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Clayton GROUP SERVICES

July 19, 2001

6070

JUL 23 2001

Mr. Barney Chan
Hazardous Materials Specialists
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Clayton Project No.70-97066.00.000

Subject: Second Quarter 2001 Groundwater Monitoring Results for the property at 630 29th Avenue in Oakland, California

Dear Mr. Chan:

Clayton is pleased to present the results for the Second Quarter 2001 groundwater monitoring event performed at 630 29th Avenue in Oakland, California.

Clayton received the ACHS comments letter dated June 19, 2001, and shall prepare a brief workplan and proceed with prefield activities.

If you have any comments or questions regarding the report please contact me at (925) 426-2665.

Sincerely,

Warren B. Chamberlain, R.G., C.HG., P.E.
Project Manager
Environmental Services

Marc Mulley FOR
Jon A. Rosso, P.E.
Director

WBC/wbc

cc: Donna Profitt — Bank of America
Kristy Williams — ECS
Marlin Zechman — ECS
Rita Repko — Clayton

Clayton GROUP SERVICES

Second Quarter 2001
Groundwater Monitoring Results
for the
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Clayton Project No. 70-97066.00

July 19, 2001

CONTENTS

Section Page

1. INTRODUCTION 1

2. SITE DESCRIPTION AND HISTORY 1

3. GROUNDWATER MONITORING FIELD ACTIVITIES 2
3.1. GROUNDWATER LEVEL MEASUREMENTS 2
3.2. GROUNDWATER PURGING 2
3.3. GROUNDWATER SAMPLING 2
3.4. LABORATORY ANALYSES 3

4. FINDINGS 3
4.1. GROUNDWATER FLOW CONDITIONS 3
4.2. PETROLEUM AND AROMATIC HYDROCARBONS 3
4.3. HALOGENATED VOLATILE ORGANIC COMPOUNDS 4

5. CONCLUSION 4

CONTENTS

Tables

1. Historical Groundwater Table Elevation Data
2. Summary of Groundwater Analytical Data

Figures

1. Site Location Map
2. Water Table Elevation Contour Map (June 2001)

3a. TPH-g in Groundwater Isoconcentration Contour Map (June 2001)

3b. Benzene in Groundwater Isoconcentration Contour Map (June 2001)

Appendices

A. Second Quarter (June), 2001 - Groundwater Sampling Logs

B. Second Quarter (June), 2001 - Certified Analytical Data Sheets and Chain-of-Custody Documentation

1. INTRODUCTION

Clayton Group Services, Inc., (Clayton) has prepared this quarterly groundwater monitoring report to document the results of the Second Quarter, 2001 groundwater monitoring event for the former Lemoine Sausage Facility located at 630 29th Avenue in Oakland, California (Figure 1). The groundwater monitoring is performed pursuant a request from the Alameda County Health Services (ACHS) in a letter dated June 19, 1999. Groundwater monitoring is required due to past releases from a former gasoline underground storage tank (UST) previously located beneath the sidewalk adjacent to the subject property. The purpose of the groundwater monitoring is to determine groundwater flow conditions and water quality beneath the site. Groundwater samples are collected and analyzed for Total Petroleum Hydrocarbons as Gasoline (TPH-g) and associated compounds Benzene, Toluene, Ethylbenzene and total Xylenes (BTEX) and the former gasoline fuel additive 1,2-Dichloroethane (1,2-DCA).

As directed by the ACHS, groundwater monitoring is being performed on a quarterly basis. This Second Quarter 2001 Groundwater Monitoring Report documents field activities, and presents data used to determine the groundwater elevation and gradient at the site. Laboratory data are presented and indicate the groundwater concentrations of dissolved hydrocarbons in the vicinity of the subject property.

2. SITE DESCRIPTION AND HISTORY

A single 1,000-gallon gasoline UST and associated plumbing/piping were formerly located beneath the sidewalk of 7th Street and adjacent (east) of the subject property building. The associated fuel dispenser was located in a "cubby hole" near the building's roll-up door. The UST and associated piping were removed on November 21, 1996 and confirmation soil samples were collected. A petroleum hydrocarbon sheen was noted on top of groundwater and petroleum hydrocarbons were detected in the confirmation soil samples collected at the time of the UST removal.

Subsequent groundwater investigations were performed and eight groundwater monitoring wells have been installed into the first encountered water bearing zone to test groundwater conditions at the site. The locations of the monitoring wells were selected to define the vertical and lateral extent of petroleum hydrocarbons within groundwater at the site. First encountered water beneath the site occurs in predominantly low permeability clayey and sandy silt, at depths ranging from 3.5 to 8.5 feet below street grade.

In addition, during the testing for 1,2-DCA, several non-gasoline related halogenated volatile organic compounds (VOCs) were detected in the groundwater samples from wells located in the southern portion of the site. The source of non-gasoline related VOCs has not been discerned, and are mostly likely due to an off-site source.

3. GROUNDWATER MONITORING FIELD ACTIVITIES

The following discussion describes field methods used to obtain depth to water measurements, and collect groundwater samples. Field activities were performed on June 20 and 21, 2001. Groundwater samples were collected from eight monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8).

3.1. GROUNDWATER LEVEL MEASUREMENTS

Depth to water was measured in each monitoring well to determine the groundwater elevation, and the site's groundwater gradient and flow direction. The depth to water in each monitoring well was measured on June 20, 2001, with an electronic water level probe. The depth to water in each monitoring well was measured from the surveyed reference elevation represented as a V-notch at the top of the well casing (TOC) to the water surface within the well casing. By subtracting the measured depth to water from the TOC elevation in each monitoring well, the groundwater elevation at each monitoring point was calculated.

3.2. GROUNDWATER PURGING

Five monitoring wells (MW-1 through MW-5) are constructed with ¾-inch diameter PVC well casings and three monitoring wells (MW-6 through MW-8) are constructed with 2-inch diameter PVC well casings. Prior to collecting a groundwater sample from each monitoring well, approximately four well casing volumes of water were removed or the well casing was purged dry. The ¾-inch diameter wells were purged using a peristaltic pump and ¼-inch polytubing, and the 2-inch diameter wells were purged by hand bailing with a 1-liter Teflon bailer attached to nylon bailer twine. Water quality parameters (pH, specific conductivity, oxidation-reduction potential [ORP], temperature, dissolved oxygen and visual turbidity) were measured and recorded onto field sampling data sheets. Water quality parameter measurements were made prior to purging and after removing each well casing volume of water from the monitoring well.

The purge volume from each monitoring well was determined from multiplying the nominal cross-sectional area of the well casing by the water column within each well casing. The water column height in each well was determined from subtracting the groundwater elevation from the well casing bottom elevation (known from well construction details).

Field logs documenting water level measurements, well purging and sampling for the Second Quarter 2001 monitoring event are presented in Appendix A. Groundwater purged from monitoring wells during sampling was stored onsite in sealed USDOT approved 55-gallon drums, labeled with identifying information, manifested and removed from the site by a licensed hauler.

3.3. GROUNDWATER SAMPLING

Prior to collecting a groundwater sample from each monitoring well, the well was allowed to recharge to 80-percent of the pre-purged well casing water volume.

Groundwater samples for laboratory analyses were retrieved using either a peristatlic pump with polytubing or a disposable bailer. The groundwater retrieved for analyses was transferred into appropriately sized and preserved laboratory supplied containers. Sample containers were sealed, labeled with identifying information, logged onto the chain-of-custody, and temporarily stored in a chilled ice-chest while awaiting transportation to the laboratory.

3.4. LABORATORY ANALYSES

Groundwater samples were submitted to the State of California certified Curtis and Tompkins Laboratories of Berkeley, California for laboratory analyses. The samples were analyzed by one or more of the following United States Environmental Protection Agency (USEPA) approved analytical methods:

- USEPA Method 8015M for Total Petroleum Hydrocarbons as Gasoline (TPH-g)
- USEPA Method 8020 for Aromatic Hydrocarbons (Benzene, Toluene, Ethylbenzene, and total Xylenes [BTEX]), and
- USEPA Method 8010 for Halogenated Volatile Organic Compounds (VOCs).

Certified analytical data sheets and chain-of-custody documentation for the Second Quarter 2001 groundwater sampling event are presented in Appendix B.

4. FINDINGS

The following discussion presents an interpretation of groundwater flow conditions and water quality at the site based on the results obtained from field measurements and laboratory analyses.

4.1. GROUNDWATER FLOW CONDITIONS

A site piezometric surface (water table) map was produced by using the surveyed monitoring well coordinates and contouring the corresponding groundwater elevation data. The magnitude of the local groundwater gradient was determined using groundwater elevations from monitoring wells MW-1 and MW-7. The direction of groundwater flow is inferred to be perpendicular to the piezometric equipotential contours. For the Second Quarter 2001 monitoring event, the groundwater gradient was determined to be 0.018 feet per foot (ft/ft) towards the west.

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The Second Quarter 2001 groundwater elevation contour map with the groundwater flow direction indicated is presented on Figure 2.

4.2. PETROLEUM AND AROMATIC HYDROCARBONS

The frequency and range of petroleum hydrocarbons detected in groundwater samples are as follows:

- TPH-g was detected in 7 of 8 samples tested, and ranged in concentration from 420 micrograms per liter (µg/L) to 34,000 µg/L.
- Benzene was detected in 6 of 8 samples tested, and ranged in concentration from 490 µg/L to 8,600 µg/L.
- Toluene was detected in 5 of 8 samples tested, and ranged in concentration from 26 µg/L to 6,200 µg/L.
- Ethylbenzene was detected in 7 of 8 samples tested, and ranged in concentration from 0.59 µg/L to 570 µg/L.
- Total Xylenes was detected in 6 of 8 samples tested, and ranged in concentration from 1 µg/L to 1,550 µg/L.

A summary of petroleum hydrocarbons and VOCs detected in groundwater samples are presented on Table 2. The concentrations of TPH-g and benzene detected in groundwater samples collected from monitoring wells for the Second Quarter 2001 monitoring event are presented in Figures 3a and 3b, respectively.

4.3. HALOGENATED VOLATILE ORGANIC COMPOUNDS

The frequency and range of VOCs were detected in groundwater samples are as follows:

- 1,2-Dichloroethane (1,2-DCA) was detected in 7 of 8 samples tested, and ranged in concentration from 1.4 µg/L to 120 µg/L.
- Trichloroethene (TCE) was detected in 2 of 8 samples tested, and ranged in concentration from 2.4 µg/L to 28 µg/L.
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 3 of 8 samples tested, and ranged in concentration from 0.8 µg/L to 910 µg/L.
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 1 of 8 samples tested, at 48 µg/L.
- Vinyl Chloride (VC) was detected in 1 of 8 samples tested, at 75 µg/L.

5. CONCLUSION

The groundwater gradient determined for the Second Quarter 2001 monitoring event was found to be 0.018 ft/ft to the west, and is consistent with past determinations. The highest concentrations of TPH-g and benzene occur in the beneath the central portion of the subject building in the area of monitoring wells MW-2 and MW-3. The locations of monitoring wells MW-6 and MW-7 define the eastern and northern edge of the hydrocarbon plume. The distribution of the former gasoline fuel additive 1,2-DCA appears to be associated with the petroleum hydrocarbon release.

