab #: 134897

BATCH QC REPORT



Curtis & Tompkins Ltd.

BTXE

Client: ATC Associates, Inc.
 Project#: 61877.0004
 Location: 1750 Webster St.

Analysis Method: EPA 8020A
 Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Soil
 Batch#: 42552
 Units: ug/Kg
 Diln Fac: 1

Prep Date: 08/08/98
 Analysis Date: 08/08/98

BS Lab ID: QC77248

Analyte	Spike Added	BS	%Rec #	Limits
MTBE	100	85.44	85	65-135
Benzene	100	77.41	77	69-118
Toluene	100	86.99	87	73-118
Ethylbenzene	100	81	81	68-124
m,p-Xylenes	200	185.6	93	67-124
o-Xylene	100	90.04	90	73-127
Surrogate	%Rec	Limits		
Trifluorotoluene	92	53-126		
Bromofluorobenzene	101	35-144		

BSD Lab ID: QC77249

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
MTBE	100	86.94	87	65-135	2	20
Benzene	100	78.57	79	69-118	1	14
Toluene	100	89.68	90	73-118	3	21
Ethylbenzene	100	78.57	79	68-124	3	22
m,p-Xylenes	100	181.8	91	67-124	2	22
o-Xylene	100	88.84	89	73-127	1	26
Surrogate	%Rec	Limits				
Trifluorotoluene	93	53-126				
Bromofluorobenzene	102	35-144				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits

Halogenated Volatile Organics
EPA 8010 Analyte ListClient: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.Analysis Method: EPA 8260
Prep Method: EPA 5030Field ID: A-2
Lab ID: 134897-001
Matrix: Water
Batch#: 42585
Units: ug/L
Diln Fac: 33.33Sampled: 08/04/98
Received: 08/04/98
Extracted: 08/11/98
Analyzed: 08/11/98

Analyte	Result	Reporting Limit
Chloromethane	ND	33
Vinyl Chloride	ND	33
Bromomethane	ND	33
Chloroethane	ND	33
Trichlorofluoromethane	ND	17
Freon 113	ND	33
1,1-Dichloroethene	ND	17
Methylene Chloride	ND	670
trans-1,2-Dichloroethene	ND	17
1,1-Dichloroethane	ND	17
cis-1,2-Dichloroethene	22	17
Chloroform	ND	33
1,1,1-Trichloroethane	ND	17
Carbon Tetrachloride	ND	17
1,2-Dichloroethane	ND	17
Trichloroethene	52	17
1,2-Dichloropropane	ND	17
Bromodichloromethane	ND	17
cis-1,3-Dichloropropene	ND	17
trans-1,3-Dichloropropene	ND	17
1,1,2-Trichloroethane	ND	17
Tetrachloroethene	ND	17
Dibromochloromethane	ND	17
Chlorobenzene	ND	17
Bromoform	ND	17
1,1,2,2-Tetrachloroethane	ND	17
1,3-Dichlorobenzene	ND	17
1,4-Dichlorobenzene	ND	17
1,2-Dichlorobenzene	ND	17

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

Halogenated Volatile Organics
EPA 8010 Analyte ListClient: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.Analysis Method: EPA 8260
Prep Method: EPA 5030Field ID: A-1
Lab ID: 134897-002
Matrix: Water
Batch#: 42585
Units: ug/L
Diln Fac: 10Sampled: 08/04/98
Received: 08/04/98
Extracted: 08/11/98
Analyzed: 08/11/98

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	10
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	200
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	19	5.0
Chloroform	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	8.4	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	105	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	100	84-115

Halogenated Volatile Organics
EPA 8010 Analyte ListClient: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.Analysis Method: EPA 8260
Prep Method: EPA 5030Field ID: A-3
Lab ID: 134897-003
Matrix: Water
Batch#: 42585
Units: ug/L
Diln Fac: 10Sampled: 08/04/98
Received: 08/04/98
Extracted: 08/11/98
Analyzed: 08/11/98

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	10
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	200
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	9.6	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	104	85-121
Toluene-d8	99	92-110
Bromofluorobenzene	101	84-115



Halogenated Volatile Organics
EPA 8010 Analyte List

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 42585
Units: ug/L
Diln Fac: 1

Prep Date: 08/10/98
Analysis Date: 08/10/98

MB Lab ID: QC76972

Analyte	Result	Reporting Limit
Chloromethane	ND	1.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	107	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	105	84-115



Halogenated Volatile Organics
EPA 8010 Analyte List

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 42585
Units: ug/L
Diln Fac: 1

Prep Date: 08/10/98
Analysis Date: 08/10/98

MB Lab ID: QC76973

Analyte	Result	Reporting Limit
Chloromethane	ND	1.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	105	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	104	84-115



Halogenated Volatile Organics

Client: ATC Associates, Inc.
 Project#: 61877.0004
 Location: 1750 Webster St.

Analysis Method: EPA 8260
 Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
 Batch#: 42585
 Units: ug/L
 Diln Fac: 1

Prep Date: 08/10/98
 Analysis Date: 08/10/98

BS Lab ID: QC76970

Analyte	Spike Added	BS	%Rec #	Limits
1,1-Dichloroethene	50	52.55	105	69-137
Trichloroethene	50	50.3	101	83-116
Chlorobenzene	50	49.05	98	87-117
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	102	85-121		
Toluene-d8	98	92-110		
Bromofluorobenzene	103	84-115		

BSD Lab ID: QC76971

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	55.13	110	69-137	5	14
Trichloroethene	50	53.73	107	83-116	7	10
Chlorobenzene	50	51.98	104	87-117	6	10
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	105	85-121				
Toluene-d8	99	92-110				
Bromofluorobenzene	103	84-115				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

Halogenated Volatile Organics
EPA 8010 Analyte ListClient: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.Analysis Method: EPA 8260
Prep Method: EPA 5030Field ID: COMP SOIL DRUM- (1,2)
Lab ID: 134897-007
Matrix: Soil
Batch#: 42572
Units: ug/Kg
Diln Fac: 1Sampled: 08/04/98
Received: 08/04/98
Extracted: 08/08/98
Analyzed: 08/08/98

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	75-130
Toluene-d8	99	89-110
Bromofluorobenzene	106	83-117

Lab #: 134897

BATCH QC REPORT



Curtis & Tompkins, Inc. 1

Halogenated Volatile Organics
EPA 8010 Analyte List

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 42572
Units: ug/Kg
Diln Fac: 1

Prep Date: 08/07/98
Analysis Date: 08/07/98

MB Lab ID: QC76913

Analyte	Result	Reporting Limit
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	102	75-130
Toluene-d8	99	89-110
Bromofluorobenzene	104	83-117

Halogenated Volatile Organics

Client: ATC Associates, Inc.	Analysis Method: EPA 8260
Project#: 61877.0004	Prep Method: EPA 5030
Location: 1750 Webster St.	

