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January 8, 2002

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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

Subject: Fourth 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 Fourth Quarter 2001 groundwater monitoring event performed at 630 29th Avenue in Oakland, California.

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

Sincerely,

Marc Mullaney
Project Geologist
Environmental Services

Jon A. Rosso, P.E.
Director

MRM/wbc

cc: Donna Profitte Bank of America
 Clayton
 Rita Repko

5/25/01 + 2/16/01 R+FS



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

Clayton Project No. 70-97066.00

January 8, 2002

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1. INTRODUCTION

Clayton Group Services, Inc., (Clayton) has prepared this quarterly groundwater monitoring report to document the results of the Fourth 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 Fourth 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 December 3, 2001. Groundwater samples were collected from eight monitoring wells (MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, and MW-11).

3.1. GROUNDWATER LEVEL MEASUREMENTS

Depth to water was measured in each monitoring well to determine the groundwater elevation, gradient and flow direction. The depth to water in each monitoring well was measured on December 3, 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

Two monitoring wells (MW-1 and MW-2) are constructed with $\frac{3}{4}$ -inch diameter PVC well casings and six monitoring wells (MW-6 through MW-11) 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 $\frac{3}{4}$ -inch diameter wells were purged using a peristaltic pump and $\frac{1}{4}$ -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 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 Fourth 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 peristaltic

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 Fourth 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-10 and MW-11. The direction of groundwater flow is inferred to be perpendicular to the piezometric equipotential contours. For the Fourth Quarter 2001 monitoring event, the groundwater gradient was determined to be 0.019 feet per foot (ft/ft) towards the west.

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The Fourth 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 72 micrograms per liter ($\mu\text{g}/\text{L}$) to 90,000 $\mu\text{g}/\text{L}$.
- Benzene was detected in 6 of 8 samples tested, and ranged in concentration from 24 $\mu\text{g}/\text{L}$ to 15,000 $\mu\text{g}/\text{L}$.
- Toluene was detected in 4 of 8 samples tested, and ranged in concentration from 14 $\mu\text{g}/\text{L}$ to 15,000 $\mu\text{g}/\text{L}$.
- Ethylbenzene was detected in 5 of 8 samples tested, and ranged in concentration from 3.7 $\mu\text{g}/\text{L}$ to 2,200 $\mu\text{g}/\text{L}$.
- Total Xylenes was detected in 4 of 8 samples tested, and ranged in concentration from 11.3 $\mu\text{g}/\text{L}$ to 9,100 $\mu\text{g}/\text{L}$.

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 Fourth 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 2 of 8 samples tested, and ranged in concentration from 1.6 $\mu\text{g}/\text{L}$ to 14 $\mu\text{g}/\text{L}$.
- Trichloroethene (TCE) was detected in 1 of 8 samples tested, at 100 $\mu\text{g}/\text{L}$.
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 1 of 8 samples tested, at 650 $\mu\text{g}/\text{L}$.
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 1 of 8 samples tested, at 44 $\mu\text{g}/\text{L}$.
- Vinyl Chloride (VC) was detected in 1 of 8 samples tested, at 31 $\mu\text{g}/\text{L}$.

5. CONCLUSION

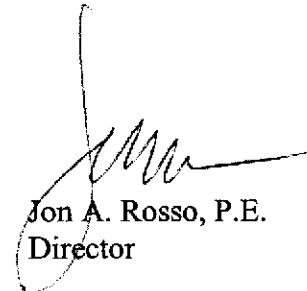
The groundwater gradient determined for the Fourth Quarter 2001 monitoring event was found to be 0.019 ft/ft to the west, and is consistent with past determinations. The highest concentrations of TPH-g and benzene occur in the beneath the central portion of the subject building in the area of monitoring wells MW-2 and MW-9. The locations of monitoring wells MW-6, MW-7, and MW-10 define the eastern, southern 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 well MW-8.

Sincerely,



Marc Mullaney
Project Geologist
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	12/3/01	16.69	4.17	12.52
	9/25/01		6.76	9.93
	6/20/01		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	12/3/01	20.79	11.13	9.66
	9/25/01		11.78	9.01
	6/20/01		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	Removed from monitoring program in October 2001			
	9/25/01	21.10	10.74	10.36
	6/20/01		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	Removed from monitoring program in October 2001			
	9/25/01	17.78	7.40	10.38
	6/20/01		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

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-5	Removed from monitoring program in October 2001			
	9/25/01	21.12	10.34	10.78
	6/20/01		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	12/3/01	16.60	4.72	11.88
	9/25/01		6.68	9.92
	6/20/01		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
MW-7	12/3/01	15.47	6.48	8.99
	9/25/01		7.25	8.22
	6/20/01		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	12/3/01	17.58	6.58	11.00
	9/25/01		8.89	8.69
	6/20/01		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
MW-9	12/3/01	17.61	5.79	11.82
MW-10	12/3/01	16.92	4.22	12.70
MW-11	12/3/01	14.87	5.67	9.20

Notes:

1. All top of casing elevations referenced to mean sea level (msl) and measured with reference to the benchmark located at Peterson Street and East 7th Street.

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	12/3/01	15,000	NA	2,800	310	1,200	1,660	<3.1	<3.1	<3.1	<3.1	<3.1
	9/26/01	16,000	NA	1,100	< 10	130	320	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
	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	12/3/01	45,000	NA	13,000	950	5,100	2,930	14	<7.1	<7.1	<7.1	<7.1
	9/26/01	26,000	NA	12,000	590	3,900	1,960	11	< 10	< 10	< 10	< 10
	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	Removed from sampling program in October 2001											
	9/26/01	59,000	NA	12,000	780	13,000	3,680	990	< 8.3	< 8.3	< 8.3	< 8.3
	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

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-4 Removed from sampling program in October 2001												
	9/26/01	17,000	NA	7,900	440	< 50	581	1.9	< 0.5	8.1	< 0.5	< 0.5
	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
MW-5 Removed from sampling program in October 2001												
	9/26/01	5,100	NA	2,400	< 10	1,200	460	22	< 3.6	< 3.6	< 3.6	< 3.6
	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												
	12/3/01	72	NA	< 0.5	< 0.5	< 0.5	< 0.5	1.6* ⁵	< 0.5	< 0.5	< 0.5	< 0.5
	9/25/01	760	NA	< 0.5	< 0.5	< 0.5	2.9	< 0.5* ⁴	< 0.5	< 0.5	< 0.5	< 0.5
	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

Table 2
Summary of Monitoring Well Groundwater Analytical Data
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California

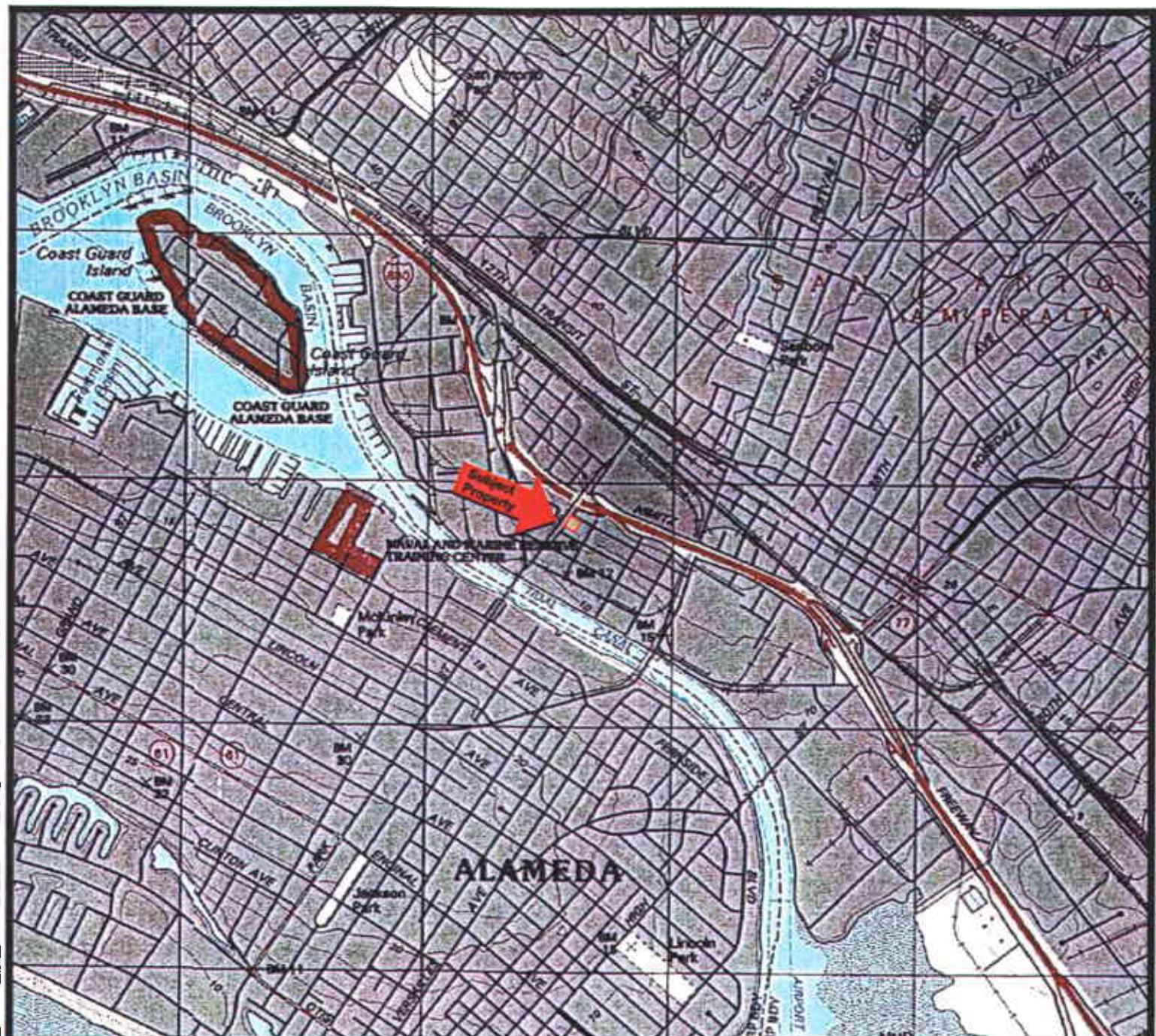
Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-7	12/3/01	82	NA	24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	9/25/01	< 50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/21/01	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	<0.5	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	12/3/01	1,200	NA	190	2.7	14	11.3	<2.5	100	650	44	31
	9/25/01	1,500	NA	170	1.6	4.3	2.7	5.0	36	820	59	53
	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
MW-9	12/3/01	90,000	NA	15,000	2,200	15,000	9,100	<10	<10	<10	<10	<10
MW-10	12/3/01	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-11	12/3/01	1,600	NA	470	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