Non gasoline related chlorinated volatile organic compounds TCE, cis-1,2-DCE, trans-1,2-DCE and VC were detected in groundwater samples collected from monitoring wells MW-3, MW-4 and MW-8.

Sincerely,

Warren B. Chamberlain, R.G., C.HG., P.E.
Project Manager
Environmental Services

Jon A. Rosso, P.E.
Director

Table 1

Summary of Groundwater Elevation Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-1	6/20/01	16.69	5.85	10.84
	3/21/01		4.29	12.40
	12/19/00		5.50	11.19
	9/22/00		6.30	10.39
	6/15/00		4.82	11.87
	2/8/99		3.60	13.09
MW-2	6/20/01	20.79	10.92	9.87
	3/21/01		10.01	10.78
	12/19/00		11.38	9.41
	9/22/00		11.49	9.30
	6/15/00		10.46	10.33
	2/8/99		14.20	6.59
MW-3	6/20/01	21.10	10.14	10.96
	3/21/01		8.95	12.15
	12/19/00		9.72	11.38
	9/22/00		15.30	5.80
	6/15/00		10.56	10.54
	2/8/99		7.45	13.65
MW-4	6/20/01	17.78	6.78	11.00
	3/21/01		5.77	12.01
	12/19/00		6.40	11.38
	9/22/00		6.90	10.88
	6/15/00		6.30	11.48
	2/8/99		4.13	13.65
MW-5	6/20/01	21.12	9.90	11.22
	3/21/01		8.68	12.44
	12/19/00		9.99	11.13
	9/22/00		9.99	11.13
	6/15/00		10.36	10.76
	2/8/99		7.62	13.50
MW-6	6/20/01	16.60	6.13	10.47
	3/21/01		4.70	11.90
	12/19/00		5.93	10.67
	9/22/00		6.54	10.06
	6/15/00		5.47	11.13

Table 1

Summary of Groundwater Elevation Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-7	6/20/01	15.47	6.90	8.57
	3/21/01		5.53	9.94
	12/19/00		7.20	8.27
	9/22/00		7.51	7.96
	6/15/00		6.40	9.07
MW-8	6/20/01	17.58	7.96	9.62
	3/21/01		6.40	11.18
	12/19/00		7.71	9.87
	9/22/00		8.33	9.25
	6/15/00		7.14	10.44

Notes:
1. All top of casing elevations referenced to mean sea level (msl) and measured with reference to the
2. NM = Not Measured.

Table 2

Summary of Monitoring Well Groundwater Analytical Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2 DCE	trans-1,2-DCE	VC
MW-1	6/21/01	12,000	NA	2,000	180	880	1,180	3.0	<0.5	<0.5	<0.5	<0.5
	3/21/00	21,000	NA	3,200	290	1,700	2,600	<2.5	<2.5	<2.5	<2.5	<2.5
	12/19/00	25,000	NA	3,200	480	1,900	3,300	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/00	25,000	<500	3,100	470	1,800	3,600	NA	NA	NA	NA	NA
	6/15/00	29,000	NA	3,900	1,900	<100	4,200	<5.0	<5.0	<5.0	<5.0	<5.0
	2/8/99	48,000	NA	3,900	970	6,300	4,300	<30	NA	NA	NA	NA
MW-2	6/21/01	30,000	NA	8,600	440	2,600	1,230	5.6	<0.5	<0.5	<0.5	<0.5
	3/23/01	34,000	NA	10,000	410	3,200	1,220	14	<13	<13	<13	<13
	12/19/00	43,000	NA	9,800	810	4,000	2,430	21	<13	<13	<13	<13
	9/22/00	24,000	<500	10,000	370	2,700	1,200	NA	NA	NA	NA	NA
	6/29/00	31,000	NA	11,000	4,400	930	250	25	<5.0	<5.0	<5.0	<5.0
	2/8/99	41,000	NA	11,000	650	4,900	1,720	60	NA	NA	NA	NA
MW-3	6/21/01	34,000	NA	5,900	340	6,200	1,550	120	2.4	0.8	<0.5	<0.5
	3/22/01	1,300	NA	98	51	67	104	2.3	<0.5	<0.5	<0.5	<0.5
	12/19/00	50,000	NA	1,200	510	1,600	1,810	350	<8.3	<8.3	<8.3	<8.3
	9/22/00	83,000	<1,000	16,000	1,300	20,000	7,000	NA	NA	NA	NA	NA
	6/29/00	39,000	NA	7,800	8,000	630	3,400	600	<5.0	<5.0	<5.0	<5.0
	2/8/99	35,000	NA	1,200	1,400	3,400	4,900	<30	NA	NA	NA	NA
MW-4	6/21/01	11,000	NA	2,300	570	26	641	1.4	<0.5	3.3	<0.5	<0.5
	3/22/01	5,600	NA	1,100	310	13	303	<0.5	<0.5	1.6	<0.5	<0.5
	12/19/00	2,200	NA	200	100	2.9	81.4	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/00	12,000	<500	2,800	1,100	82	1,300	NA	NA	NA	NA	NA
	6/15/00	2,300	NA	230	10	<5	94	0.88	<0.5	2.1	<0.5	<0.5
	2/8/99	15,000	NA	670	780	90	940	<30	NA	NA	NA	NA

Table 2

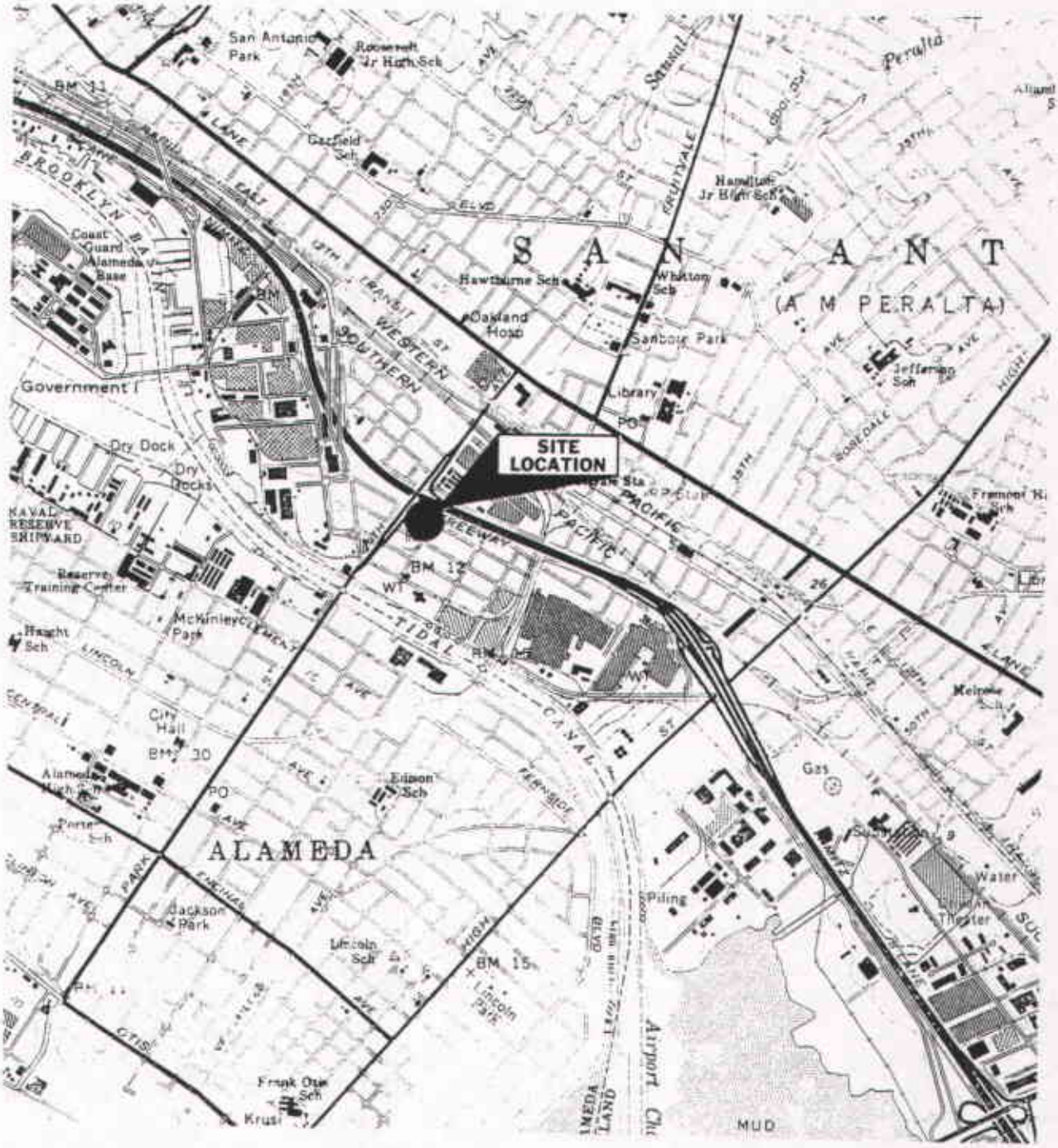
Summary of Monitoring Well Groundwater Analytical Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2 DCE	trans-1,2-DCE	VC
MW-5	6/21/01	18,000	NA	3,400	350	2,300	1,020	21	<0.5*3	<0.5	<0.5	<0.5
	3/22/01	6,200	NA	1,500	310	360	288	3.3	<0.5	<0.5	<0.5	<0.5
	12/19/00	21,000	NA	3,200	1,100	1,100	1,300	15	<4.2	<4.2	<4.2	<4.2
	9/27/00	16,000	<500	4,300	420	3,100	1,600	NA	NA	NA	NA	NA
	6/29/00	3,900	NA	1,500	330	28	260	36	<0.5	<0.5	<0.5	<0.5
	2/8/99	4,900	NA	780	230	440	370	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	6/21/01	420	NA	<0.5	0.59	<0.5	1.00	0.9	<0.5	<0.5	<0.5	<0.5
	3/21/01	820	NA	<0.5	1.4	<0.5	0.52	<0.5*[2]	<0.5	<0.5	<0.5	<0.5
	12/19/00	320	NA	<0.5	<0.5	<0.5	<0.5	<0.5*[1]	<0.5	<0.5	<0.5	<0.5
	9/22/00	71	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
	6/15/00	1,100	NA	3.8	2.1	2.2	4.8	0.78	<0.5	<0.5	<0.5	<0.5
MW-7	6/21/01	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/21/01	160	NA	59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/19/00	<50	NA	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/00	<50	<5	2	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
	6/15/00	1,000	NA	250	<10	<10	16	<0.5	<0.5	<0.5	<0.5	<0.5
MW-8	6/21/01	2,400	NA	490	29	<2.5	<2.5	4.9	28	910	48	75
	3/21/01	3,500	NA	530	21	<2.5	<2.5	<3.6	32	760	39	58
	12/19/00	2,700	NA	410	4.8	<2.5	<2.5	9.1	130	1,000	67	48
	9/22/00	1,800	<25	340	<2.5	<2.5	<2.5	NA	NA	NA	NA	NA
	6/15/00	5,400	NA	150	8.9	<5	8.7	<13	210	1,100	73	25

Notes:

1. All results in micrograms per liter (µg/L).
2. NA = Not Analyzed.
3. 1,2-DCA = 1,2-dichloroethane.
4. TPHG = Total Petroleum Hydrocarbons as Gasoline.
5. MTBE = methyl tert-butyl ether.
6. TCE = Trichlororethene.
7. DCE = Dichlororethene.
8. VC= Vinyl Chloride.