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ	Sample Date: 08/03/98
Lab ID: 134872-001	Received Date: 08/03/98
Matrix: Soil	Prep Date: 08/12/98
Batch#: 42572	Analysis Date: 08/12/98
Units: ug/Kg	
Diln Fac: 1	

MS Lab ID: QC76914

Analyte	Spike Added	Sample	MS	%Rec #	Limits
1,1-Dichloroethene	50	<5	34.85	70	33-153
Trichloroethene	50	<5	32.18	64	38-144
Chlorobenzene	50	<5	27.05	54	39-127
Surrogate	%Rec	Limits			
1,2-Dichloroethane-d4	99	75-130			
Toluene-d8	102	89-110			
Bromofluorobenzene	102	83-117			

MSD Lab ID: QC76915

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
1,1-Dichloroethene	50	28.56	57	33-153	20	27
Trichloroethene	50	25.31	51	38-144	24	29
Chlorobenzene	50	19.72	39	39-127	31 *	27
Surrogate	%Rec	Limits				
1,2-Dichloroethane-d4	100	75-130				
Toluene-d8	103	89-110				
Bromofluorobenzene	105	83-117				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

Lab #: 134897

BATCH QC REPORT



Curtis & Tompkins, Inc. 1

Halogenated Volatile Organics

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8260
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 42572
Units: ug/Kg
Diln Fac: 1

Prep Date: 08/07/98
Analysis Date: 08/07/98

LCS Lab ID: QC76912

Analyte	Result	Spike Added	%Rec #	Limits
1,1-Dichloroethene	44.09	50	88	60-156
Trichloroethene	45.44	50	91	80-130
Chlorobenzene	45.67	50	91	88-124
Surrogate	%Rec	Limits		
1,2-Dichloroethane-d4	101	75-130		
Toluene-d8	102	89-110		
Bromofluorobenzene	102	83-117		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 3 outside limits



TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134897-001	A-2	42617	08/04/98	08/13/98	08/13/98	
134897-002	A-1	42617	08/04/98	08/13/98	08/13/98	
134897-003	A-3	42617	08/04/98	08/13/98	08/13/98	

Matrix: Water

Analyte	Units	134897-001	134897-002	134897-003
Diln Fac:		200	100	10
Gasoline C7-C12	ug/L	73000	59000	23000
Surrogate				
Trifluorotoluene	%REC	112	115	119
Bromofluorobenzene	%REC	108	119	122



BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134897-001	A-2	42617	08/04/98	08/13/98	08/13/98	
134897-002	A-1	42617	08/04/98	08/13/98	08/13/98	
134897-003	A-3	42617	08/04/98	08/13/98	08/13/98	

Matrix: Water

Analyte	Units	134897-001	134897-002	134897-003
Diln Fac:		200	100	10
MTBE	ug/L	<400	<200	<20
Benzene	ug/L	7700	12000	65
Toluene	ug/L	18000	9200	270
Ethylbenzene	ug/L	1400	1700	1300
m,p-Xylenes	ug/L	5100	6100	2400
o-Xylene	ug/L	2300	2300	250
Surrogate				
Trifluorotoluene	%REC	83	86	85
Bromofluorobenzene	%REC	86	95	97

Lab #: 134897

BATCH QC REPORT

TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 42617
Units: ug/L
Diln Fac: 1

Prep Date: 08/13/98
Analysis Date: 08/13/98

MB Lab ID: QC77073

Analyte	Result	
Gasoline C7-C12	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	108	59-162
Bromofluorobenzene	108	59-162

Lab #: 134897

BATCH QC REPORT



Curtis & Tompkins Ltd
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BTXE

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8020A
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 42617
Units: ug/L
Diln Fac: 1

Prep Date: 08/13/98
Analysis Date: 08/13/98

MB Lab ID: QC77073

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

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	79	53-124
Bromofluorobenzene	79	41-142

Lab #: 134897

BATCH QC REPORT



Curtis & Tompkins Ltd
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TVH-Total Volatile Hydrocarbons

Client: ATC Associates, Inc.
Project#: 61877.0004
Location: 1750 Webster St.

Analysis Method: EPA 8015M
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Water
Batch#: 42617
Units: ug/L
Diln Fac: 1

Prep Date: 08/13/98
Analysis Date: 08/13/98

LCS Lab ID: QC77071

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	1930	2000	96	80-119
Surrogate	%Rec	Limits		
Trifluorotoluene	135	59-162		
Bromofluorobenzene	112	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



BTXE

Client: ATC Associates, Inc.	Analysis Method: EPA 8020A
Project#: 61877.0004	Prep Method: EPA 5030
Location: 1750 Webster St.	

LABORATORY CONTROL SAMPLE

Matrix: Water	Prep Date: 08/13/98
Batch#: 42617	Analysis Date: 08/13/98
Units: ug/Kg	
Diln Fac: 1	

LCS Lab ID: QC77072

Analyte	Result	Spike Added	%Rec #	Limits
MTBE	18.47	20	92	65-135
Benzene	15.21	20	76	69-109
Toluene	18.3	20	92	72-116
Ethylbenzene	17.92	20	90	67-120
m,p-Xylenes	38.27	40	96	69-117
o-Xylene	19.15	20	96	75-122
Surrogate	%Rec	Limits		
Trifluorotoluene	82	53-124		
Bromofluorobenzene	85	41-142		

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

Lab #: 134897

BATCH QC REPORT



Curtis & Tompkins, Ltd. 1

BTXE

Client: ATC Associates, Inc.
 Project#: 61877.0004
 Location: 1750 Webster St.