1. All results in micrograms per liter ($\mu\text{g/L}$).
2. NA = Not Analyzed.
3. 1,2-DCA = 1,2-dichloroethane.
4. TPHG = Total Petroleum Hydrocarbons as Gasoline.

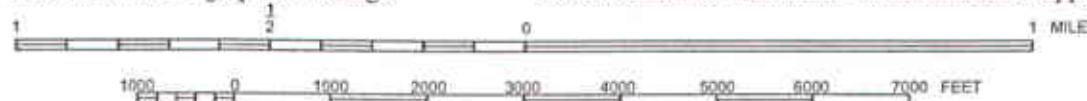
5. MTBE = methyl tert-butyl ether.
6. TCE = Trichloroethene.
7. DCE = Dichloroethene.
8. VC= Vinyl Chloride.

- *¹ 1,1-DCA detected at 1.1 $\mu\text{g/L}$.
- *² 1,1-DCA detected at 0.9 $\mu\text{g/L}$.
- *³ Freon -11 detected at 0.6 $\mu\text{g/L}$.
- *⁴ 1,1 DCA detected at 0.9 $\mu\text{g/L}$.
- *⁵ 1,1 DCA detected at 0.7 $\mu\text{g/L}$.



Map Source: TOPO!© 2000 National Geographic Holdings

Note: Boundaries and Location Information is Approximate



Portion of the 7.5-Minute Series Oakland East, California
Quadrangle Topographic Map (Datum: NAD 27)
United States Department of the Interior
Geological Survey
1997

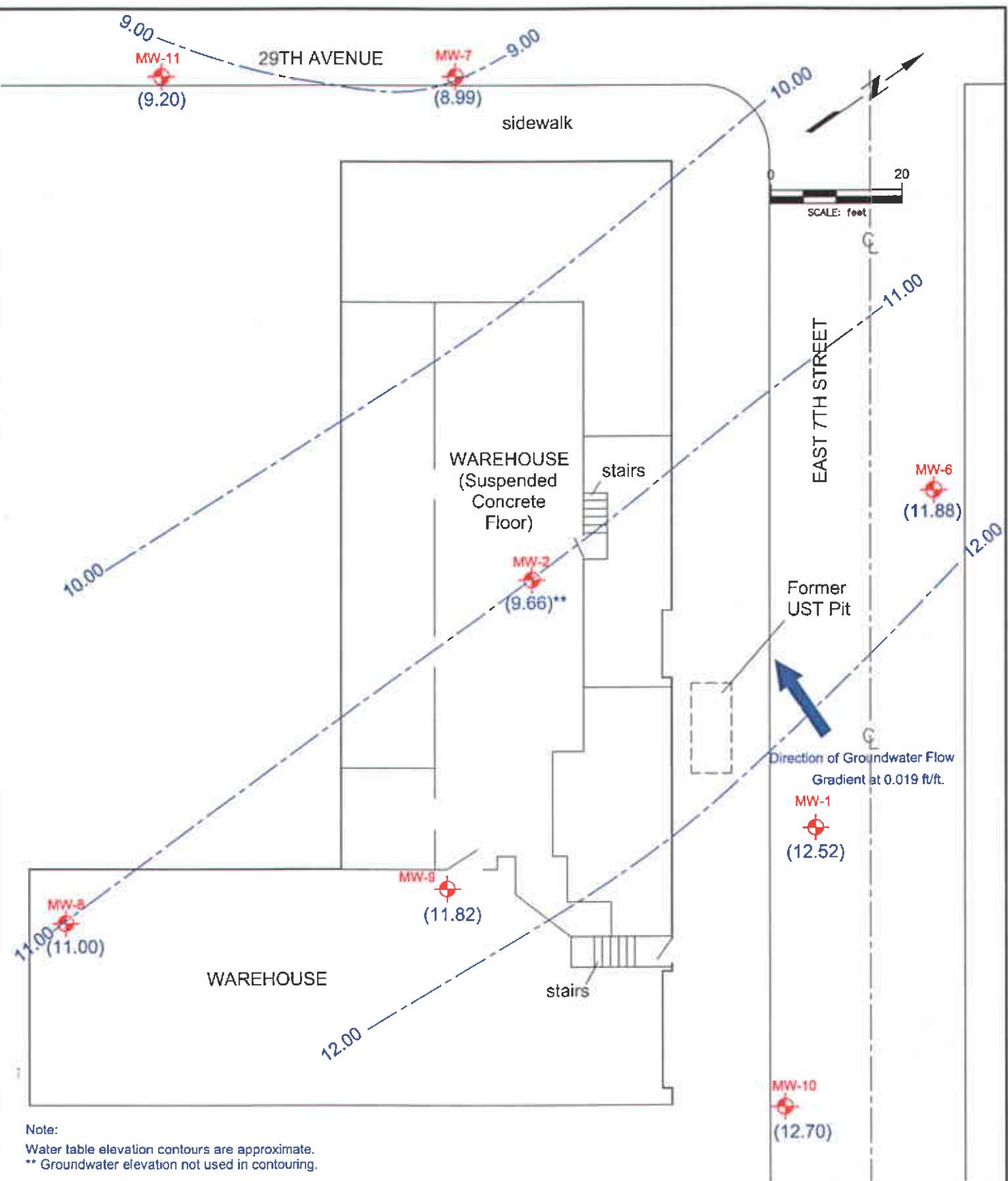


PROPERTY LOCATION MAP
Former Lemoine Sausage Factory
630 29th Avenue
Oakland, California
Clayton Project No. 70-97066.00

Figure

1

Clayton
GROUP SERVICES

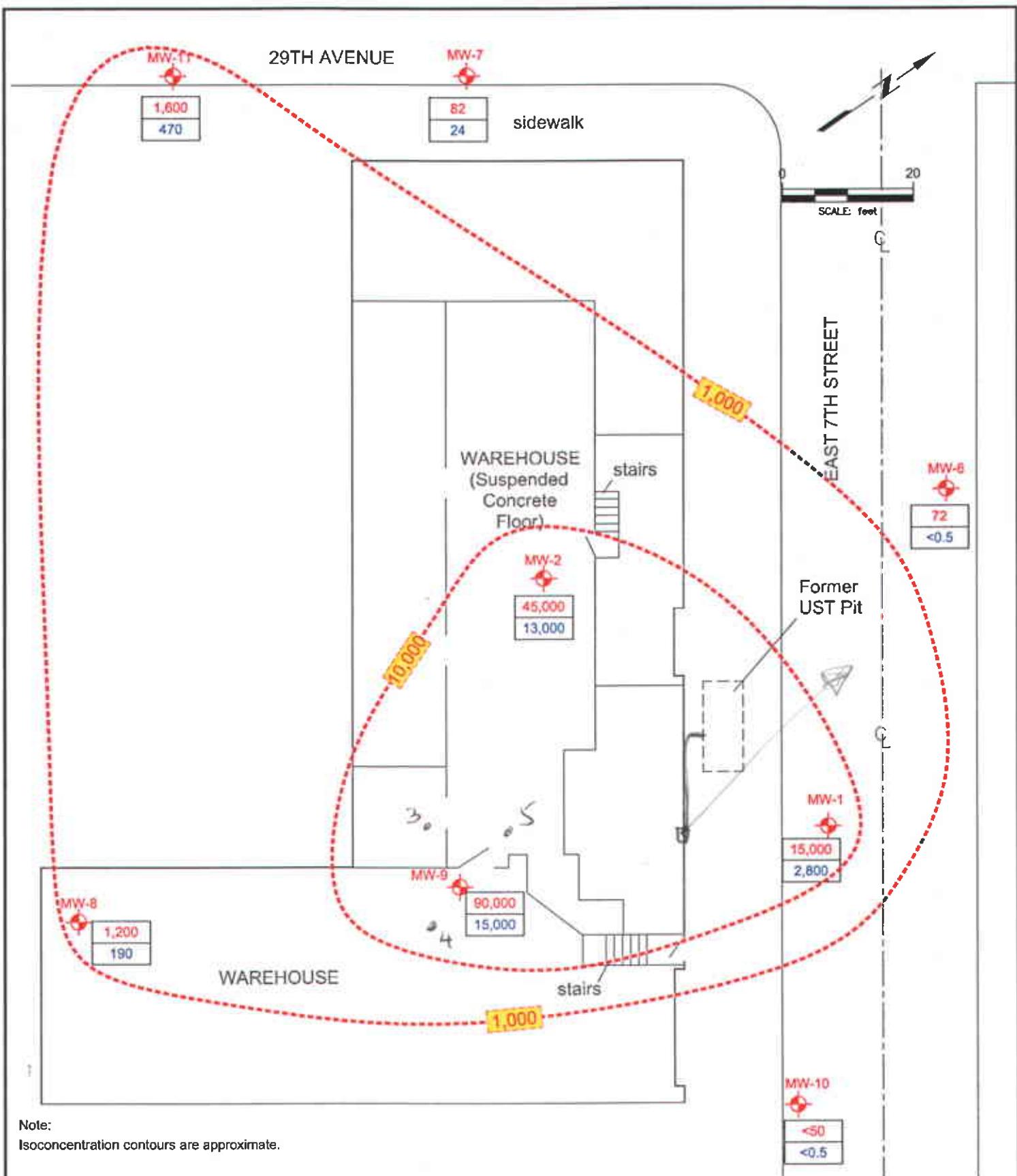


LEGEND	
Monitoring Well Location	(12.52) Groundwater Elevation in Feet above Mean Sea Level
10.00	— Groundwater Surface Contour and Elevation