*[1] 1,1-DCA detected at 1.1 µg/L.
*[2] 1,1-DCA detected at 0.9 µg/L.
*[3] Freon -11 detected at 0.6 µg/L.



Source: U.S.G.S. OAKLAND EAST, CALIF., 7.5 Minute Quadrangle, 1959, (photorevised 1980).

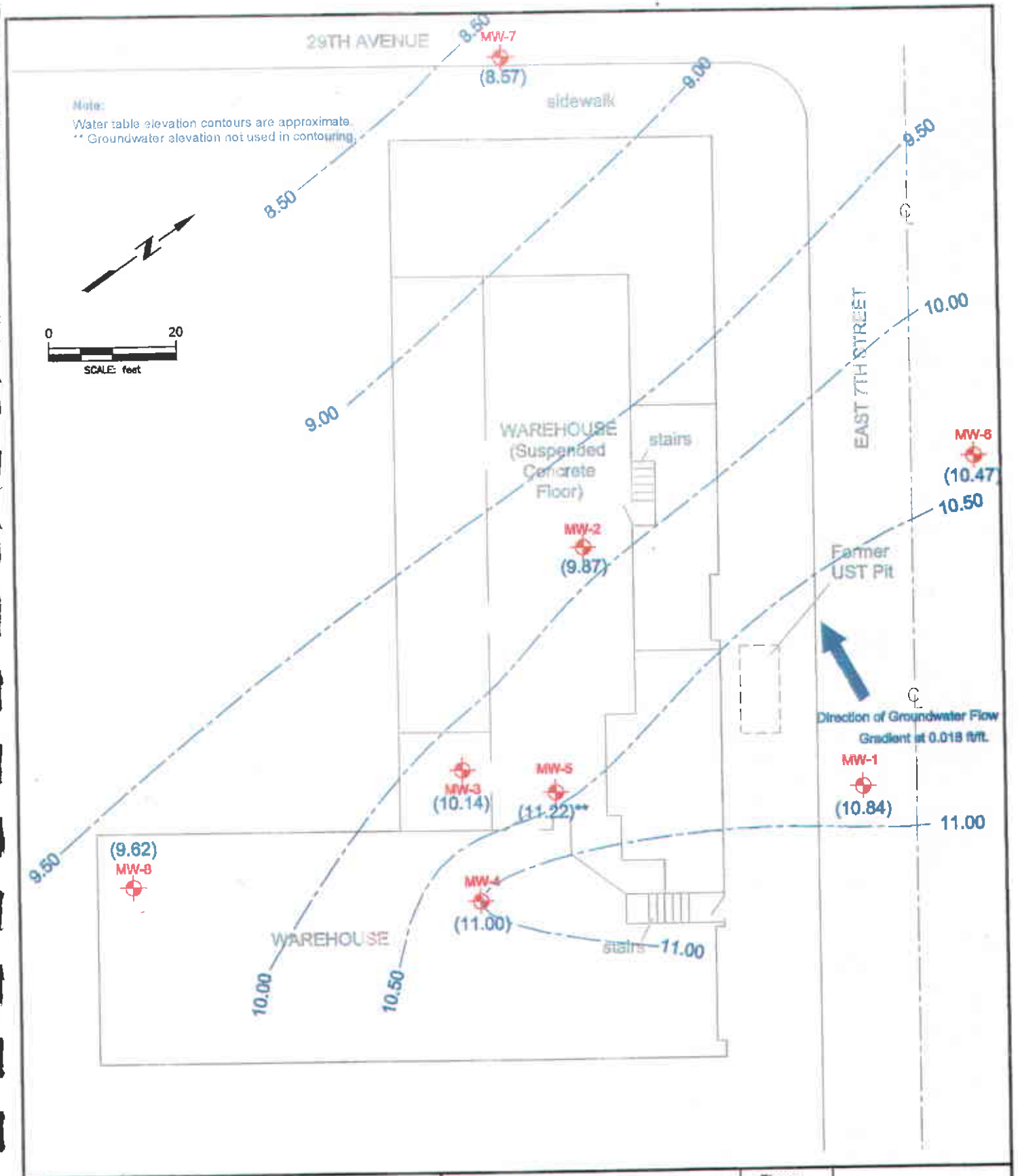
SITE LOCATION

FORMER LEMOINE SAUSAGE FACTORY
630 29th AVENUE
OAKLAND, CALIFORNIA

Clayton Project No. 70-97066.00.002

Figure
1
12/31/96
TOPOFIG1.CDR

Clayton
ENVIRONMENTAL CONSULTANTS



LEGEND	GROUNDWATER ELEVATION CONTOUR MAP (June 5, 2001)	Figure
MW-1 Monitoring Well Location (10.78) Groundwater Elevation in Feet above Mean Sea Level 10.50 Groundwater Surface Contour and Elevation	FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	2 7/9/01 Q2ND_01.DWG

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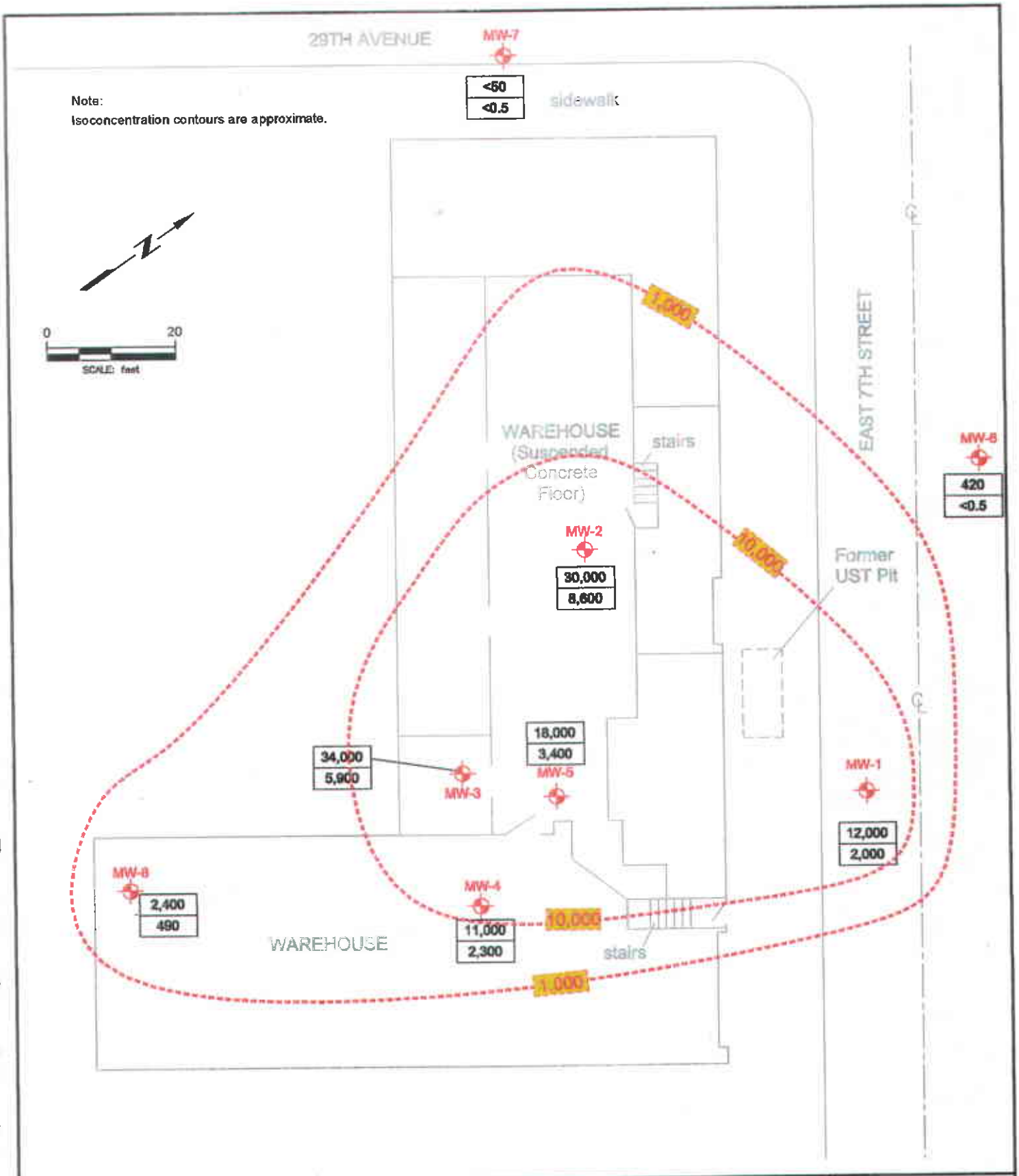

LEGEND			
MW-1	Monitoring Well Location	TPH as Gasoline **CONCENTRATIONS IN GROUNDWATER** **June 2001** FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	Figure **3a** 7/9/01 Q2ND_01.DWG
34,000	TPH-G Concentration (micrograms per liter)		
10,000	Benzene Concentration (micrograms per liter)		
1,000	Isoconcentration Contour (micrograms per liter)		