Analysis Method: EPA 8020A
 Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ
 Lab ID: 134920-004
 Matrix: Water
 Batch#: 42617
 Units: ug/L
 Diln Fac: 1

Sample Date: 08/04/98
 Received Date: 08/04/98
 Prep Date: 08/13/98
 Analysis Date: 08/13/98

MS Lab ID: QC77074

Analyte	Spike Added	Sample	MS	%Rec #	Limits
MTBE	20	<2	17.54	88	65-135
Benzene	20	<0.5	15.4	77	55-125
Toluene	20	<0.5	18.22	91	65-126
Ethylbenzene	20	<0.5	17.93	90	60-129
m,p-Xylenes	40	<0.5	37.7	94	68-116
o-Xylene	20	<0.5	19.11	96	69-129
Surrogate	%Rec	Limits			
Trifluorotoluene	80	53-124			
Bromofluorobenzene	84	41-142			

MSD Lab ID: QC77075

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
MTBE	20	19.59	98	65-135	11	20
Benzene	20	16.21	81	55-125	5	11
Toluene	20	19.15	96	65-126	5	11
Ethylbenzene	20	18.72	94	60-129	4	12
m,p-Xylenes	40	39.47	99	68-116	5	11
o-Xylene	20	19.92	100	69-129	4	12
Surrogate	%Rec	Limits				
Trifluorotoluene	82	53-124				
Bromofluorobenzene	86	41-142				

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

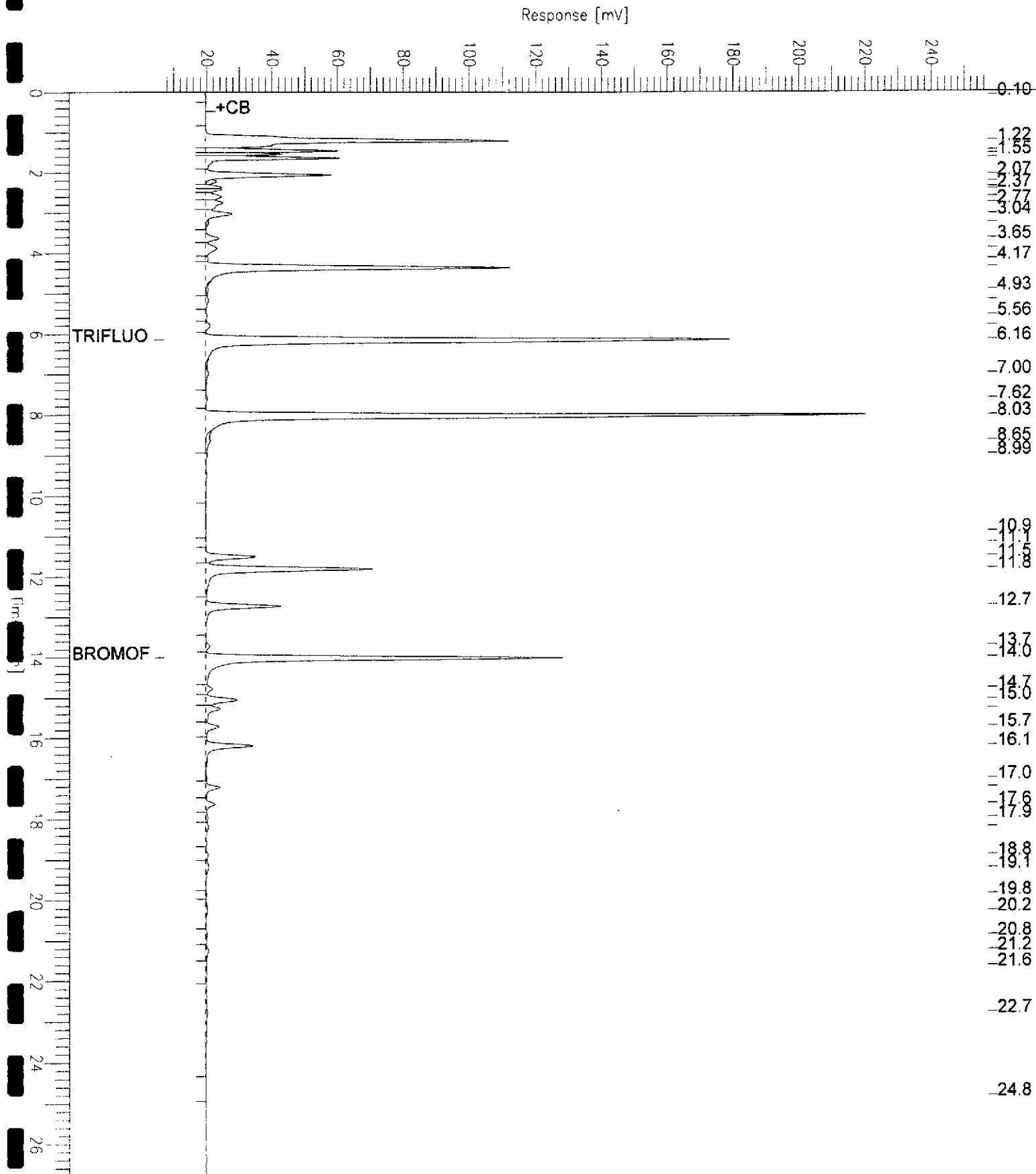
Spike Recovery: 0 out of 12 outside limits

GC05 'G' File TVH

Sample Name : RR,D,134897-001,42617,
 File Name : G:\GC05\DATA\225G015.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor : -1.0

End Time : 26.80 min
 Plot Offset : 7 mV

Sample # :
 Date : 8/13/98 08:21 PM
 Time of Injection: 8/13/98 07:54 PM
 Low Point : 7.03 mV
 Plot Scale: 250.0 mV
 High Point : 257.03 mV