GROUNDWATER ELEVATION CONTOUR MAP
(Dec 3, 2001)
FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure
2
12/21/01
Q4TH_01.DWG

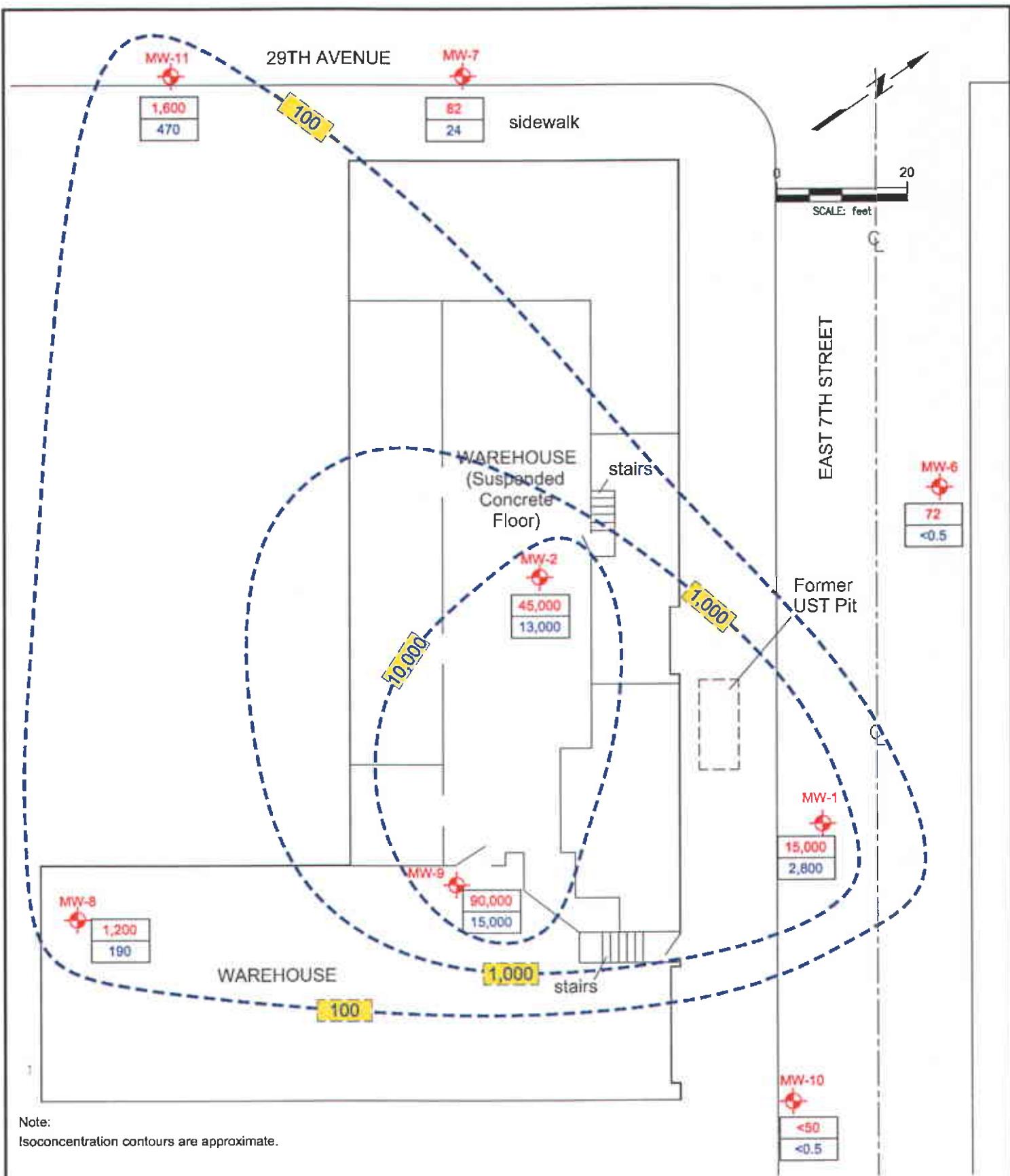




Note:

Isoconcentration contours are approximate.

LEGEND	TPH as Gasoline CONCENTRATIONS IN GROUNDWATER December 2001 FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	Figure	Clayton GROUP SERVICES
MW-1 Monitoring Well Location 16,000 TPH-G Concentration (micrograms per liter) 1,100 Benzene Concentration (micrograms per liter) 1,000 Isoconcentration Contour (micrograms per liter)		3a 12/21/01 Q4TH_01.DWG	



Note:

Isoconcentration contours are approximate.

LEGEND	
MW-1	Monitoring Well Location
16,000	TPH-G Concentration (micrograms per liter)
1,100	Benzene Concentration (micrograms per liter)
1,000	Isoconcentration Contour (micrograms per liter)

BENZENE
CONCENTRATIONS IN GROUNDWATER
December 2001
FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure

3b

12/21/01
Q4TH_01.DWG



APPENDIX A

FOURTH QUARTER (DECEMBER) 2001
GROUNDWATER SAMPLING LOGS

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory 630 29th Avenue Oakland, California	Job #:	70-97066
Sampling Location:	MW-1	Date Purged:	12/3/2001
Top of Casing:	16.69 (ft, msl)	Purge Method:	Peristaltic Pump
Depth to Water:	4.17 Feet	Date & Time Sampled:	12/3/01 1430
Groundwater Elevation	12.52 (ft, msl)	Sampling Method:	Peristaltic Pump
Well Bottom	7.69 (ft, msl)	Sample Type:	TPHG/BTEX /8010
Water Column:	4.83 Feet	Preservatives:	Ice
Well Casing Volume:	0.05 gal (WC* 0.01)	# of Containers:	4 VOAs
Casing Volumes Purged:	2.69	Field Tech:	MRM
Purge Rate:	0.13 GPM	Weather Conditions:	cool, overcast
80% Recovery from TOC:	-5.14 ft. from TOC	3/4" dia well	

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	12/3/2001
	Oakland, California	Purge Method:	Peristaltic Pump
Sampling Location:	MW-2	Date & Time Sampled:	12/3/01 1455
Top of Casing:	20.79 (ft, msl)	Sampling Method:	Peristaltic Pump
Depth to Water:	11.13 Feet	Sample Type:	TPHG/BTEX /8010
Groundwater Elevation	9.66 (ft, msl)	Preservatives:	Ice
Well Bottom	0.79 (ft, msl)	# of Containers:	4 VOAs
Water Column:	8.87 Feet	Field Tech:	MRM
Well Casing Volume:	0.09 gal (WC* 0.01)	Weather Conditions:	Cool, overcast
Casing Volumes Purged:	1.47		
Purge Rate:	0.13 GPM	3/4" dia well	
80% Recovery from TOC:	-12.90 ft. from TOC		

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Factory Job #: 70-97066
 630 29th Avenue Date Purged: 12/3/2001
 Oakland, California Purge Method: Submersible Pump/Sond
 Sampling Location: MW-6 Date & Time Sampled: 12/3/01 1604
 Top of Casing: 16.6 (ft, msl) Sampling Method: Disposable Bailer
 Depth to Water: 4.72 Feet Sample Type: TPHG/BTEX /8010
 Groundwater Elevation 11.88 (ft, msl) Preservatives: Ice
 Well Bottom -3.40 (ft, msl) # of Containers: 4 VOAs
 Water Column: 15.28 Feet Field Tech: MRM
 Well Casing Volume: 2.44 gal (WC* 0.16) Weather Conditions: cool, overcast
 Casing Volumes Purged: 4.09
 Purge Rate: 5.00 GPM
 80% Recovery from TOC: -7.78 ft. from TOC 2" dia well

Time	Volume Removed (gal)	Temp. (°C)	CND	DO	ORP	Specific Conductivity (mmhos/cm)	pH	Turbidity (NTU)
1223	0	19.99	1654	2.95	63.3	1816	6.84	59.5
1226	2.5	20.70	1443	0.83	96.7	1543	6.78	8.8
1228	2.5	20.98	1423	0.56	137.6	1553	6.73	7.4
1231	2.5	21.38	1519	0.42	65.7	1666	6.71	6.4
1234	2.5	21.35	1689	0.43	81.8	1810	6.77	19.2
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:								