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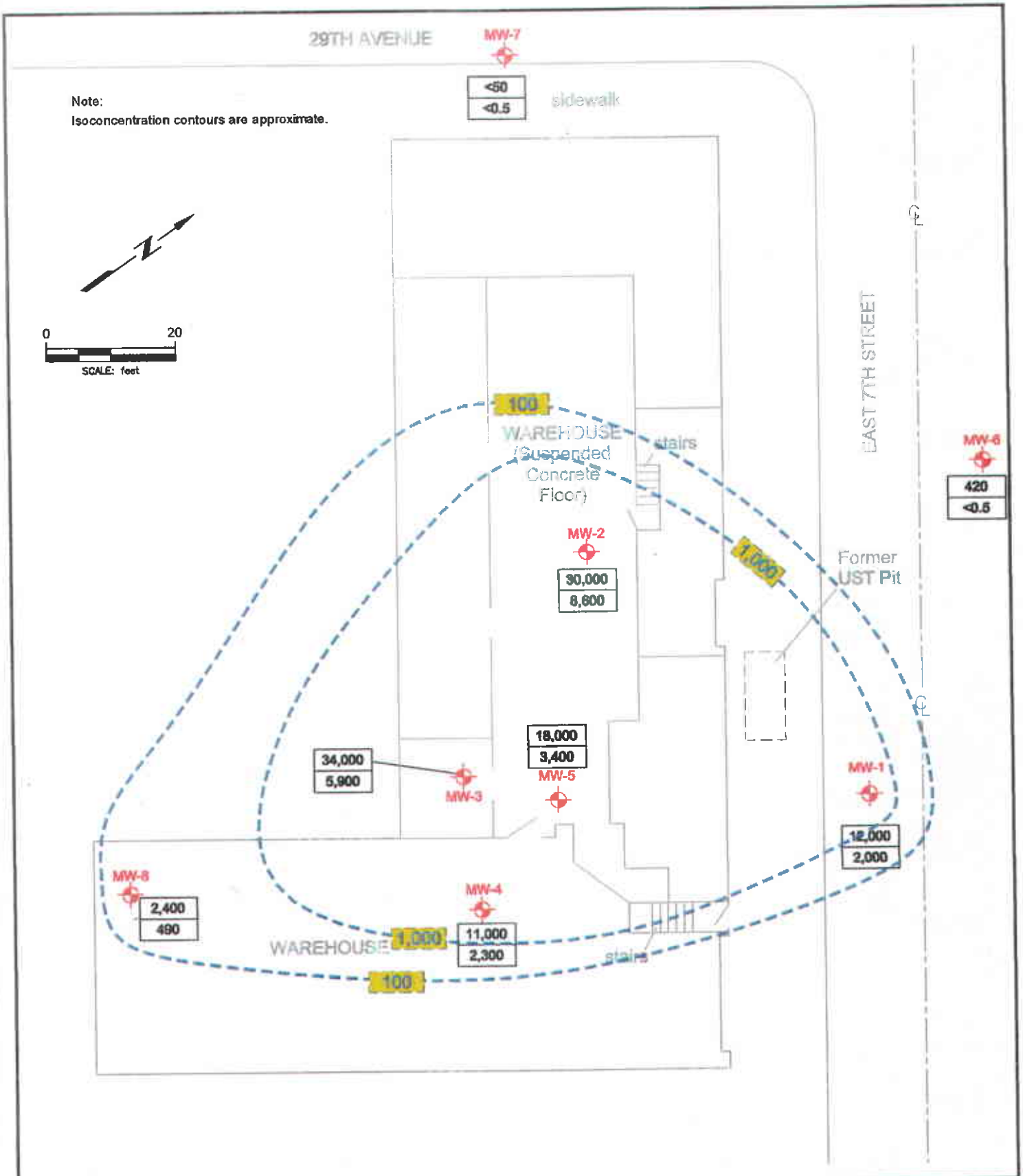

LEGEND

MW-1 Monitoring Well Location

34,000 TPH-G Concentration (micrograms per liter)

10,000 Benzene Concentration (micrograms per liter)

1,000 Isoconcentration Contour (micrograms per liter)

BENZENE

CONCENTRATIONS IN GROUNDWATER
June 2001

FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure
3b
7/9/01
Q2ND_01.DWG

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APPENDIX A

SECOND QUARTER (JUNE) 2001

GROUNDWATER SAMPLING LOGS

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/20
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	MW- 1	Date & Time Sampled:	6/21 10:30
Top of Casing:	16.69 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	5.85	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	10.84	Preservatives:	HCL
Well Bottom	7.69	# of Containers:	5
Water Column:	3.15	Field Tech:	Mike K.
Well Casing Volume:	.0315 (WC* ~~0.02~~ 0.01	Weather Conditions:	Sunny, hot
Casing Volumes Purged:	3		
Purge Rate:	.0189 gal/min	~~3/4~~ 2" dia well	

Time	Volume Removed ~~(gal)~~ mL	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
12:05	200 mL	7.75	1.75	11	27.2	2.11
12:07	150 mL	7.83	1.021	10	27.1	2.10
12:10	100 mL	7.91	0.363	20	26.9	2.46
:						
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Field Notes: Purged Dry at 12:07 – purged Dry at 12:10

~~7th~~ 7th Avenue was repaved with asphalt + sprayed with oil in last 2 weeks. Well was accessible and in good condition. Covered with duct tape when spraying 6 - VOA's then Dry

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/21
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	MW- 2	Date & Time Sampled:	6/21 9:00
Top of Casing:	20.79 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	10.92	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	9.87	Preservatives:	HCL
Well Bottom	10.79	# of Containers:	5
Water Column:	9.08	Field Tech:	Mikel.
Well Casing Volume:	.0908 (WC* ~~0.16~~)0.01	Weather Conditions:	Sunny, hot
Casing Volumes Purged:	4		
Purge Rate:	.045 gal/min	~~3/4~~ 2" dia well	

Time	Volume Removed (gal)~~ml~~	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
1:07	350	7.25	9.58	15 ~~0.95~~	18.2	0.90
1:09	350	7.21	9.58	18	17.7	0.75
1:11	350	7.17	9.46	22	17.3	0.49
1:13	350	7.09	9.39	27	17.2	0.42
1:15	350	7.09	9.31	27	17.4	0.45
:	~~\~~ Purged Dry					
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Field Notes:

Purged Dry at 1:15

3-VOA's - Dry

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/20
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	MW-3	Date & Time Sampled:	6/21 8:30
Top of Casing:	21.10 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	10.14	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	10.96	Preservatives:	HCL
Well Bottom	1.10	# of Containers:	5
Water Column:	9.86	Field Tech:	Mike K.
Well Casing Volume:	.0986 (WC* ~~0.46~~ 0.01	Weather Conditions:	Sunny, hot
Casing Volumes Purged:	4		~~3/4~~
Purge Rate:	.032 gal/min		~~X~~ dia well

Time	Volume Removed ~~(gal)~~ mL	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
12:33	350	7.72	14.96	7	16.8	1.11
12:35	350	7.33	13.07	15	17.7	1.09
12:40	350	7.01	13.86	31	17.5	1.21
12:45	700	7.10	16.90	25	17.2	1.75
:	purged Dry					
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Field Notes:

purged Dry at 12:45

2 - VOA's

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/20
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	MW- 4	Date & Time Sampled:	6/21 - 9:30 Am
Top of Casing:	17.78 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	6.78	Sample Type:	TPHG/BTEX / 8010
Groundwater Elevation	11.00	Preservatives:	HCL
Well Bottom	2.78	# of Containers:	5
Water Column:	8.22	Field Tech:	Mike L.
Well Casing Volume:	.0822 (WC* 0.16) 0.01	Weather Conditions:	Sunny, hot
Casing Volumes Purged:	3		
Purge Rate:	.0616 gal/min	3/4 2" dia well	

Time	Volume Removed (gal) mL	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
1:24	350	7.35	6.89	13	17.4	0.64
1:26	350	7.64	3.84	3	17.0	2.33
1:28	350	7.52	3.09	4	17.1	0.88
:	Purged	Dry				
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Field Notes:

Purged Dry at 1:28

6 - VOAs

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/20
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	MW- 5	Date & Time Sampled:	6/20 1:00 pm
Top of Casing:	21.12 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	9.90	Sample Type:	TPHG/BTEX 1601.0
Groundwater Elevation	11.22	Preservatives:	HCL
Well Bottom	6.12	# of Containers:	5
Water Column:	5.1	Field Tech:	Mike K.
Well Casing Volume:	.051 (WC* ~~0.16~~) 0.01	Weather Conditions:	Sunny, hot
Casing Volumes Purged:	2		
Purge Rate:	.0255 gal/min	3/4 2" dia well	

Time	Volume Removed ~~(gal)~~ mL	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
12:53	350	7.72	6.20	8	18.1	1.57
12:55	350	7.34	11.18	7	16.2	1.55
:	purged Dry	Dry				
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Field Notes: purged Dry at 12:55

4. VOA then Dry

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/20
	Oakland, California	Purge Method:	Bailer 6/21 10:20
Sampling Location:	MW- 6	Date & Time Sampled:	6/21/97 10:20
Top of Casing:	16.6 (ft, msl)	Sampling Method:	Bailer
Depth to Water:	6.13	Sample Type:	TPHG/BTEX 8010
Groundwater Elevation	10.47	Preservatives:	HCL
Well Bottom	-3.40	# of Containers:	5
Water Column:	13.87	Field Tech:	Mike K.
Well Casing Volume:	2.21 (WC* 0.16)	Weather Conditions:	sunny, hot
Casing Volumes Purged:	4		
Purge Rate:	.382 gal/min		2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
9:44	0	7.37	1,715	16	22.9	1.42
9:50	2.2	7.70	1.58	8	22.3	1.81
9:55	2.2	7.37	1.62	NTD	21.9	1.01
10:02	2.2	7.52	1.67	7	20.6	1.22
10:07	2.2	7.47	1,771	5	21.0	1.31
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Field Notes:

7th Avenue was repaved with Asphalt within the last 2 weeks. This included spraying with oil. Well ~~was~~ was accessible and in good condition

6-VOA's

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/20
	Oakland, California	Purge Method:	Bailer
Sampling Location:	MW-7	Date & Time Sampled:	6/20/97 10:40
Top of Casing:	15.47 (ft, msl)	Sampling Method:	Bailer
Depth to Water:	6.90	Sample Type:	TPHG/BTEX 8010
Groundwater Elevation	8.57	Preservatives:	HCL
Well Bottom	-4.53	# of Containers:	5
Water Column:	13.1	Field Tech:	MRK.
Well Casing Volume:	2.09 (WC* 0.16)	Weather Conditions:	Sunny, hot
Casing Volumes Purged:	4		
Purge Rate:	.533 gal/min		2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
10:25	0	7.64	1.195	8	21.2	1.84
10:28	2	7.68	1.243	[illegible]	19.6	1.30
10:32	2	7.72	1.233	13	18.8	1.15
10:36	2	7.64	1.224	5	18.4	1.01
10:40	2	7.59	1.203	3	18.3	1.03
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Field Notes:

6 VOA's

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6/20
	Oakland, California	Purge Method:	Bailer
Sampling Location:	MW- 8	Date & Time Sampled:	6/20 11:30 6/21 10:00
Top of Casing:	17.58 (ft, msl)	Sampling Method:	Bailer
Depth to Water:	7.96	Sample Type:	TPHG/BTEX /8010
Groundwater Elevation	9.62	Preservatives:	HCl
Well Bottom	-2.42	# of Containers:	5
Water Column:	12.04	Field Tech:	mike.
Well Casing Volume:	1.9 (WC* 0.16)	Weather Conditions:	sunny, hot
Casing Volumes Purged:	3.5		
Purge Rate:	.609 gal/min	2" dia well	

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
10:54	0	7.71	1.71	2	16.6	0.92
11:06	1.9	7.46	1.74	5	15.8	1.06
11:11	1.9	7.38	1.625	11	15.8	0.97
11:14	1.9	7.42	1.727	8	16.0	1.31
11:17	1.0	7.40	1.784	9	16.1	1.19
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Field Notes:

Bailed Dry at 11:17

6- VOAs

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name

6. US EPA ID Number

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a.				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

TRANSPORTER

FACILITY

GENERATOR'S COPY

APPENDIX B

SECOND QUARTER (JUNE) 2001

LABORATORY ANALYTICAL DATA SHEETS AND CHAIN-OF-CUSTODY DOCUMENTATION

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

ANALYTICAL REPORT

Prepared for:

Clayton Group Services
6920 Koll Center Parkway
Suite 216
Pleasanton, CA 94566

Date: 10-JUL-01
Lab Job Number: 152718
Project ID: N/A
Location: N/A

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

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Lab Number: **152718**
Client: **Clayton**
Project: **70-97066**

Receipt Date: **06/25/01**

CASE NARRATIVE

This hardcopy data package contains sample and QC results for eight water samples that were received on June 25, 2001. All samples were received cold and intact.