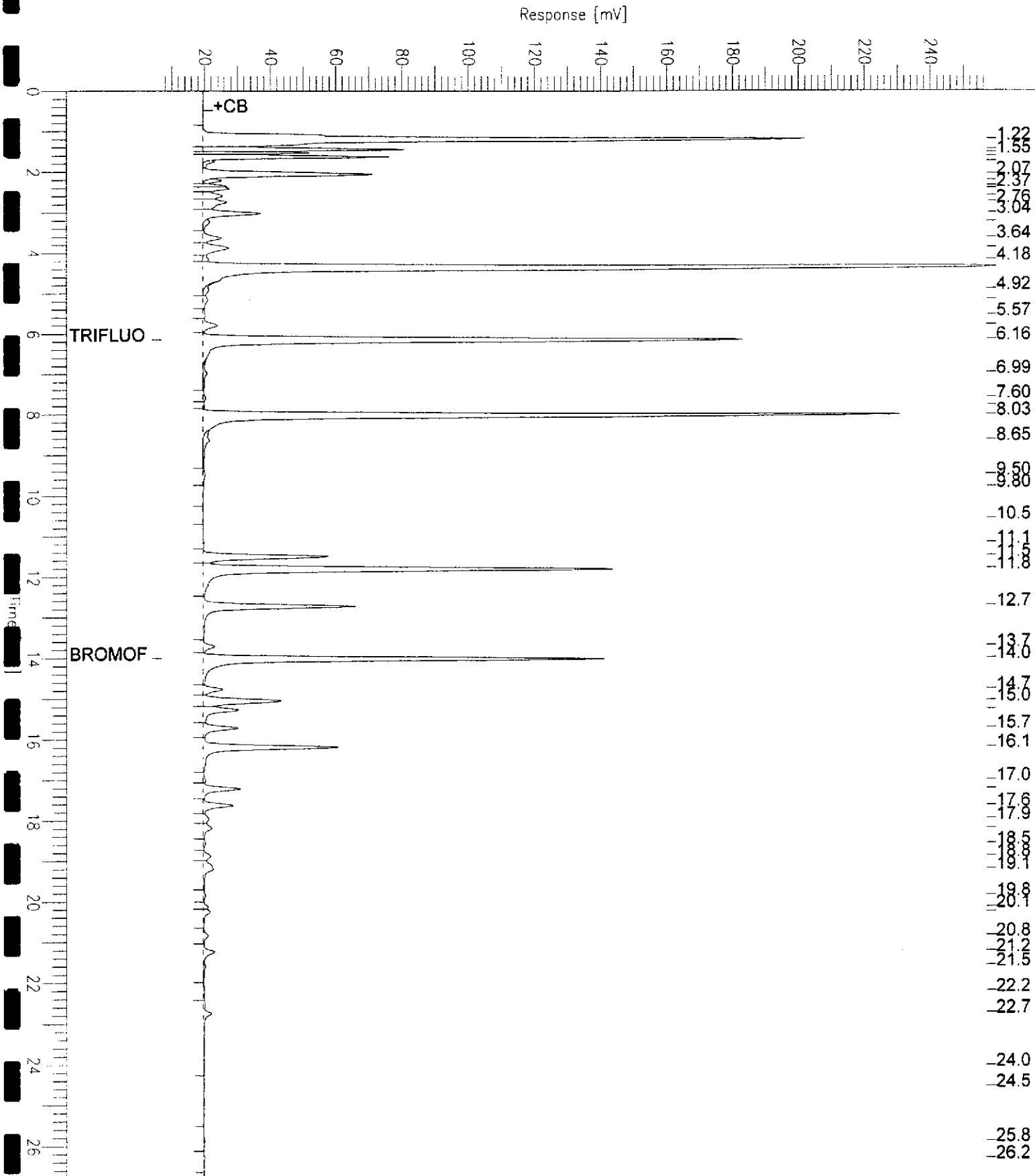


GC05 'G' File TVH

Sample Name : RR,D,134897-002,42617,
 File Name : G:\GC05\DATA\225G014.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor: -1.0

End Time : 26.80 min
 Plot Offset: 7 mV

Sample #: Page 1 of 1
 Date : 8/13/98 07:45 PM
 Time of Injection: 8/13/98 07:17 PM
 Low Point : 6.88 mV High Point : 256.88 mV
 Plot Scale: 250.0 mV



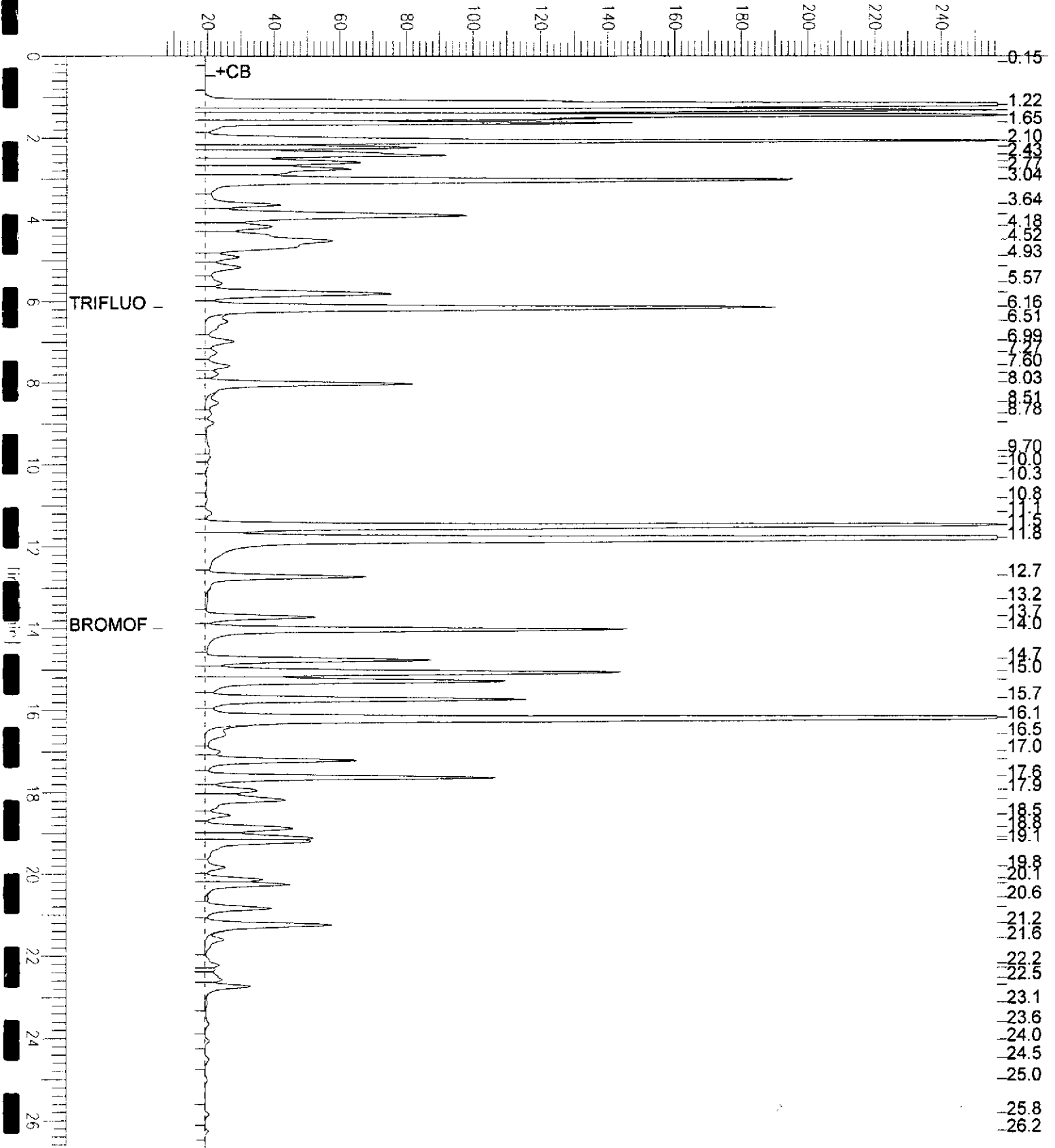
GC05 'G' File TVH

Sample Name : RR,D,134897-003,42617,
File Name : G:\GC05\DATA\225G013.raw
Method : TVHBTXE
Start Time : 0.00 min
Scale Factor: -1.0