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Facto Job #: 70-97066
 630 29th Avenue Date Purged: 12/3/2001
 Oakland, California Purge Method: Submersible Pump/Sond
 Sampling Location: MW-7 Date & Time Sampled: 12/3/03 1554
 Top of Casing: 15.47 (ft, msl) Sampling Method: Disposable Bailer
 Depth to Water: 6.48 Feet Sample Type: TPHG/BTEX /8010
 Groundwater Elevation 8.99 (ft, msl) Preservatives: Ice
 Well Bottom -4.52 (ft, msl) # of Containers: 4 VOAs
 Water Column: 13.51 Feet Field Tech: MRM
 Well Casing Volume: 2.16 gal (WC* 0.16) Weather Conditions: cool, overcast
 Casing Volumes Purged: 3.98
 Purge Rate: 4.30 GPM
 80% Recovery from TOC: -9.18 ft. from TOC 2" dia well

Time	Volume Removed (gal)	Temp. (°C)	CND	DO	ORP	Specific Conductivity (mmhos/cm)	pH	Turbidity (NTU)
1157	0	19.69	1108	2.08	132.7	1218	7.06	183.3
1158	2.2	19.84	1094	1.88	127.9	1215	6.97	36.8
1201	2.1	19.95	1136	1.76	125.8	1261	6.97	13.4
1204	2.2	20.02	1122	1.90	121.7	1239	6.97	58.6
1207	2.1	19.96	1105	1.90	116.0	1220	6.95	167.1
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:								

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Factory
 630 29th Avenue
 Oakland, California

Job #: 70-97066
 Date Purged: 12/3/2001
 Purge Method: Submersible Pump/Sond

Sampling Location: MW-8
 Top of Casing: 17.58 (ft, msl)
 Depth to Water: 6.58 Feet
 Groundwater Elevation 11.00 (ft, msl)
 Well Bottom -2.42 (ft, msl)
 Water Column: 13.42 Feet
 Well Casing Volume: 2.15 gal (WC* 0.16)
 Casing Volumes Purged: 3.21
 Purge Rate: 3.45 GPM
 80% Recovery from TOC: -9.26 ft. from TOC

Date & Time Sampled: 12/3/01 1515
 Sampling Method: Disposable Bailer
 Sample Type: TPHG/BTEX /8010
 Preservatives: Ice
 # of Containers: 4 VOAs
 Field Tech: MRM
 Weather Conditions: cool, overcast

Time	Volume Removed (gal)	Temp. (°C)	CND	DO	ORP	Specific Conductivity (mmhos/cm)	pH	Turbidity (NTU)
1345	0	16.77	2017	0.76	-51.1	2135	6.94	8.3
1349	2.2	16.88	1614	1.11	-54.1	1887	6.93	12.1
1352	2.2	16.97	1580	0.61	-45.8	1890	6.85	7.4
1356	2.5	16.90	1862	0.39	-44.1	2298	6.77	46.0
	Pumped dry							

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage F: Job #: 70-97066
 630 29th Avenue Date Purged: 12/3/2001
 Oakland, California Purge Method: Submersible Pump/Sond
 Sampling Location: MW-9 Date & Time Sampled: 12/3/01 1530
 Top of Casing: 0 (ft, msl) Sampling Method: Disposable Bailer
 Depth to Water: 5.79 Feet Sample Type: TPHG/BTEX /8010
 Groundwater Elevation -5.79 (ft, msl) Preservatives: Ice
 Well Bottom -14.96 (ft, msl) # of Containers: 4 VOAs
 Water Column: 9.17 Feet Field Tech: MRM
 Well Casing Volume: 1.47 gal (WC* 0.16) Weather Conditions: cool, overcast
 Casing Volumes Purged: 4.09
 Purge Rate: 3.00 GPM
 80% Recovery from TOC: -7.62 ft. from TOC

Time	Volume Removed (gal)	Temp. (°C)	CND	DO	ORP	Specific Conductivity (mmhos/cm)	pH	Turbidity (NTU)
1322	0	17.58	10754	1.41	-45.9	11408	6.49	92.1
1324	1.5	17.58	8001	0.98	-75.1	8867	6.64	44.9
1328	1.5	17.72	8148	0.61	-59.4	10306	6.59	47.2
1330	1.5	17.74	9899	0.61	-56.2	11822	6.47	29.0
1334	1.5	17.73	11622	0.73	-19.6	13417	6.38	21.1
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Field Notes:

FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Factor Job #: 70-97066
 630 29th Avenue Date Purged: 12/3/2001
 Oakland, California Purge Method: Submersible Pump/Sond
 Sampling Location: MW-10 Date & Time Sampled: 12/3/01 1537
 Top of Casing: 0 (ft, msl) Sampling Method: Disposable Bailer
 Depth to Water: 4.22 Feet Sample Type: TPHG/BTEX /8010
 Groundwater Elevation -4.22 (ft, msl) Preservatives: Ice
 Well Bottom -8.75 (ft, msl) # of Containers: 4 VOAs
 Water Column: 4.53 Feet Field Tech: MRM
 Well Casing Volume: 0.72 gal (WC* 0.16) Weather Conditions: cool, overcast
 Casing Volumes Purged: 8.28
 Purge Rate: 3.00 GPM 2" dia well
 80% Recovery from TOC: -5.13 ft. from TOC

Time	Volume Removed (gal)	Temp. (°C)	CND	DO	ORP	Specific Conductivity (mmhos/cm)	pH	Turbidity (NTU)
1245	0	19.32	1177	1.79	99.5	1317	7.17	77.5
1246	1.5	19.63	1017	0.61	82.2	1125	7.09	22.2
1248	1.5	19.69	987	0.47	49.2	1079	7.05	13.8
1251	1.5	19.76	895	0.31	-1.5	990	7.00	17.8
1253	1.5	19.78	848	0.28	-41.5	943	6.96	9.3
:								
:								
:								
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:								

Field Notes:

FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Fact Job #: 70-97066
 630 29th Avenue Date Purged: 12/3/2001
 Oakland, California Purge Method: Submersible Pump/Sond
 Sampling Location: MW-11 Date & Time Sampled: 12/3/01 1546
 Top of Casing: 0 (ft, msl) Sampling Method: Disposable Bailer
 Depth to Water: 5.67 Feet Sample Type: TPHG/BTEX /8010
 Groundwater Elevation -5.67 (ft, msl) Preservatives: Ice
 Well Bottom -15.14 (ft, msl) # of Containers: 4 VOAs
 Water Column: 9.47 Feet Field Tech: MRM
 Well Casing Volume: 1.52 gal (WC* 0.16) Weather Conditions: cool, overcast
 Casing Volumes Purged: 3.04
 Purge Rate: 2.30 GPM 2" dia well
 80% Recovery from TOC: -7.56 ft. from TOC

Time	Volume Removed (gal)	Temp. (°C)	CND	DO	ORP	Specific Conductivity (mmhos/cm)	pH	Turbidity (NTU)
1133	0	19.43	2270	2.05	195.0	2464	6.86	22.9
1137	1.7	19.41	2268	3.84	183.0	2469	6.89	76.7
1139	1.5	19.66	2179	1.08	170.4	2547	6.76	128.2
1142	1.4	19.52	2772	1.71	157.4	3071	6.87	154.3
:	Pumped dry							
:								
:								
:								
:								

Field Notes:

APPENDIX B

FOURTH QUARTER (DECEMBER) 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

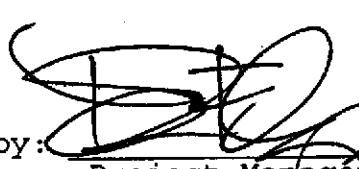
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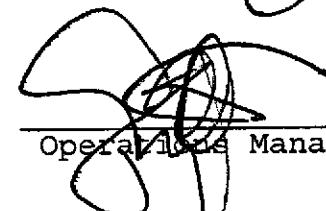
Prepared for:

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

Date: 30-DEC-01
Lab Job Number: 155768
Project ID: 70-97066.01
Location: Sausage Factory

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

This package may be reproduced only in its entirety.

Laboratory Number: 155768
Client: Clayton Group Services
Location: Sausage Factory
Project#: 70-97066.01

Receipt Date: 12/04/01

CASE NARRATIVE

This hardcopy data package contains sample and QC results for eight water samples that were received on December 04, 2001. The samples were received cold and intact.

TVHG / BTEX: High surrogate recovery was observed for Trifluorotoluene in sample ID MW-8 (C&T#155768-005) due to coelution with a hydrocarbon peak. No other analytical problems were encountered.

Volatile Organics: A trace amount of Bromomethane was detected in the method blank batch # 68679. This outlier should not affect the quality of the data, as this compound was not detected in the associated samples. No other analytical problems were encountered.