TVH Gasoline / BTXE: High percent surrogate recovery was observed for Trifluorotoluene in sample IDs MW-8 (C&T#152718-008) and MSD (QC148818) due to coelution with a hydrocarbon peak. No other analytical problems were encountered.

Purgeable Halocarbons by GC/MS: No analytical problems were encountered.

152718

REQUEST FOR LABORATORY ANALYTICAL SERVICES

Clayton GROUP SERVICES

IMPORTANT
Date Results Requested: _____
Rush Charges Authorized? ☐ Yes ☐ No
☐ Phone or ☐ Fax Results

Page ____ of ____
For Clayton Use Only
Clayton Lab Project No.

REPORT RESULTS TO

Name	Mike Krzeminski	Client Job No.	70-970669
Company	Clayton	Dept.	
Mailing Address	6920 Koll Center Pkwy Suite 210		
City, State, Zip	Pleasanton, CA		
Telephone No.	925-426-2270	FAX No.	925-426-0106

SEND INVOICE TO

Purchase Order No.	
Name	
Company	Dept.
Address	
City, State, Zip	

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)

* Explanation of Preservative

Samples are:
(check if applicable)
☐ Drinking Water
☒ Groundwater
☐ Wastewater

	CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	TPH-G/BTEX	8010	FOR LAB USE ONLY
-1	mw-1	6/21		water		6	X	X	
-2	mw-2	6/21				5	X	X	
-3	mw-3	6/21				6	X	X	
-4	mw-4	6/21				6	X	X	
-5	mw-5	6/21				4	X	X	
-6	mw-6	6/21				6	X	X	
-7	mw-7	6/21				6	X	X	
-8	mw-8	6/21				6	X	X	

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.*)

Received ☒ On Ice ☒ Cold ☐ Ambient ☒ Intact

Preservation Correct? ☒ Yes ☐ No ☐ N/A

CHAIN OF CUSTODY

Collected by:	Mike Krzeminski (print)	Collector's Signature:	
Relinquished by:	Mike Krzeminski Date/Time 6/22/01	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time 6/25/01 3:50
Method of Shipment:		Received at Lab by:	Date/Time
Authorized by: _____ (Client Signature **MUST** Accompany Request) Date _____		Sample Condition Upon Receipt: ☐ Acceptable ☐ Other (explain)	

Please return completed form and samples to one of the Clayton Group Services, Inc. labs listed below:

Detroit Regional Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
FAX (248) 344-2655

Atlanta Regional Lab
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
FAX (770) 423-4990

Seattle Regional Lab
4636 E. Marginal Way S., Suite 215
Seattle, WA 98134
(800) 568-7755
(206) 763-7364
FAX (206) 763-4189

DISTRIBUTION:
White = Clayton Laboratory
Yellow = Clayton Accounting
Pink = Client Copy

1/00 20K

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8015M
Project#:	STANDARD		
Matrix:	Water	Received:	06/25/01
Units:	ug/L		

Field ID:	MW-1	Batch#:	64588
Type:	SAMPLE	Sampled:	06/21/01
Lab ID:	152718-001	Analyzed:	06/27/01
Diln Fac:	10.00		

Analyte	Result	RL
Gasoline C7-C12	12,000	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	59-135
Bromofluorobenzene (FID)	111	60-140

Field ID:	MW-2	Batch#:	64588
Type:	SAMPLE	Sampled:	06/21/01
Lab ID:	152718-002	Analyzed:	06/27/01
Diln Fac:	25.00		

Analyte	Result	RL
Gasoline C7-C12	30,000	1,300

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	59-135
Bromofluorobenzene (FID)	109	60-140

Field ID:	MW-3	Batch#:	64588
Type:	SAMPLE	Sampled:	06/21/01
Lab ID:	152718-003	Analyzed:	06/27/01
Diln Fac:	40.00		

Analyte	Result	RL
Gasoline C7-C12	34,000	2,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	59-135
Bromofluorobenzene (FID)	108	60-140

Field ID:	MW-4	Batch#:	64588
Type:	SAMPLE	Sampled:	06/21/01
Lab ID:	152718-004	Analyzed:	06/27/01
Diln Fac:	10.00		

Analyte	Result	RL
Gasoline C7-C12	11,000	500

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	59-135
Bromofluorobenzene (FID)	109	60-140

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit
LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8015M
Project#:	STANDARD		
Matrix:	Water	Received:	06/25/01
Units:	ug/L		

Field ID:	MW-5	Batch#:	64588
Type:	SAMPLE	Sampled:	06/22/01
Lab ID:	152718-005	Analyzed:	06/27/01
Diln Fac:	20.00		

Analyte	Result	RL
Gasoline C7-C12	18,000	1,000

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	59-135
Bromofluorobenzene (FID)	108	60-140

Field ID:	MW-6	Batch#:	64552
Type:	SAMPLE	Sampled:	06/21/01
Lab ID:	152718-006	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	420	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	59-135
Bromofluorobenzene (FID)	110	60-140

Field ID:	MW-7	Batch#:	64552
Type:	SAMPLE	Sampled:	06/21/01
Lab ID:	152718-007	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	59-135
Bromofluorobenzene (FID)	105	60-140

Field ID:	MW-8	Batch#:	64552
Type:	SAMPLE	Sampled:	06/21/01
Lab ID:	152718-008	Analyzed:	06/27/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	2,400	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	372 *	>LR b 59-135
Bromofluorobenzene (FID)	115	60-140

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit
LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8015M
Project#:	STANDARD		
Matrix:	Water	Received:	06/25/01
Units:	ug/L		

Type:	BLANK	Batch#:	64552
Lab ID:	QC148816	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	59-135
Bromofluorobenzene (FID)	98	60-140

Type:	BLANK	Batch#:	64588
Lab ID:	QC148942	Analyzed:	06/27/01
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	59-135
Bromofluorobenzene (FID)	93	60-140

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit
LR= Response exceeds instrument's linear range

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8021B
Project#:	STANDARD		
Matrix:	Water	Batch#:	64588
Units:	ug/L	Received:	06/25/01

Field ID: MW-1
Type: SAMPLE
Lab ID: 152718-001
Diln Fac: 10.00
Sampled: 06/21/01
Analyzed: 06/27/01

Analyte	Result	RL
Benzene	2,000	5.0
Toluene	880	5.0
Ethylbenzene	180	5.0
m,p-Xylenes	650	5.0
o-Xylene	530	5.0

Surrogate	%REC	Limits
Trifluorotoluene (PID)	112	56-142
Bromofluorobenzene (PID)	110	55-149

Field ID: MW-2
Type: SAMPLE
Lab ID: 152718-002
Diln Fac: 50.00
Sampled: 06/21/01
Analyzed: 06/28/01

Analyte	Result	RL
Benzene	8,600	25
Toluene	2,600	25
Ethylbenzene	440	25
m,p-Xylenes	950	25
o-Xylene	280	25

Surrogate	%REC	Limits
Trifluorotoluene (PID)	109	56-142
Bromofluorobenzene (PID)	106	55-149

Field ID: MW-3
Type: SAMPLE
Lab ID: 152718-003
Diln Fac: 40.00
Sampled: 06/21/01
Analyzed: 06/27/01

Analyte	Result	RL
Benzene	5,900	20
Toluene	6,200	20
Ethylbenzene	340	20
m,p-Xylenes	1,100	20
o-Xylene	450	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	109	56-142
Bromofluorobenzene (PID)	107	55-149

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8021B
Project#:	STANDARD		
Matrix:	Water	Batch#:	64588
Units:	ug/L	Received:	06/25/01

Field ID: MW-4
Type: SAMPLE
Lab ID: 152718-004
Diln Fac: 20.00
Sampled: 06/21/01
Analyzed: 06/28/01

Analyte	Result	RL
Benzene	2,300	10
Toluene	26	10
Ethylbenzene	570	10
m,p-Xylenes	570	10
o-Xylene	71	10

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

Field ID: MW-5
Type: SAMPLE
Lab ID: 152718-005
Diln Fac: 20.00
Sampled: 06/22/01
Analyzed: 06/27/01

Analyte	Result	RL
Benzene	3,400	10
Toluene	2,300	10
Ethylbenzene	350	10
m,p-Xylenes	640	10
o-Xylene	380	10

Surrogate	%REC	Limits
Trifluorotoluene (PID)	108	56-142
Bromofluorobenzene (PID)	109	55-149

Field ID: MW-6
Type: SAMPLE
Lab ID: 152718-006
Diln Fac: 1.000
Sampled: 06/21/01
Analyzed: 06/27/01

Analyte	Result	RL
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	0.59	0.50
m,p-Xylenes	ND	0.50
o-Xylene	1.0	0.50

Surrogate	%REC	Limits
Trifluorotoluene (PID)	115	56-142
Bromofluorobenzene (PID)	105	55-149

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8021B
Project#:	STANDARD		
Matrix:	Water	Batch#:	64588
Units:	ug/L	Received:	06/25/01

Field ID: MW-7
Type: SAMPLE
Lab ID: 152718-007
Diln Fac: 1.000
Sampled: 06/21/01
Analyzed: 06/27/01

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

Surrogate	%REC	Limits
Trifluorotoluene (PID)	104	56-142
Bromofluorobenzene (PID)	106	55-149

Field ID: MW-8
Type: SAMPLE
Lab ID: 152718-008
Diln Fac: 5.000
Sampled: 06/21/01
Analyzed: 06/27/01

Analyte	Result	RL
Benzene	490	2.5
Toluene	ND	2.5
Ethylbenzene	29	2.5
m,p-Xylenes	ND	2.5
o-Xylene	ND	2.5

Surrogate	%REC	Limits
Trifluorotoluene (PID)	120	56-142
Bromofluorobenzene (PID)	108	55-149