End Time : 26.80 min
Plot Offset: 7 mV

Sample #:
Date : 8/13/98 07:08 PM
Time of Injection: 8/13/98 06:41 PM
Low Point : 6.74 mV
High Point : 256.74 mV
Plot Scale: 250.0 mV

Response [mV]

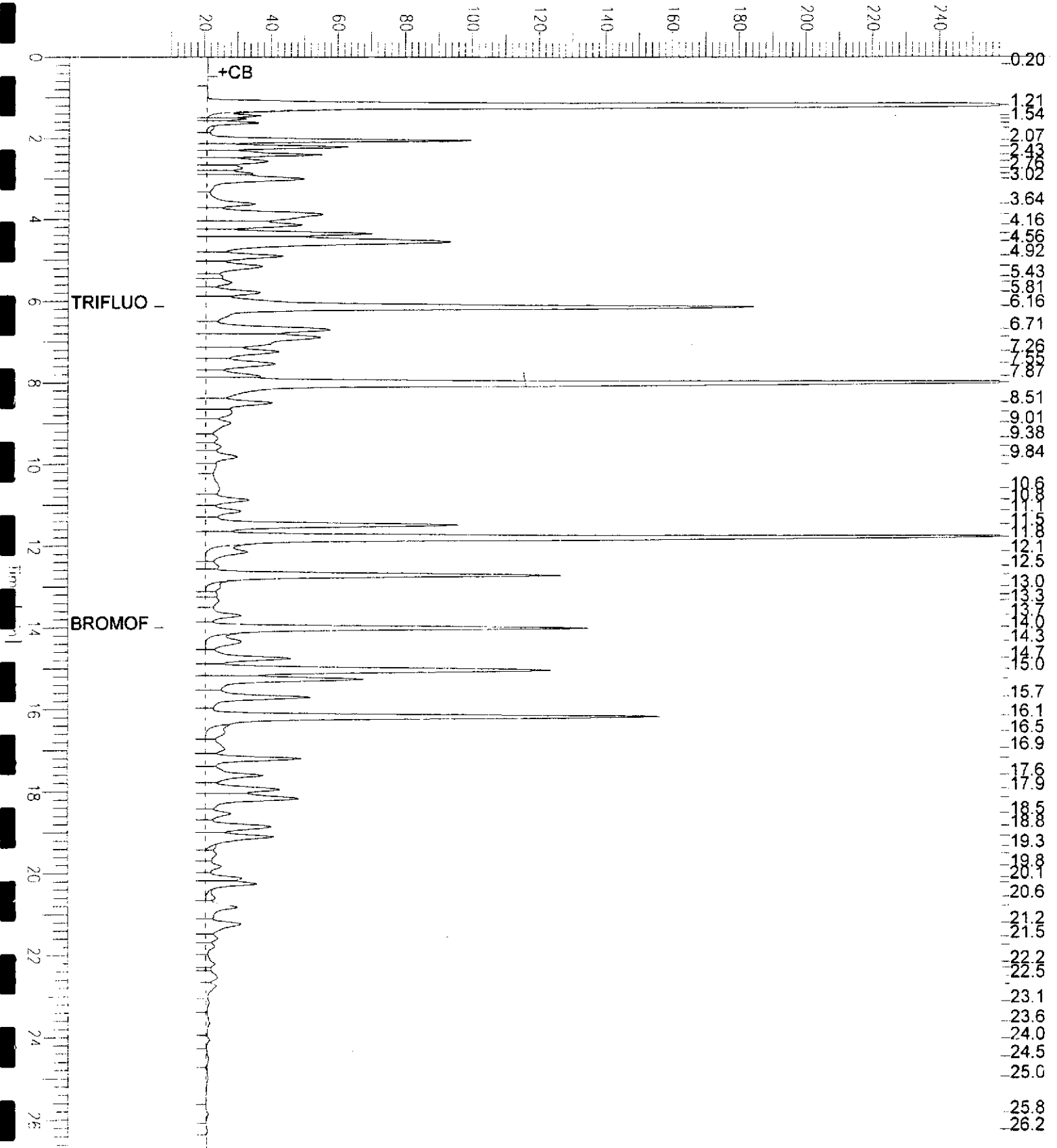


Sample Name : CCV/LCS, QC77071, 98WS61B4, 42617,
 FileName : G:\GC05\DATA\225G002.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.80 min
 Scale Factor: -1.0 Plot Offset: 8 mV

Sample #: GAS Page 1 of 1
 Date : 8/13/98 12:08 PM
 Time of Injection: 8/13/98 11:41 AM
 Low Point : 8.31 mV High Point : 258.31 mV
 Plot Scale: 250.0 mV

Gasoline Standard

Response [mV]





Curtis & Tompkins, Ltd.