CHAIN OF CUSTODY

Page 1 of 1Lab: Curtis and TompkinsTAT: 5-Days**Report results to:**

Name Marc Mullaney
Company Clayton Group Services
Mailing Address 6920 Koll Center Parkway, Ste. 216
City, State, Zip Pleasanton, California 94566
Telephone No. (925) 426-2600
Fax No. (925) 426-0106

Project Information

Project No. 70-97066.01
Name Sausage Factory
Location Oakland, California

Special instructions and/or specific regulatory requirements:

Sample Identification#	Date Sampled	Time Sampled	Matrix/Media	Sample Size	Analyses Requested												Preservative
					TBHQ/BTEX	EPA 8010											
MW-1	03-Dec-01	1430	GW	4	x	x											HCI
MW-2	03-Dec-01	1455	GW	4	x	x											HCI
MW-6	03-Dec-01	1604	GW	4	x	x											HCI
MW-7	03-Dec-01	1554	GW	4	x	x											HCI
MW-8	03-Dec-01	1515	GW	4	x	x											HCI
MW-9	03-Dec-01	1530	GW	4	x	x											HCI
MW-10	03-Dec-01	1537	GW	4	x	x											HCI
MW-11	03-Dec-01	1546	GW	4	x	x											HCI

Collected by: Marc Mullaney Date/Time 12/3/01 1726Collector's Signature: Marc Mullaney Date/Time 12/3/01 1726

Relinquished by: _____ Date/Time _____

Date/Time 12/4/01 0220

Relinquished by: _____ Date/Time _____

Date/Time _____

Method of Shipment: _____

Sample Condition on Rcpt: _____

Received by: _____

Received by: _____

Received by: _____

Received by: _____



Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B(M)
Matrix:	Water	Sampled:	12/03/01
Units:	ug/L	Received:	12/04/01

Field ID: MW-1 Diln Fac: 40.00
Type: SAMPLE Batch#: 68607
Lab ID: 155768-001 Analyzed: 12/09/01

Analyte	Result	RL
Gasoline C7-C12	15,000	2,000

Analyte	Result	RL
Trifluorotoluene (FID)	105	59-135
Bromofluorobenzene (FID)	94	60-140

Field ID: MW-2 Diln Fac: 40.00
Type: SAMPLE Batch#: 68607
Lab ID: 155768-002 Analyzed: 12/09/01

Analyte	Result	RL
Gasoline C7-C12	45,000	2,000

Analyte	Result	RL
Trifluorotoluene (FID)	104	59-135
Bromofluorobenzene (FID)	92	60-140

Field ID: MW-6 Diln Fac: 1.000
Type: SAMPLE Batch#: 68607
Lab ID: 155768-003 Analyzed: 12/09/01

Analyte	Result	RL
Gasoline C7-C12	72	50

Analyte	Result	RL
Trifluorotoluene (FID)	108	59-135
Bromofluorobenzene (FID)	99	60-140

Field ID: MW-7 Diln Fac: 1.000
Type: SAMPLE Batch#: 68573
Lab ID: 155768-004 Analyzed: 12/07/01

Analyte	Result	RL
Gasoline C7-C12	82 Z	50

Analyte	Result	RL
Trifluorotoluene (FID)	101	59-135
Bromofluorobenzene (FID)	98	60-140

*= Value outside of QC limits; see narrative

Z= Sample exhibits unknown single peak or peaks

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 #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B (M)
Matrix:	Water	Sampled:	12/03/01
Units:	ug/L	Received:	12/04/01

Field ID: MW-8 Diln Fac: 1.000
Type: SAMPLE Batch#: 68573
Lab ID: 155768-005 Analyzed: 12/07/01

Analyte	Result	RL
Gasoline C7-C12	1,200	50

Analyte	Result	RL
Trifluorotoluene (FID)	391 * >LR b 59-135	
Bromofluorobenzene (FID)	104 60-140	

Field ID: MW-9 Diln Fac: 50.00
Type: SAMPLE Batch#: 68607
Lab ID: 155768-006 Analyzed: 12/09/01

Analyte	Result	RL
Gasoline C7-C12	90,000	2,500

Analyte	Result	RL
Trifluorotoluene (FID)	113 59-135	
Bromofluorobenzene (FID)	94 60-140	

Field ID: MW-10 Diln Fac: 1.000
Type: SAMPLE Batch#: 68607
Lab ID: 155768-007 Analyzed: 12/09/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Analyte	Result	RL
Trifluorotoluene (FID)	100 59-135	
Bromofluorobenzene (FID)	102 60-140	

Field ID: MW-11 Diln Fac: 5.000
Type: SAMPLE Batch#: 68607
Lab ID: 155768-008 Analyzed: 12/09/01

Analyte	Result	RL
Gasoline C7-C12	1,600	250

Analyte	Result	RL
Trifluorotoluene (FID)	120 59-135	
Bromofluorobenzene (FID)	94 60-140	

*= Value outside of QC limits; see narrative

Z= Sample exhibits unknown single peak or peaks

b= See narrative

ND= Not Detected

RL= Reporting Limit

LR= Response exceeds instrument's linear range



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	12/03/01
Units:	ug/L	Received:	12/04/01

Field ID: MW-1 Diln Fac: 40.00
Type: SAMPLE Batch#: 68607
Lab ID: 155768-001 Analyzed: 12/09/01

Analyste	Result	RI
Benzene	2,800	20
Toluene	1,200	20
Ethylbenzene	310	20
m,p-Xylenes	990	20
o-Xylene	670	20

Surrogate	PPM	Limits
Trifluorotoluene (PID)	97	56-142
Bromofluorobenzene (PID)	88	55-149

Field ID: MW-2 Diln Fac: 100.0
Type: SAMPLE Batch#: 68613
Lab ID: 155768-002 Analyzed: 12/09/01

Analyste	Result	RI
Benzene	13,000	50
Toluene	5,100	50
Ethylbenzene	950	50
m,p-Xylenes	2,300	50
o-Xylene	630	50

Surrogate	PPM	Limits
Trifluorotoluene (PID)	93	56-142
Bromofluorobenzene (PID)	83	55-149

Field ID: MW-6 Diln Fac: 1.000
Type: SAMPLE Batch#: 68607
Lab ID: 155768-003 Analyzed: 12/09/01

Analyste	Result	RI
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	PPM	Limits
Trifluorotoluene (PID)	95	56-142
Bromofluorobenzene (PID)	92	55-149



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	12/03/01
Units:	ug/L	Received:	12/04/01

Field ID: MW-7 Diln Fac: 1.000
Type: SAMPLE Batch#: 68573
Lab ID: 155768-004 Analyzed: 12/07/01

Analyte	Result	RL
Benzene	24	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	SPEC	Diln Fac
Trifluorotoluene (PID)	91	56-142
Bromofluorobenzene (PID)	89	55-149

Field ID: MW-8 Diln Fac: 1.000
Type: SAMPLE Batch#: 68573
Lab ID: 155768-005 Analyzed: 12/07/01

Analyte	Result	RL
Benzene	190	0.50
Toluene	14	0.50
Ethylbenzene	2.7	0.50
m,p-Xylenes	7.6	0.50
o-Xylene	3.7	0.50

Surrogate	SPEC	Diln Fac
Trifluorotoluene (PID)	100	56-142
Bromofluorobenzene (PID)	97	55-149

Field ID: MW-9 Diln Fac: 100.0
Type: SAMPLE Batch#: 68613
Lab ID: 155768-006 Analyzed: 12/09/01

Analyte	Result	RL
Benzene	15,000	50
Toluene	15,000	50
Ethylbenzene	2,200	50
m,p-Xylenes	7,100	50
o-Xylene	2,000	50

Surrogate	SPEC	Diln Fac
Trifluorotoluene (PID)	97	56-142
Bromofluorobenzene (PID)	86	55-149



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	12/03/01
Units:	ug/L	Received:	12/04/01

Field ID: MW-10 Diln Fac: 1.000
Type: SAMPLE Batch#: 68607
Lab ID: 155768-007 Analyzed: 12/09/01

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

Surrogate	SRCC	RT (min)
Trifluorotoluene (PID)	93	56-142
Bromofluorobenzene (PID)	90	55-149

Field ID: MW-11 Diln Fac: 5.000
Type: SAMPLE Batch#: 68607
Lab ID: 155768-008 Analyzed: 12/09/01

Analyte	Result	RI
Benzene	470	2.5
Toluene	ND	2.5
Ethylbenzene	3.7	2.5
m,p-Xylenes	ND	2.5
o-Xylene	ND	2.5

Surrogate	SRCC	RT (min)
Trifluorotoluene (PID)	104	56-142
Bromofluorobenzene (PID)	88	55-149

Type: BLANK Batch#: 68573
Lab ID: QC164496 Analyzed: 12/07/01
Diln Fac: 1.000

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

Surrogate	SRCC	RT (min)
Trifluorotoluene (PID)	88	56-142
Bromofluorobenzene (PID)	81	55-149



Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B(M)
Matrix:	Water	Sampled:	12/03/01
Units:	ug/L	Received:	12/04/01

Type: BLANK Batch#: 68573
Lab ID: QC164496 Analyzed: 12/07/01
Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	IRPC	Range
Trifluorotoluene (FID)	95	59-135
Bromofluorobenzene (FID)	96	60-140

Type: BLANK Batch#: 68607
Lab ID: QC164629 Analyzed: 12/08/01
Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	IRPC	Range
Trifluorotoluene (FID)	96	59-135
Bromofluorobenzene (FID)	97	60-140

*= Value outside of QC limits; see narrative
Z= Sample exhibits unknown single peak or peaks
b= See narrative
ND= Not Detected
RL= Reporting Limit
LR= Response exceeds instrument's linear range
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Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	12/03/01
Units:	ug/L	Received:	12/04/01

Type: BLANK Batch#: 68607
Lab ID: QC164629 Analyzed: 12/08/01
Diln Fac: 1.000

Analyst	Result	PL
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	SPEC	Limits
Trifluorotoluene (PID)	88	56-142
Bromofluorobenzene (PID)	79	55-149