Type: BLANK
Lab ID: QC148942
Diln Fac: 1.000
Analyzed: 06/27/01

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

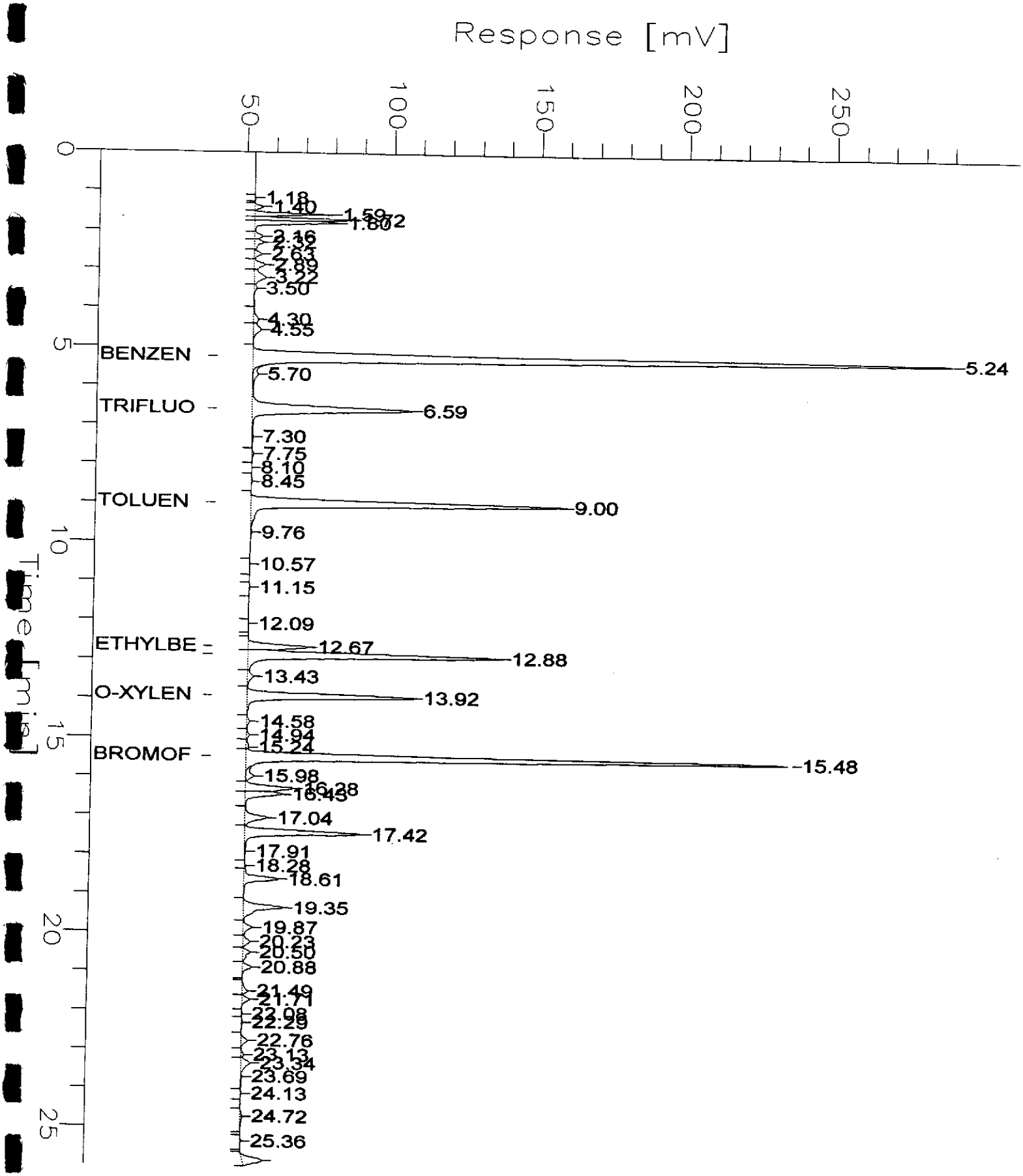
Surrogate	%REC	Limits
Trifluorotoluene (PID)	97	56-142
Bromofluorobenzene (PID)	97	55-149

D= Not Detected
L= Reporting Limit

Chromatogram

Sample Name : 152718-001,64588
FileName : G:\GC04\DATA\178K009.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 41 mV

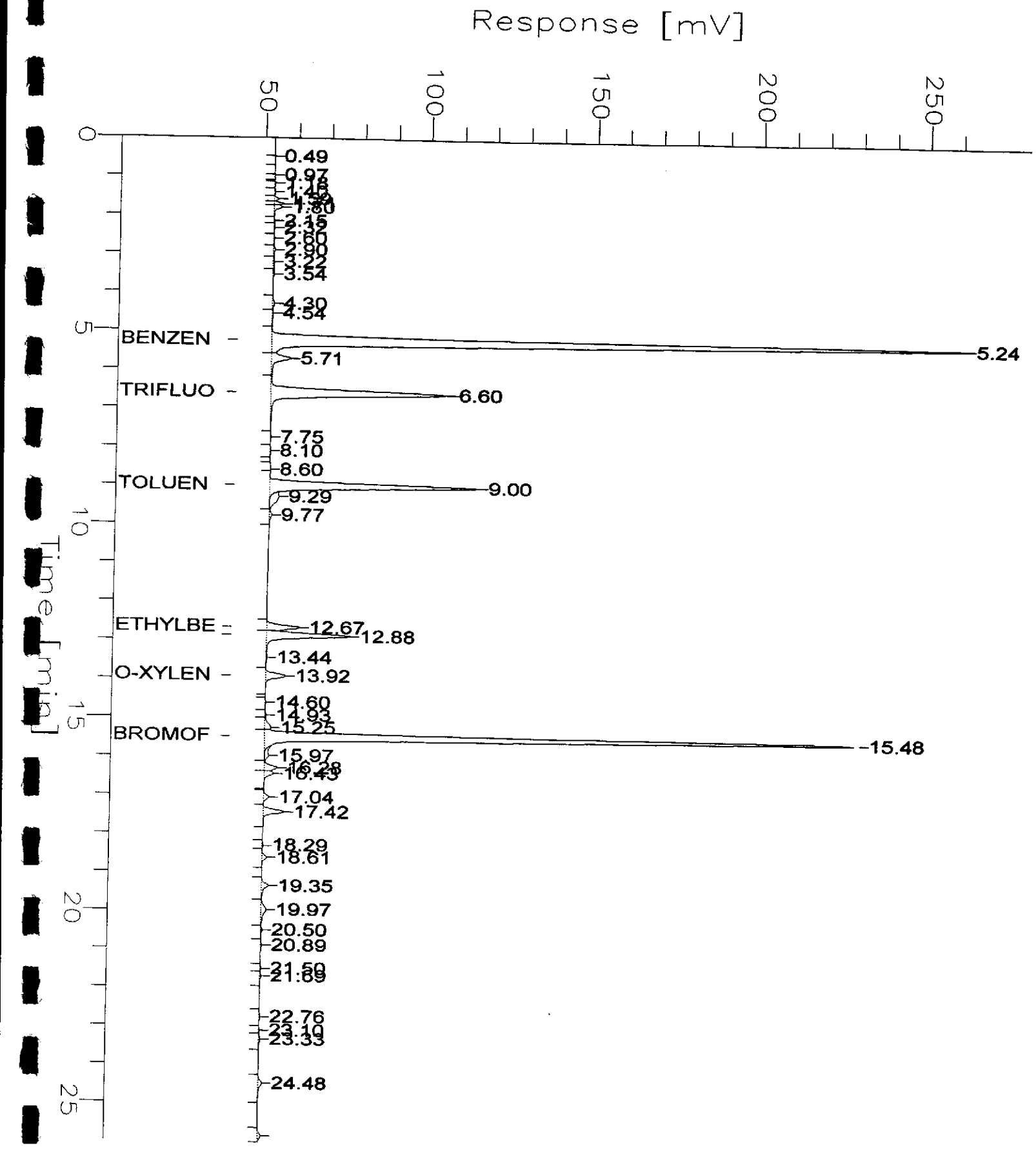
Sample #: C1 Page 1 of 1
Date : 6/27/01 06:35 PM
Time of Injection: 6/27/01 06:08 PM
Low Point : 40.68 mV High Point : 290.77 mV
Plot Scale: 250.1 mV



Chromatogram

Sample Name : 152718-002,64588,BTXE ONLY
FileName : G:\GC04\DATA\178K029.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 42 mV

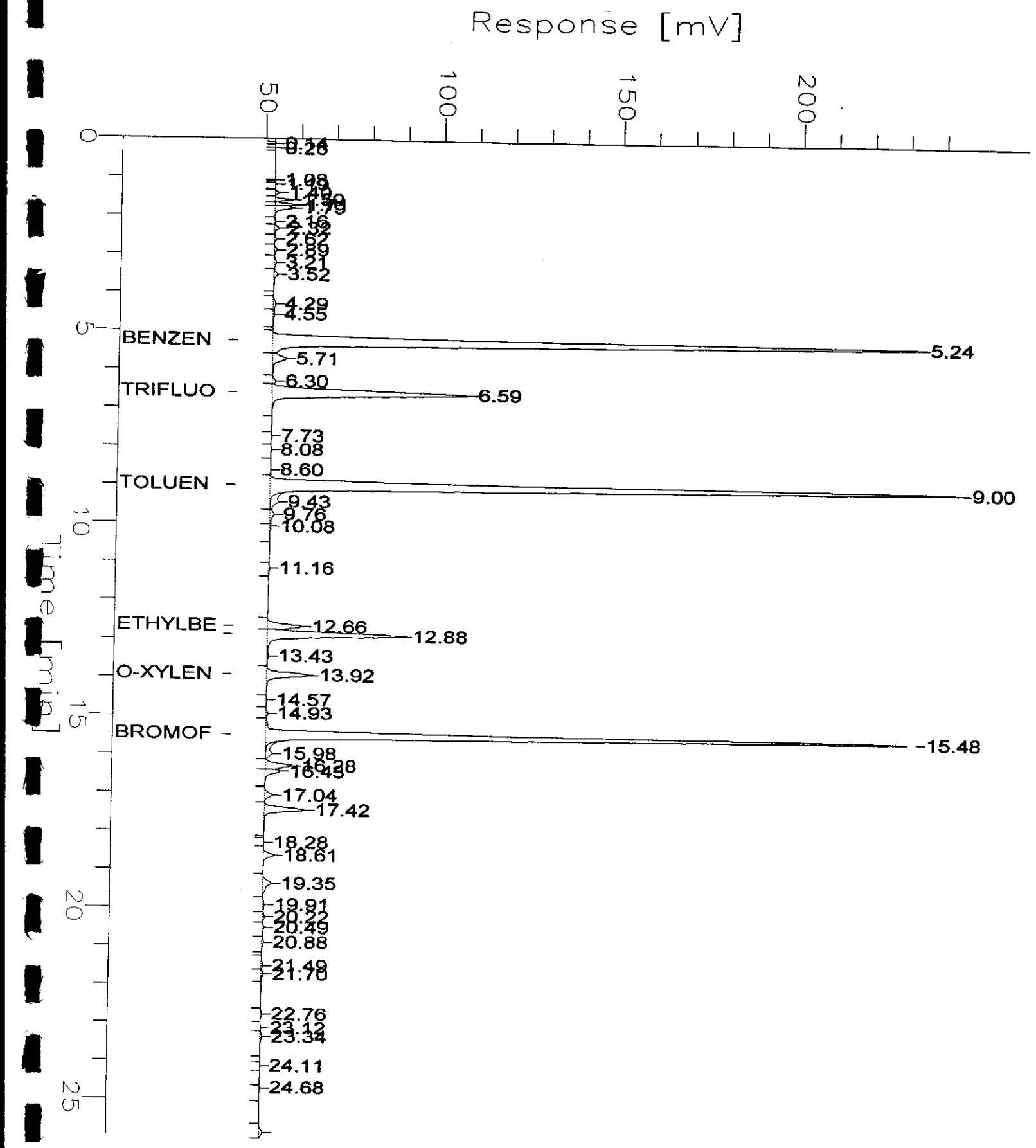
Sample #: C1 Page 1 of 1
Date : 6/28/01 04:46 PM
Time of Injection: 6/28/01 04:20 PM
Low Point : 42.13 mV High Point : 261.79 mV
Plot Scale: 219.7 mV