SAMPLE ID: DRUM PURGE WATER
LAB ID: 134897-004
CLIENT: ATC Associates, Inc.
PROJECT ID: 61877.0004
LOCATION: 1750 Webster St.
MATRIX: Water

DATE SAMPLED: 08/04/98
DATE RECEIVED: 08/04/98
DATE REPORTED: 08/20/98

California TITLE 26 Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60	1	42636	EPA 6010A	08/13/98
Arsenic	ND	5.0	1	42636	EPA 6010A	08/13/98
Barium	12	10	1	42636	EPA 6010A	08/13/98
Beryllium	ND	2.0	1	42636	EPA 6010A	08/13/98
Cadmium	ND	5.0	1	42636	EPA 6010A	08/13/98
Chromium (total)	ND	10	1	42636	EPA 6010A	08/13/98
Cobalt	ND	20	1	42636	EPA 6010A	08/13/98
Copper	ND	10	1	42636	EPA 6010A	08/13/98
Lead	4.9	3.0	1	42636	EPA 6010A	08/13/98
Mercury	ND	0.20	1	42584	EPA 7470	08/10/98
Molybdenum	ND	20	1	42636	EPA 6010A	08/13/98
Nickel	ND	20	1	42636	EPA 6010A	08/13/98
Selenium	ND	5.0	1	42636	EPA 6010A	08/13/98
Silver	ND	5.0	1	42636	EPA 6010A	08/13/98
Thallium	ND	5.0	1	42636	EPA 6010A	08/13/98
Vanadium	ND	10	1	42636	EPA 6010A	08/13/98
Zinc	34	20	1	42636	EPA 6010A	08/13/98

ND = Not detected at or above reporting limit



Curtis & Tompkins, Ltd.

SAMPLE ID: COMP SOIL DRUM-(1,2)
 LAB ID: 134897-007
 CLIENT: ATC Associates, Inc.
 PROJECT ID: 61877.0004
 LOCATION: 1750 Webster St.
 MATRIX: Soil

DATE SAMPLED: 08/04/98
 DATE RECEIVED: 08/04/98
 DATE REPORTED: 08/20/98

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3.0	1	42666	EPA 6010A	08/13/98
Arsenic	1.8	0.25	1	42666	EPA 6010A	08/13/98
Barium	49	0.49	1	42666	EPA 6010A	08/13/98
Beryllium	0.20	0.099	1	42666	EPA 6010A	08/13/98
Cadmium	ND	0.099	1	42666	EPA 6010A	08/13/98
Chromium (total)	42	0.49	1	42666	EPA 6010A	08/13/98
Cobalt	6.4	0.99	1	42666	EPA 6010A	08/13/98
Copper	6.9	0.49	1	42666	EPA 6010A	08/13/98
Lead	6.8	0.15	1	42666	EPA 6010A	08/13/98
Mercury	ND	0.038	1	42656	EPA 7471	08/12/98
Molybdenum	ND	0.99	1	42666	EPA 6010A	08/13/98
Nickel	35	0.99	1	42666	EPA 6010A	08/13/98
Selenium	ND	0.25	1	42666	EPA 6010A	08/13/98
Silver	ND	0.49	1	42666	EPA 6010A	08/13/98
Thallium	1.1	0.25	1	42666	EPA 6010A	08/13/98
Vanadium	27	0.49	1	42666	EPA 6010A	08/13/98
Zinc	21	0.99	1	42666	EPA 6010A	08/13/98

ND = Not detected at or above reporting limit



Curtis & Tompkins, Ltd.

DATE REPORTED: 08/20/98

CLIENT: ATC Associates, Inc.
JOB NUMBER: 134897

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	25	24.9	23.95	mg/Kg	100	96	80-120	4	35	42666	EPA 6010A	08/13/98
Arsenic	100	89.5	88.5	mg/Kg	90	89	80-120	1	35	42666	EPA 6010A	08/13/98
Barium	100	93.5	91.5	mg/Kg	94	92	80-120	2	35	42666	EPA 6010A	08/13/98
Beryllium	2.5	2.41	2.37	mg/Kg	96	95	80-120	2	35	42666	EPA 6010A	08/13/98
Cadmium	2.5	2.35	2.3	mg/Kg	94	92	80-120	2	35	42666	EPA 6010A	08/13/98
Chromium (total)	10	9.4	9.25	mg/Kg	94	93	80-120	2	35	42666	EPA 6010A	08/13/98
Cobalt	25	23.5	23.05	mg/Kg	94	92	80-120	2	35	42666	EPA 6010A	08/13/98
Copper	12.5	12.25	12.05	mg/Kg	98	96	80-120	2	35	42666	EPA 6010A	08/13/98
Lead	25	22.25	22	mg/Kg	89	88	80-120	1	35	42666	EPA 6010A	08/13/98
Mercury	5	4.63	4.948	ug/L	93	99	80-120	7	35	42584	EPA 7470	08/10/98
Mercury	1.000	1.005	1.072	mg/Kg	101	107	80-120	6	35	42656	EPA 7471	08/12/98
Molybdenum	20	18.65	18.45	mg/Kg	93	92	80-120	1	35	42666	EPA 6010A	08/13/98
Nickel	25	23.5	23.35	mg/Kg	94	93	80-120	1	35	42666	EPA 6010A	08/13/98
Selenium	100	90	88.5	mg/Kg	90	89	80-120	2	35	42666	EPA 6010A	08/13/98
Silver	5	4.73	4.675	mg/Kg	95	94	80-120	1	35	42666	EPA 6010A	08/13/98
Thallium	100	93.5	92.5	mg/Kg	94	93	80-120	1	35	42666	EPA 6010A	08/13/98
Vanadium	25	23.55	23.15	mg/Kg	94	93	80-120	2	35	42666	EPA 6010A	08/13/98
Zinc	25	23.15	23.6	mg/Kg	93	94	80-120	2	35	42666	EPA 6010A	08/13/98

CLIENT: ATC Associates, Inc.
JOB NUMBER: 134897

 Curtis & Tompkins, Ltd.
DATE REPORTED: 08/20/98

BATCH QC REPORT
LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Antimony	500	565	ug/L	113	42636	EPA 6010A	08/13/98
Arsenic	2000	2130	ug/L	107	42636	EPA 6010A	08/13/98
Barium	2000	2100	ug/L	105	42636	EPA 6010A	08/13/98
Beryllium	50	55.9	ug/L	112	42636	EPA 6010A	08/13/98
Cadmium	50	53.4	ug/L	107	42636	EPA 6010A	08/13/98
Chromium (total)	200	215	ug/L	108	42636	EPA 6010A	08/13/98
Cobalt	500	543	ug/L	109	42636	EPA 6010A	08/13/98
Copper	250	274	ug/L	110	42636	EPA 6010A	08/13/98
Lead	500	518	ug/L	104	42636	EPA 6010A	08/13/98
Molybdenum	400	430	ug/L	108	42636	EPA 6010A	08/13/98
Nickel	500	533	ug/L	107	42636	EPA 6010A	08/13/98
Selenium	2000	2140	ug/L	107	42636	EPA 6010A	08/13/98
Silver	100	110	ug/L	110	42636	EPA 6010A	08/13/98
Thallium	2000	2160	ug/L	108	42636	EPA 6010A	08/13/98
Vanadium	500	538	ug/L	108	42636	EPA 6010A	08/13/98
Zinc	500	546	ug/L	109	42636	EPA 6010A	08/13/98