Type: BLANK Batch#: 68613
Lab ID: QC164660 Analyzed: 12/09/01
Diln Fac: 1.000

Analyst	Result	PL
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

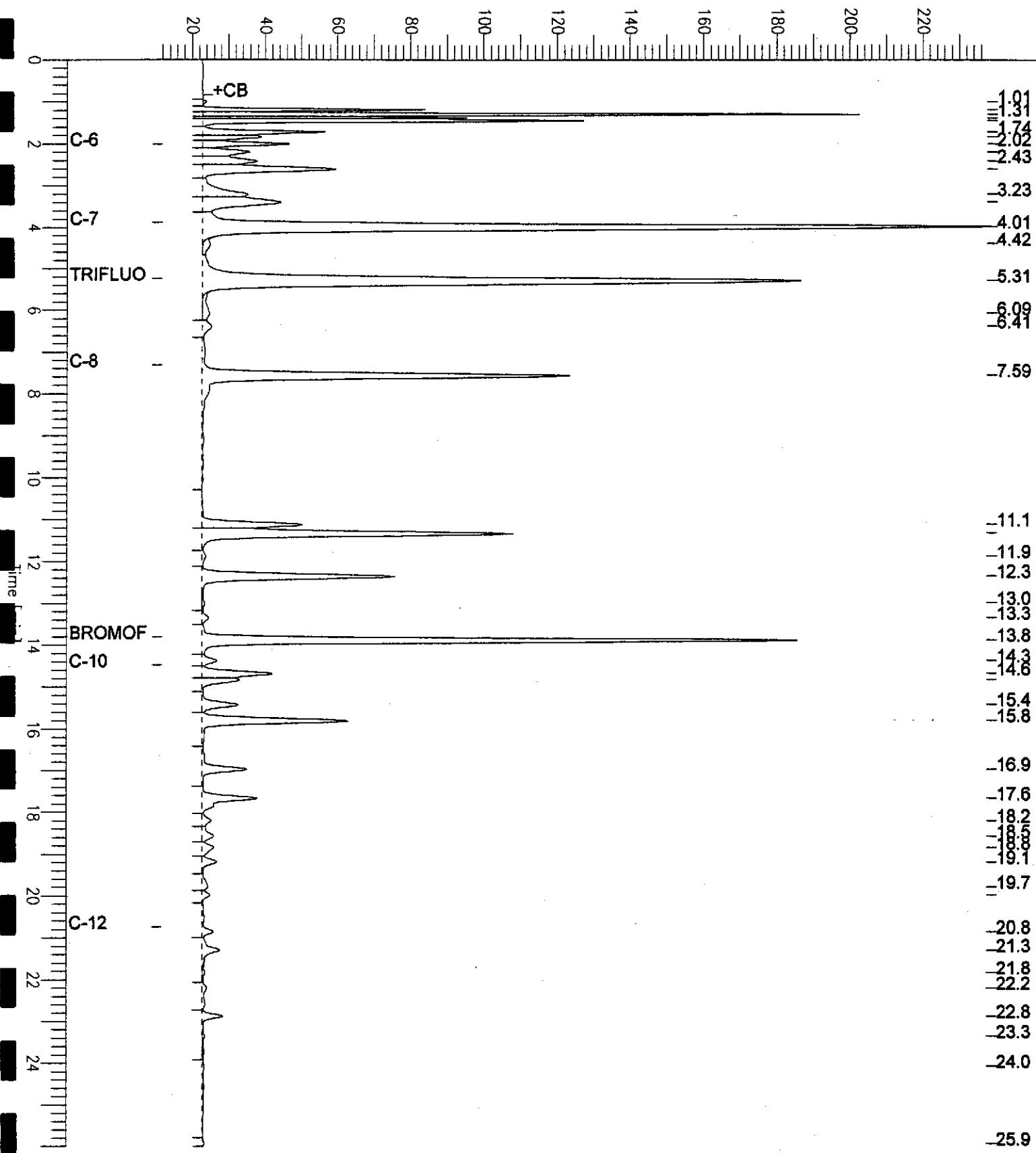
Surrogate	SPEC	Limits
Trifluorotoluene (PID)	88	56-142
Bromofluorobenzene (PID)	79	55-149

GC07 TVH 'A' Data File RTX 502

Sample Name : 155768-001,68607
 fileName : G:\GC07\DATA\342A023.raw
 method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: 12 mV

Sample #: C1 Page 1 of 1
 Date : 12/9/01 04:34 AM
 Time of Injection: 12/9/01 04:08 AM
 Low Point : 11.90 mV High Point : 237.64 mV
 Plot Scale: 225.7 mV

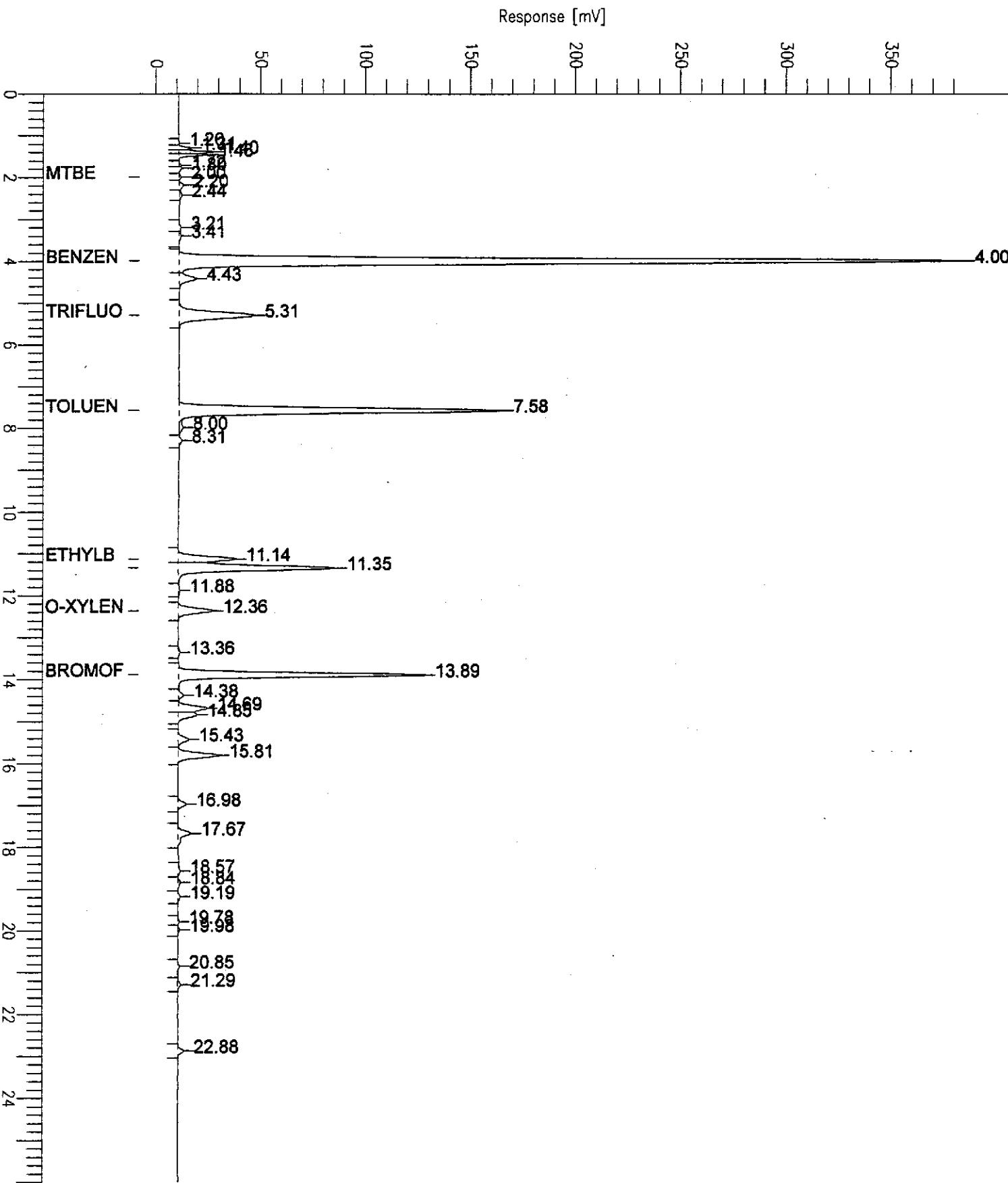
Response [mV]



GC07 BTXE 'B' DATA FILE

Sample Name : 155768-002,68607
fileName : G:\GC07\DATA\342B022.raw
method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -8 mV