Chromatogram

Sample Name : 152718-003,64588
FileName : G:\GC04\DATA\178K012.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 43 mV

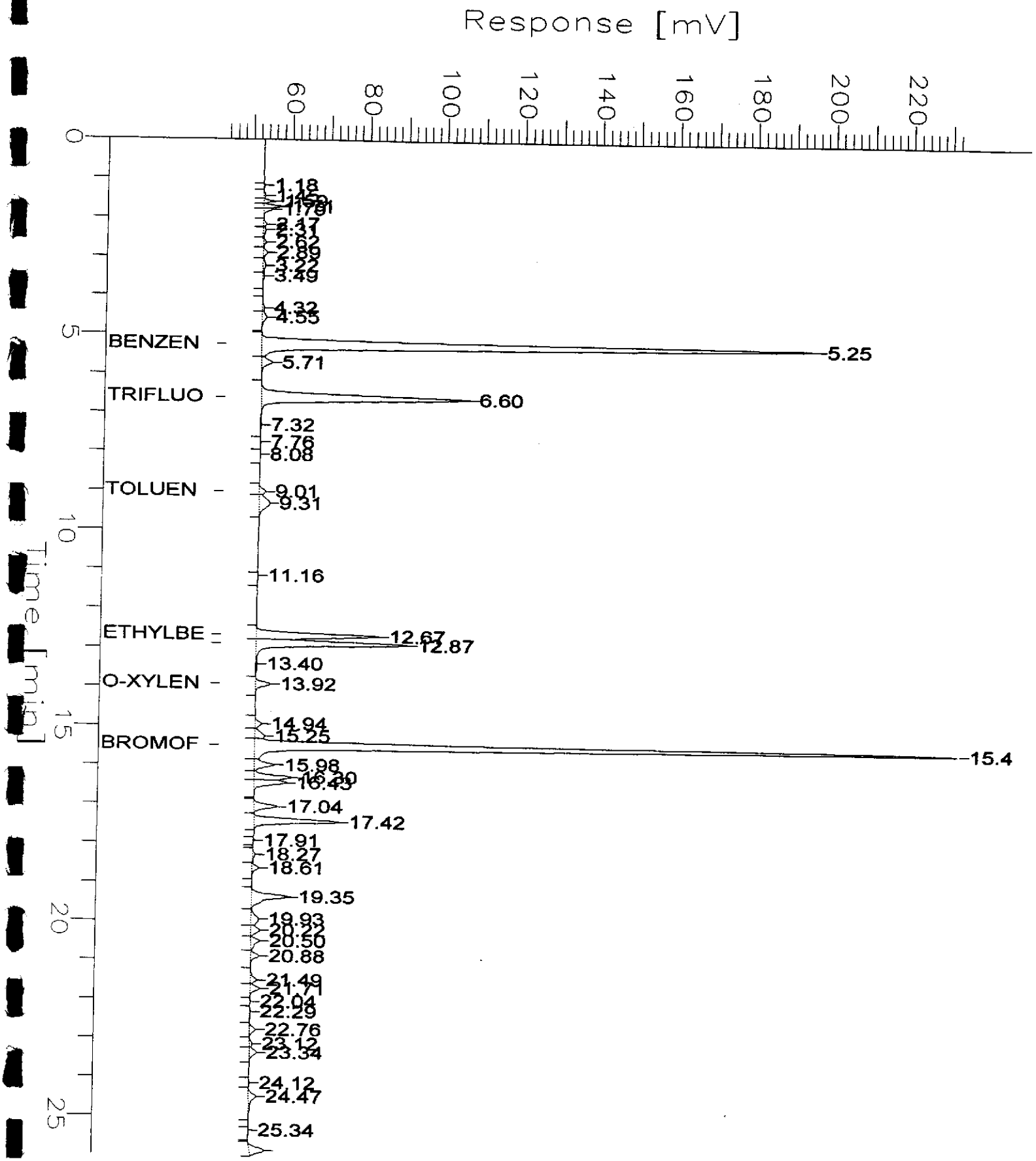
Sample #: C1 Page 1 of 1
Date : 6/27/01 08:22 PM
Time of Injection: 6/27/01 07:56 PM
Low Point : 42.91 mV High Point : 245.72 mV
Plot Scale: 202.8 mV



Chromatogram

Sample Name : 152718-004,64588,BTXE ONLY
FileName : G:\GC04\DATA\178K028.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 44 mV

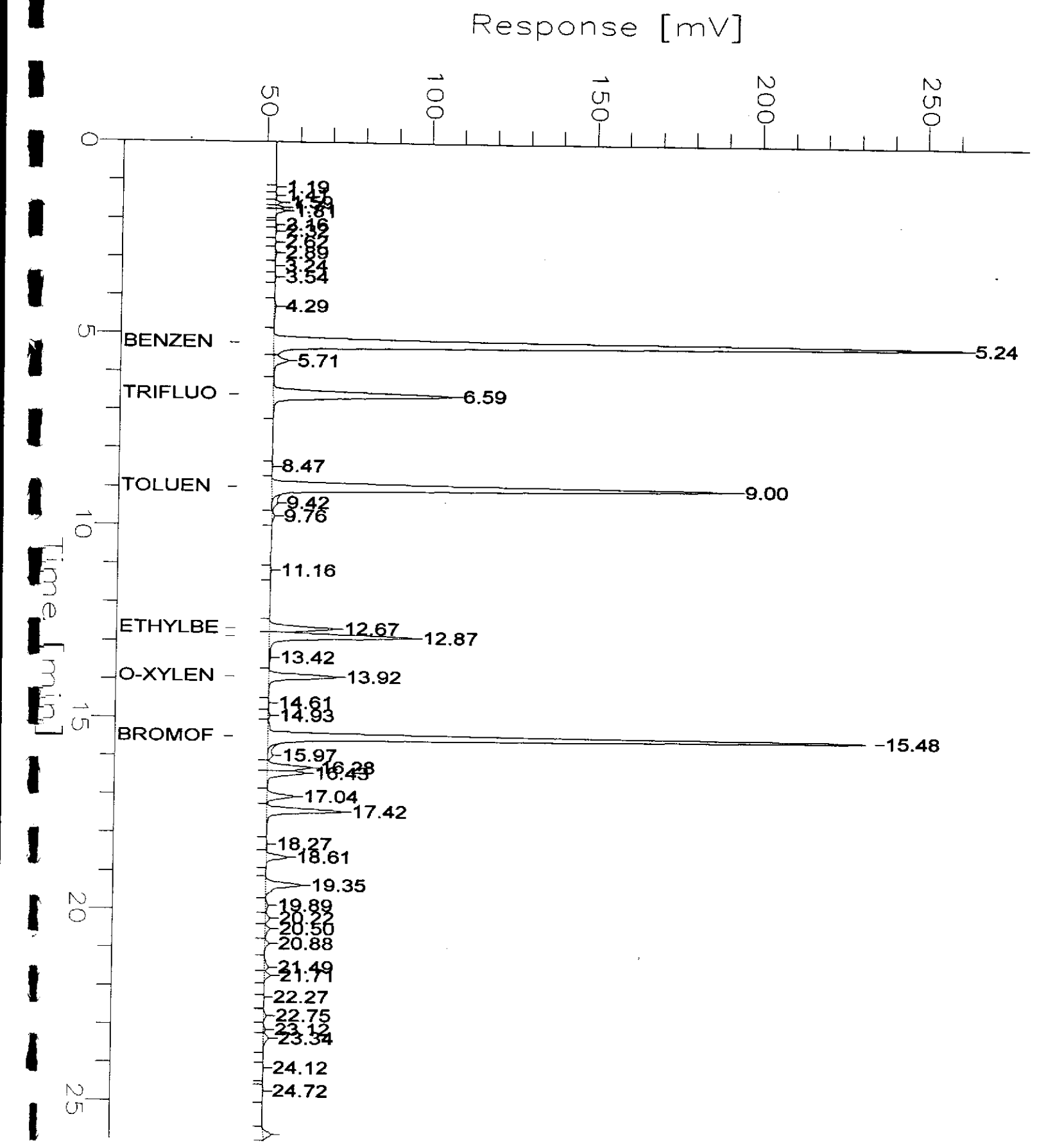
Sample #: C1 Page 1 of 1
Date : 6/28/01 04:10 PM
Time of Injection: 6/28/01 03:44 PM
Low Point : 43.54 mV High Point : 233.97 mV
Plot Scale: 190.4 mV



Chromatogram

Sample Name : 152718-005,64588
FileName : G:\GC04\DATA\178K010.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 42 mV

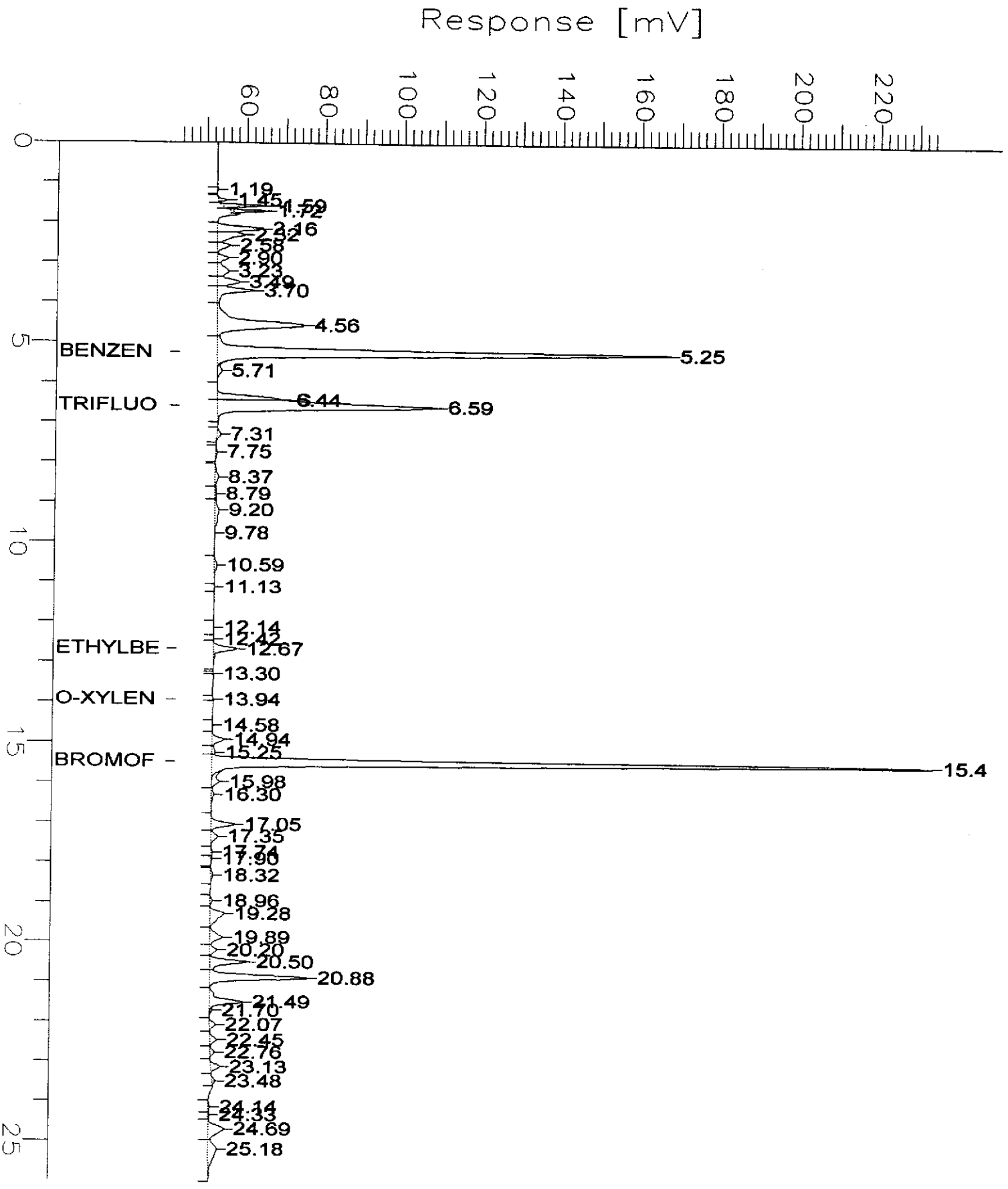
Sample #: C1
Date : 6/27/01 07:10 PM
Time of Injection: 6/27/01 06:44 PM
Low Point : 42.13 mV High Point : 261.87 mV
Plot Scale: 219.7 mV