CLIENT: ATC Associates, Inc.
 JOB NUMBER: 134897

 Curtis & Tompkins, Ltd.
 DATE REPORTED: 08/20/98

BATCH QC REPORT
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Compound	Result	Reporting Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	60 ug/L	1	42636	EPA 6010A	08/13/98
Antimony	ND	3 mg/Kg	1	42666	EPA 6010A	08/13/98
Arsenic	ND	5 ug/L	1	42636	EPA 6010A	08/13/98
Arsenic	ND	0.25 mg/Kg	1	42666	EPA 6010A	08/13/98
Barium	ND	10 ug/L	1	42636	EPA 6010A	08/13/98
Barium	ND	0.5 mg/Kg	1	42666	EPA 6010A	08/13/98
Beryllium	ND	2 ug/L	1	42636	EPA 6010A	08/13/98
Beryllium	ND	0.1 mg/Kg	1	42666	EPA 6010A	08/13/98
Cadmium	ND	5 ug/L	1	42636	EPA 6010A	08/13/98
Cadmium	ND	0.1 mg/Kg	1	42666	EPA 6010A	08/13/98
Chromium (total)	ND	10 ug/L	1	42636	EPA 6010A	08/13/98
Chromium (total)	ND	0.5 mg/Kg	1	42666	EPA 6010A	08/13/98
Cobalt	ND	20 ug/L	1	42636	EPA 6010A	08/13/98
Cobalt	ND	1 mg/Kg	1	42666	EPA 6010A	08/13/98
Copper	ND	10 ug/L	1	42636	EPA 6010A	08/13/98
Copper	ND	0.5 mg/Kg	1	42666	EPA 6010A	08/13/98
Lead	ND	3 ug/L	1	42636	EPA 6010A	08/13/98
Lead	ND	0.15 mg/Kg	1	42666	EPA 6010A	08/13/98
Mercury	ND	0.2 ug/L	1	42584	EPA 7470	08/10/98
Mercury	ND	0.04 mg/Kg	1	42656	EPA 7471	08/12/98
Molybdenum	ND	20 ug/L	1	42636	EPA 6010A	08/13/98
Molybdenum	ND	1 mg/Kg	1	42666	EPA 6010A	08/13/98
Nickel	ND	20 ug/L	1	42636	EPA 6010A	08/13/98
Nickel	ND	1 mg/Kg	1	42666	EPA 6010A	08/13/98
Selenium	ND	5 ug/L	1	42636	EPA 6010A	08/13/98
Selenium	ND	0.25 mg/Kg	1	42666	EPA 6010A	08/13/98
Silver	ND	5 ug/L	1	42636	EPA 6010A	08/13/98
Silver	ND	0.5 mg/Kg	1	42666	EPA 6010A	08/13/98
Thallium	ND	5 ug/L	1	42636	EPA 6010A	08/13/98
Thallium	ND	0.25 mg/Kg	1	42666	EPA 6010A	08/13/98

ND = Not Detected at or above reporting limit



Curtis & Tompkins, Ltd.

CLIENT: ATC Associates, Inc.
JOB NUMBER: 134897

DATE REPORTED: 08/20/98

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Vanadium	ND	10	ug/L	1	42636	EPA 6010A	08/13/98
Vanadium	ND	0.5	mg/Kg	1	42666	EPA 6010A	08/13/98
Zinc	ND	20	ug/L	1	42636	EPA 6010A	08/13/98
Zinc	ND	1	mg/Kg	1	42666	EPA 6010A	08/13/98

ND = Not Detected at or above reporting limit

CLIENT: ATC Associates, Inc.
 JOB NUMBER: 134897

BATCH QC REPORT
 SAMPLE DUPLICATE

Compound	Sample	Sample Result	Duplicate Result	Units	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	134969-011	<60.000	<60.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Antimony	135037-001	<2.970	<2.970	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Arsenic	134969-011	<5.000	<5.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Arsenic	135037-001	0.3005	0.3485	mg/Kg	15	35	42666	EPA 6010A	08/13/98
Barium	134969-011	<10.000	<10.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Barium	135037-001	7.115	1.901	mg/Kg	116*	35	42666	EPA 6010A	08/13/98
Beryllium	134969-011	<2.000	<2.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Beryllium	135037-001	<0.099	<0.099	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Cadmium	134969-011	<5.000	<5.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Cadmium	135037-001	<0.099	<0.099	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Chromium (total)	134969-011	<10.000	<10.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Chromium (total)	135037-001	<0.495	<0.495	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Cobalt	134969-011	<20.000	<20.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Cobalt	135037-001	<0.990	<0.990	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Copper	134969-011	<10.000	<10.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Copper	135037-001	<0.495	<0.495	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Lead	134969-011	<3.000	<3.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Lead	135037-001	0.5288	0.4629	mg/Kg	13	35	42666	EPA 6010A	08/13/98
Mercury	134897-004	<0.200	<0.200	ug/L	NC	20	42584	EPA 7470	08/10/98
Mercury	134861-001	<0.038	<0.038	mg/Kg	NC	35	42656	EPA 7471	08/12/98
Molybdenum	134969-011	<20.000	<20.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Molybdenum	135037-001	<0.990	<0.990	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Nickel	134969-011	<20.000	<20.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Nickel	135037-001	<0.990	<0.990	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Selenium	134969-011	<5.000	<5.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Selenium	135037-001	0.4808	<0.248	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Silver	134969-011	<5.000	<5.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Silver	135037-001	<0.495	<0.495	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Thallium	134969-011	<5.000	<5.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Thallium	135037-001	<0.248	<0.248	mg/Kg	NC	35	42666	EPA 6010A	08/13/98
Vanadium	134969-011	<10.000	<10.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Vanadium	135037-001	38.08	36.44	mg/Kg	4	35	42666	EPA 6010A	08/13/98
Zinc	134969-011	<20.000	<20.000	ug/L	NC	20	42636	EPA 6010A	08/13/98
Zinc	135037-001	<0.990	<0.990	mg/Kg	NC	35	42666	EPA 6010A	08/13/98