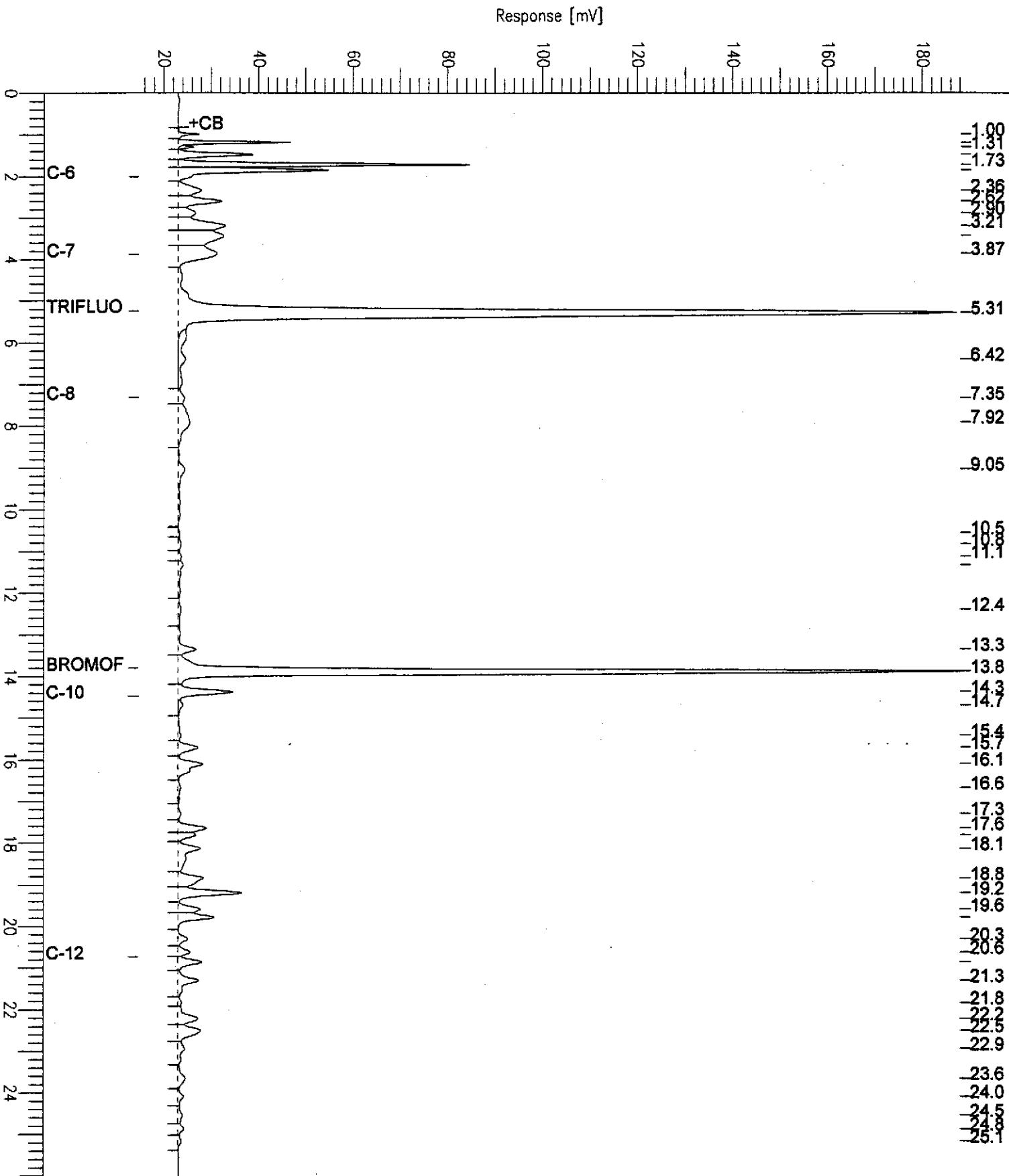
Sample #: C1 Page 1 of 1
Date : 12/9/01 04:00 AM
Time of Injection: 12/9/01 03:34 AM
Low Point : -7.94 mV High Point : 385.53 mV
Plot Scale: 393.5 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 155768-003,68607
fileName : G:\GC07\DATA\342A020.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 15 mV

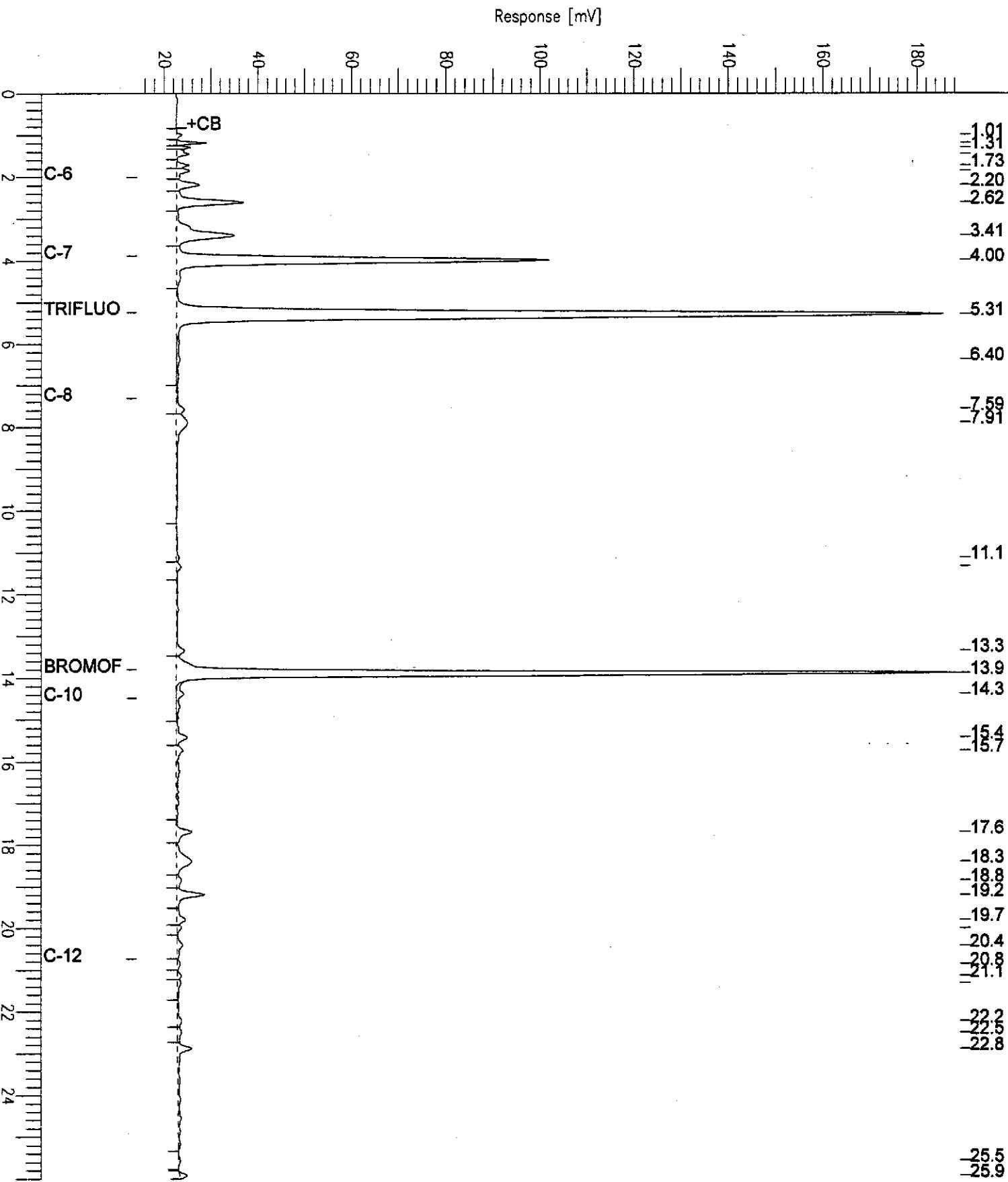
Sample #: C1 Page 1 of 1
Date : 12/9/01 02:52 AM
Time of Injection: 12/9/01 02:26 AM
Low Point : 14.69 mV High Point : 188.18 mV
Plot Scale: 173.5 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 155768-004,68573
fileName : G:\GC07\DATA\341A018.raw
method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 14 mV

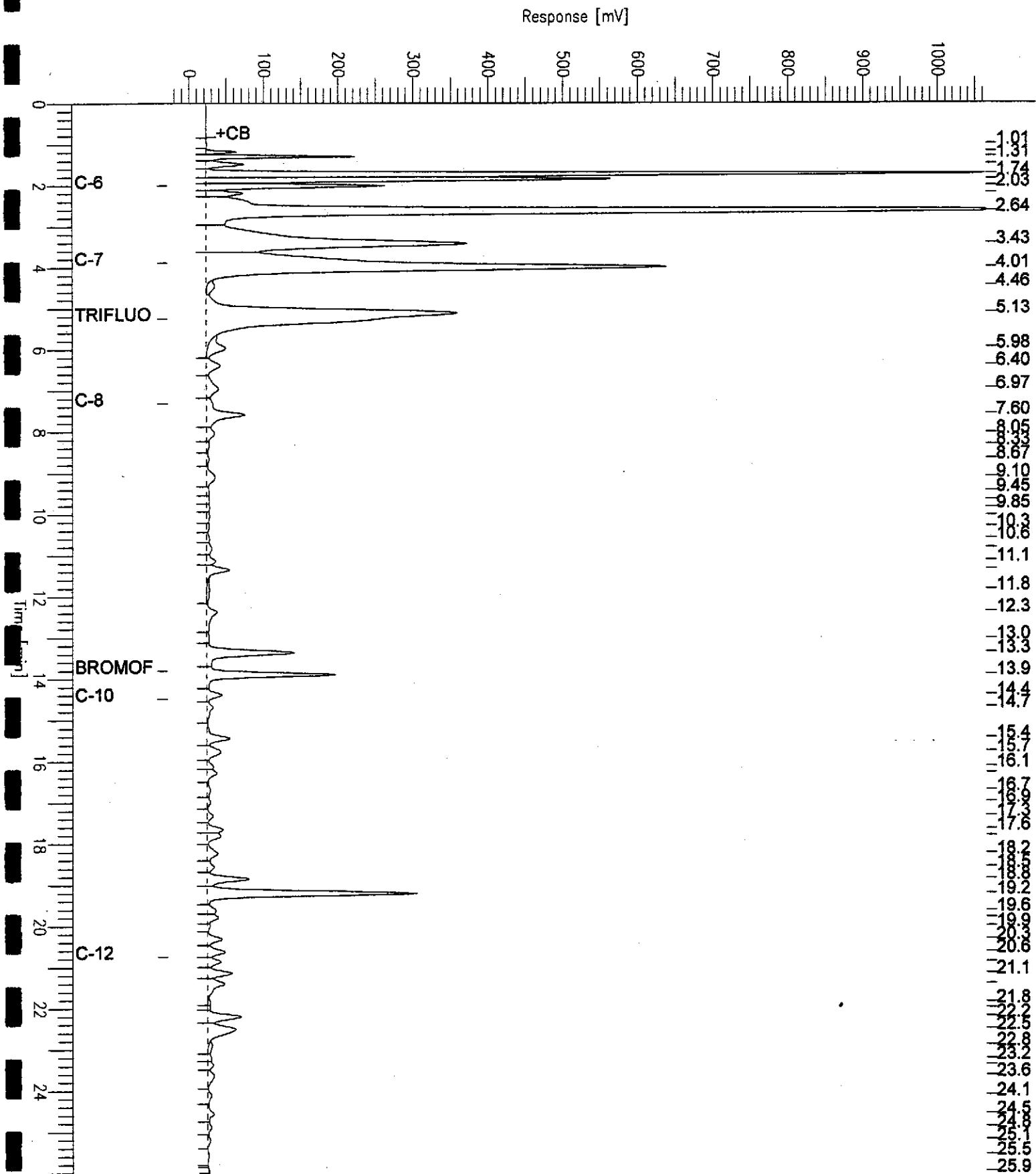
Sample #: B1 Page 1 of 1
Date : 12/7/01 10:19 PM
Time of Injection: 12/7/01 09:53 PM
Low Point : 14.18 mV High Point : 189.24 mV
Plot Scale: 175.1 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 155768-005, 68573
 File Name : G:\GC07\DATA\341A019.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: -30 mV