Chromatogram

Sample Name : 152718-008,64588,BTXE ONLY
FileName : G:\GC04\DATA\178K007.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 43 mV

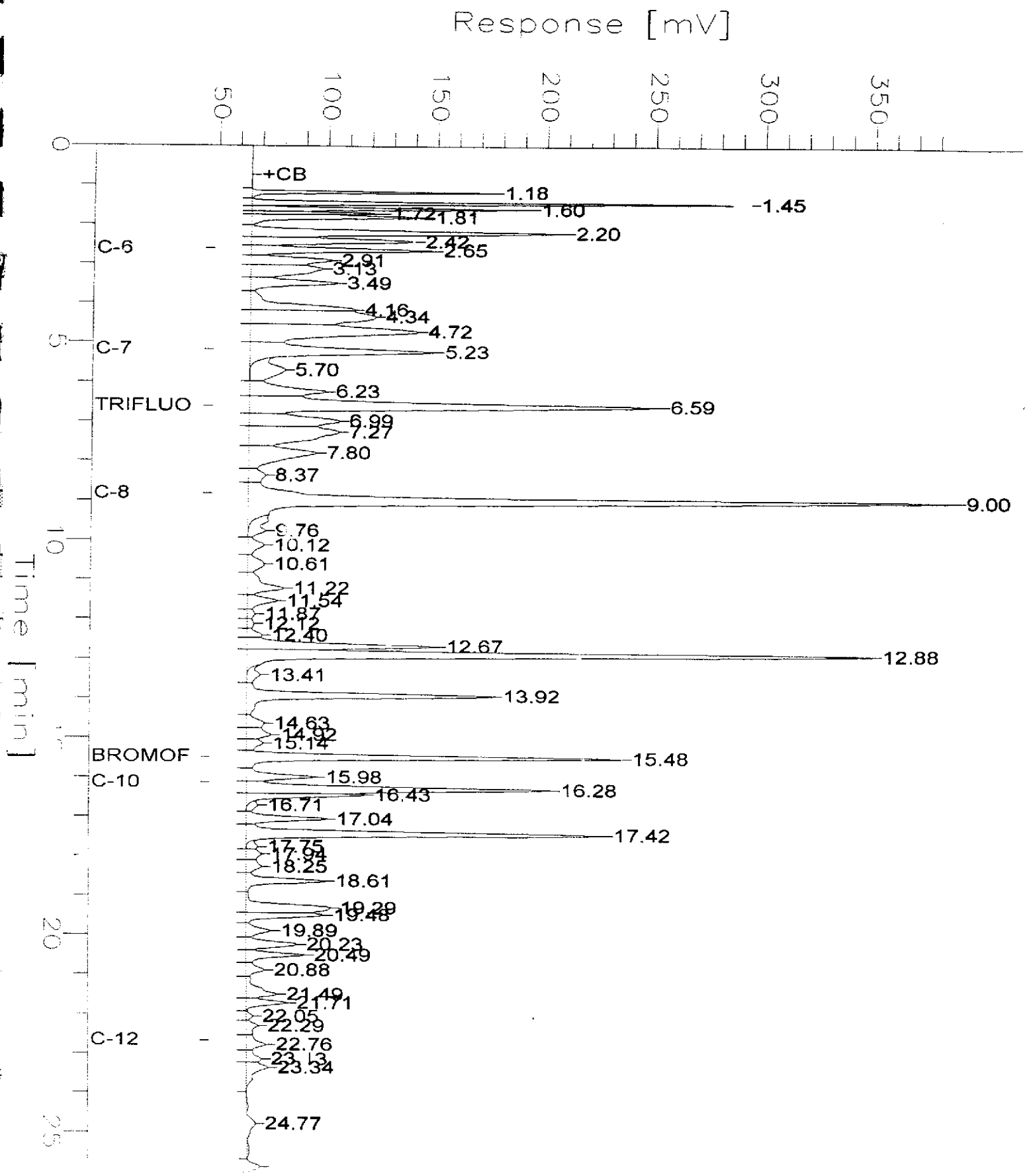
Sample #: C1 Page 1 of 1
Date : 6/28/01 02:02 PM
Time of Injection: 6/27/01 04:57 PM
Low Point : 43.47 mV High Point : 234.64 mV
Plot Scale: 191.2 mV



GC04 TVH 'J' Data File FID

Sample Name : CCV/BS,QC148956,64588,01WS1268,5/5000
FileName : G:\GC04\DATA\178J014.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 49 mV

Sample #:
Date : 6/27/01 10:02 PM
Time of Injection: 6/27/01 09:36 PM
Low Point : 48.53 mV High Point : 388.56 mV
Plot Scale: 340.0 mV



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8021B
Project#:	STANDARD		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC148941	Batch#:	64588
Matrix:	Water	Analyzed:	06/27/01
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	18.26	91	67-117
Toluene	20.00	17.00	85	69-117
Ethylbenzene	20.00	18.54	93	68-124
m,p-Xylenes	40.00	37.79	94	70-125
o-Xylene	20.00	19.00	95	65-129

Surrogate	%REC	Limits
Trifluorotoluene (PID)	99	56-142
Bromofluorobenzene (PID)	98	55-149

Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8015M
Project#:	STANDARD		
Field ID:	MW-8	Batch#:	64552
MSS Lab ID:	152718-008	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/27/01
Diln Fac:	1.000		

Type: MS Lab ID: QC148817

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,416	2,000	4,186	89	65-131

Surrogate	%REC	Limits
Trifluorotoluene (FID)	403 *	>LR 59-135
Bromofluorobenzene (FID)	115	60-140

Type: MSD Lab ID: QC148818

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	4,205	89	65-131	0	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	403 *	>LR 59-135
Bromofluorobenzene (FID)	116	60-140

*= Value outside of QC limits; see narrative
LR= Response exceeds instrument's linear range
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8021B
Project#:	STANDARD		
Field ID:	ZZZZZZZZZZ	Batch#:	64588
MSS Lab ID:	152744-003	Sampled:	06/25/01
Matrix:	Water	Received:	06/26/01
Units:	ug/L	Analyzed:	06/28/01
Diln Fac:	1.000		

Type: MS Lab ID: QC148943

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.1200	20.00	20.08	100	65-123
Toluene	<0.2500	20.00	19.98	100	73-122
Ethylbenzene	2.203	20.00	22.32	101	59-137
m,p-Xylenes	1.856	40.00	36.81	87	68-132
o-Xylene	2.177	20.00	22.93	104	61-140

Surrogate	%REC	Limits
Trifluorotoluene (PID)	103	56-142
Bromofluorobenzene (PID)	106	55-149

Type: MSD Lab ID: QC148944

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	19.31	97	65-123	4	20
Toluene	20.00	19.11	96	73-122	4	20
Ethylbenzene	20.00	21.27	95	59-137	5	20
m,p-Xylenes	40.00	34.61	82	68-132	6	20
o-Xylene	20.00	21.71	98	61-140	5	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	105	56-142
Bromofluorobenzene (PID)	106	55-149

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-1	Batch#:	64546
Lab ID:	152718-001	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	3.0	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	Limits
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	96	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-2	Batch#:	64546
Lab ID:	152718-002	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	5.6	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	Limits
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	98	80-115

D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-3	Batch#:	64546
Lab ID:	152718-003	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	0.8	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	120	0.5
Trichloroethene	2.4	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	Limits
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	95	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-4	Batch#:	64546
Lab ID:	152718-004	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	3.3	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	1.4	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	Limits
1,2-Dichloroethane-d4	102	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	93	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-5	Batch#:	64546
Lab ID:	152718-005	Sampled:	06/22/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	0.6	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	21	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	Limits
1,2-Dichloroethane-d4	100	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	96	80-115

D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-6	Batch#:	64546
Lab ID:	152718-006	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	0.9	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	Limits
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	96	80-115

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-7	Batch#:	64546
Lab ID:	152718-007	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	Limits
1,2-Dichloroethane-d4	101	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	97	80-115

D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Field ID:	MW-8	Batch#:	64546
Lab ID:	152718-008	Sampled:	06/21/01
Matrix:	Water	Received:	06/25/01
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	75	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	2.5
Freon 113	ND	5.0
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	48	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	910	2.5
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	4.9	2.5
Trichloroethene	28	2.5
1,2-Dichloropropane	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	ND	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	96	80-115

D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC148797	Batch#:	64546
Matrix:	Water	Analyzed:	06/26/01
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	Limits
1,2-Dichloroethane-d4	110	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	103	80-115

D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC148798	Batch#:	64546
Matrix:	Water	Analyzed:	06/26/01
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
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	Limits
1,2-Dichloroethane-d4	108	78-123
Toluene-d8	102	80-110
Bromofluorobenzene	99	80-115

D= Not Detected
L= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	152718	Prep:	EPA 5030
Client:	Clayton Group Services	Analysis:	EPA 8260B
Project#:	STANDARD		
Matrix:	Water	Batch#:	64546
Units:	ug/L	Analyzed:	06/26/01
Diln Fac:	1.000		

Type: BS Lab ID: QC148795

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	55.07	110	74-132
Trichloroethene	50.00	51.79	104	80-119
Chlorobenzene	50.00	50.50	101	80-117

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	113	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	98	80-115

Type: BSD Lab ID: QC148796

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	45.97	92	74-132	18	20
Trichloroethene	50.00	49.16	98	80-119	5	20
Chlorobenzene	50.00	49.91	100	80-117	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	95	80-115

RPD= Relative Percent Difference