* = Out of Limits
 NC = Not Calculable



CLIENT: ATC Associates, Inc.
JOB NUMBER: 134897

BATCH QC REPORT
SAMPLE SPIKE

Compound	Spike Amount	Sample	Sample Result	Spike Result	Units	Percent Rec.	Rec. Limit	QC Batch	Method	Analysis Date
Antimony	500	134969-011	<60.000	561	ug/L	112	65-135	42636	EPA 6010A	08/13/98
Antimony	24.63	135037-001	<2.956	23.74	mg/Kg	96	65-135	42666	EPA 6010A	08/13/98
Arsenic	2000	134969-011	<5.000	2100	ug/L	105	65-135	42636	EPA 6010A	08/13/98
Arsenic	98.52	135037-001	0.3005	87.19	mg/Kg	88	65-135	42666	EPA 6010A	08/13/98
Barium	2000	134969-011	<10.000	2130	ug/L	107	65-135	42636	EPA 6010A	08/13/98
Barium	98.52	135037-001	7.115	94.58	mg/Kg	89	65-135	42666	EPA 6010A	08/13/98
Beryllium	50	134969-011	<2.000	55.6	ug/L	111	65-135	42636	EPA 6010A	08/13/98
Beryllium	2.463	135037-001	<0.099	2.365	mg/Kg	96	65-135	42666	EPA 6010A	08/13/98
Cadmium	50	134969-011	<5.000	52.6	ug/L	105	65-135	42636	EPA 6010A	08/13/98
Cadmium	2.463	135037-001	<0.099	2.256	mg/Kg	92	65-135	42666	EPA 6010A	08/13/98
Chromium (total)	200	134969-011	<10.000	214	ug/L	107	65-135	42636	EPA 6010A	08/13/98
Chromium (total)	9.852	135037-001	<0.493	9.212	mg/Kg	94	65-135	42666	EPA 6010A	08/13/98
Cobalt	500	134969-011	<20.000	537	ug/L	107	65-135	42636	EPA 6010A	08/13/98
Cobalt	24.63	135037-001	<0.985	22.86	mg/Kg	93	65-135	42666	EPA 6010A	08/13/98
Copper	250	134969-011	<10.000	278	ug/L	111	65-135	42636	EPA 6010A	08/13/98
Copper	12.32	135037-001	<0.493	12.46	mg/Kg	101	65-135	42666	EPA 6010A	08/13/98
Lead	500	134969-011	<3.000	514	ug/L	103	65-135	42636	EPA 6010A	08/13/98
Lead	24.63	135037-001	0.5288	22.27	mg/Kg	88	65-135	42666	EPA 6010A	08/13/98
Mercury	5	134897-004	<0.200	5.142	ug/L	103	65-135	42584	EPA 7470	08/10/98
Mercury	0.9615	134861-001	<0.038	1.067	mg/Kg	111	65-135	42656	EPA 7471	08/12/98
Molybdenum	400	134969-011	<20.000	429	ug/L	107	65-135	42636	EPA 6010A	08/13/98
Molybdenum	19.7	135037-001	<0.985	18.47	mg/Kg	94	65-135	42666	EPA 6010A	08/13/98
Nickel	500	134969-011	<20.000	531	ug/L	106	65-135	42636	EPA 6010A	08/13/98
Nickel	24.63	135037-001	<0.985	22.86	mg/Kg	93	65-135	42666	EPA 6010A	08/13/98
Selenium	2000	134969-011	<5.000	2130	ug/L	107	65-135	42636	EPA 6010A	08/13/98
Selenium	98.52	135037-001	0.4808	78.33	mg/Kg	79	65-135	42666	EPA 6010A	08/13/98
Silver	100	134969-011	<5.000	110	ug/L	110	65-135	42636	EPA 6010A	08/13/98
Silver	4.926	135037-001	<0.493	4.621	mg/Kg	94	65-135	42666	EPA 6010A	08/13/98
Thallium	2000	134969-011	<5.000	2180	ug/L	109	65-135	42636	EPA 6010A	08/13/98
Thallium	98.52	135037-001	<0.246	94.09	mg/Kg	96	65-135	42666	EPA 6010A	08/13/98
Vanadium	500	134969-011	<10.000	538	ug/L	108	65-135	42636	EPA 6010A	08/13/98
Vanadium	24.63	135037-001	38.08	58.62	mg/Kg	83	65-135	42666	EPA 6010A	08/13/98
Zinc	500	134969-011	<20.000	537	ug/L	107	65-135	42636	EPA 6010A	08/13/98
Zinc	24.63	135037-001	<0.985	23.25	mg/Kg	94	65-135	42666	EPA 6010A	08/13/98

ATC ENVIRONMENTAL INC.

Chain of Custody

134897

2380 Qume Drive, Suite C
 San Jose, CA 95131
 Tel: (408) 474-0280
 Fax: (408) 434-6662

Project Name: PRENTISS WEBSTER ST.										Turn Around Time Standard 5 to 10 Business Days <input checked="" type="checkbox"/> Priority Rush Business Day(s) <input type="checkbox"/>																	
Project Number: 61877.0004																											
ATC Environmental Inc. Contact: JIM LEHRMAN																											
Laboratory Name: CURTIS & TOMPKINS																											
Sample Number	Location	Date	Time	Matrix			Preservative	No. of Containers	Type of Containers	TPH as gas/BTEX, EPA 141B	TPH as diesel, EPA 8015M	VOCs, EPA 8010	VOCs, EPA 8240	VOCs, EPA 8020	VOCs, EPA 8010/8020	SVOCs, EPA 8270	TRPH, SM 5520F	TOG, SM 5520B	Title 22 Metals, EPA	PP (13) Metals, EPA	Pesticides Only, EPA 8080	8010	CAM 17	BTEX	TPH-MO	Remarks	
				Soil	Water	Other																					
1 A-2		8-4-98			X		HC	6	VEAS	X												X					
2 A-1					X		↓	6	↓	X												X					
3 A-3					X		↓	6	↓	X												X					
4 DRUM Powder					X		HNO3	1	500 ML plastic													X					
5 Soil Drum 2					X		-	1	glass Jar													X				} Composite Soil samples	
6 Soil Drum 1					X		-	1	↓													X					
Relinquished by sampler: Jerry D. Zola										Date: 8/4/98		Time: 16:10		Received by:													
Relinquished by:										Date:		Time:		Received by:													
Relinquished by:										Date:		Time:		Received by laboratory: J Moore					Date: 8/4/98		Time: 16:10						