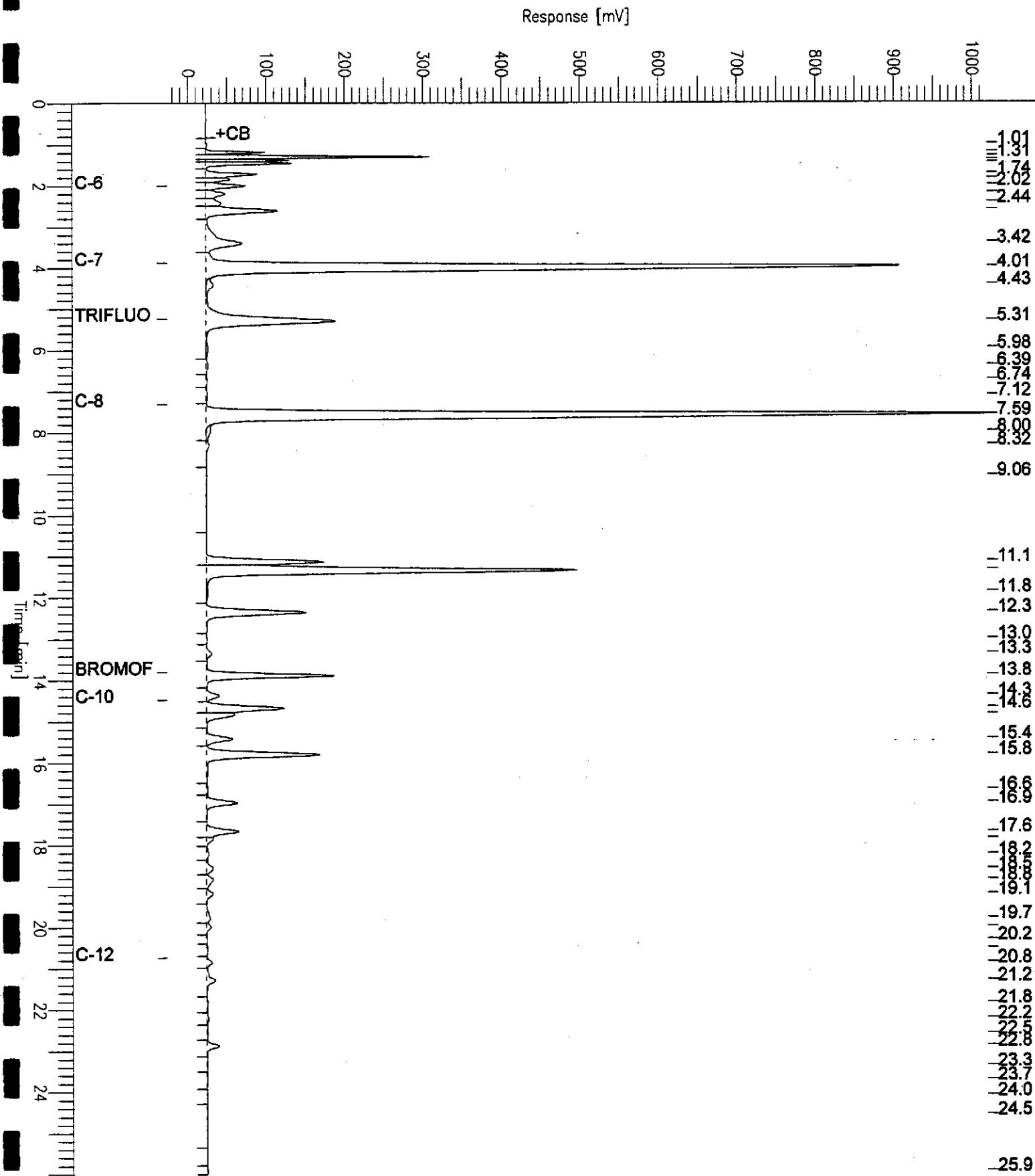
Sample #: B1 Page 1 of 1
 Date : 12/7/01 10:53 PM
 Time of Injection: 12/7/01 10:27 PM
 Low Point : -29.57 mV High Point : 1064.43 mV
 Plot Scale: 1094.0 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 155768-006,68607
FileName : G:\GC07\DATA\342A021.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: -27 mV

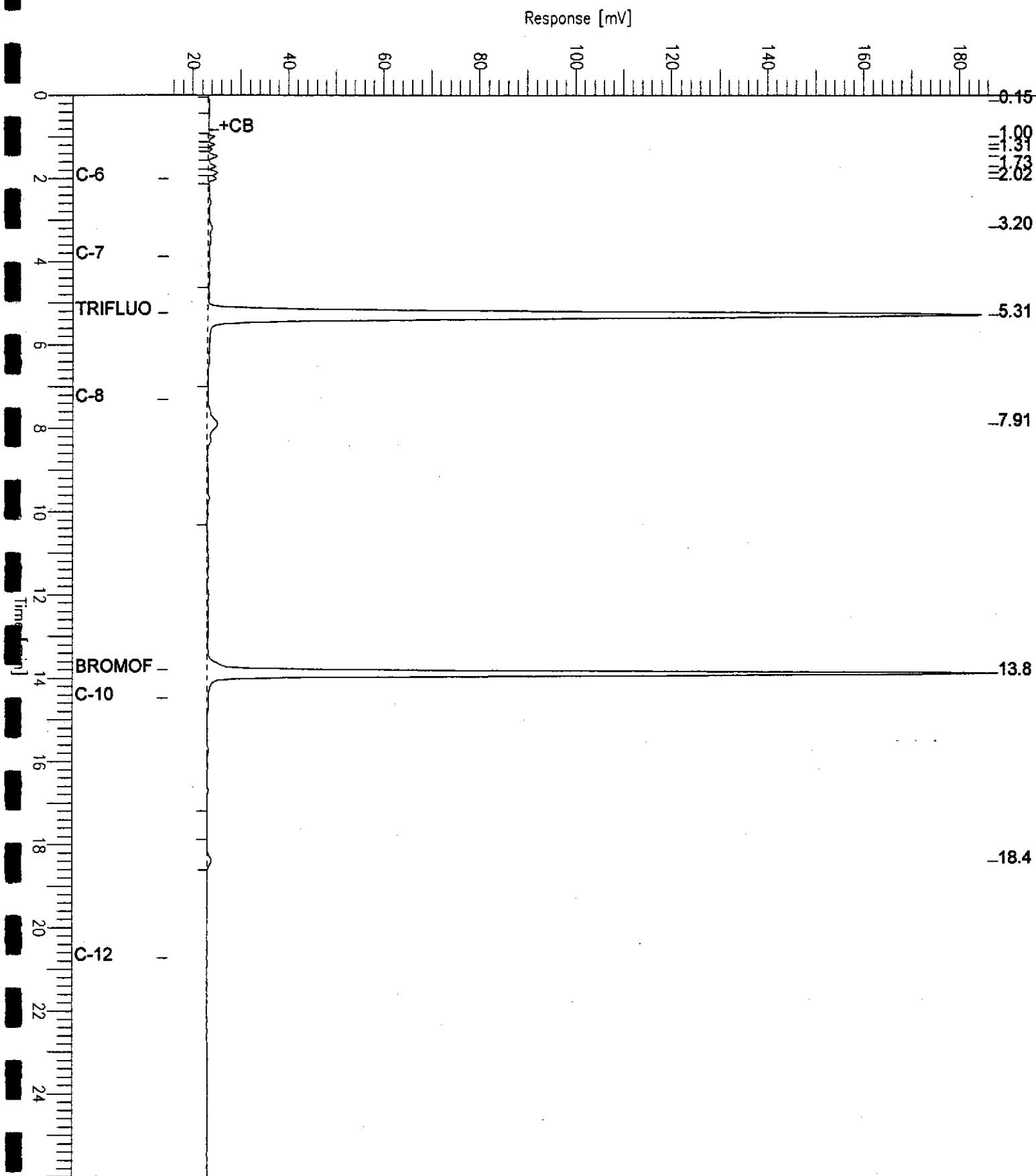
Sample #: C1 Page 1 of 1
Date : 12/9/01 03:26 AM
Time of Injection: 12/9/01 03:00 AM
Low Point : -26.97 mV High Point : 1019.17 mV
Plot Scale: 1046.1 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 155768-007,68607
fileName : G:\GC07\DATA\342A019.raw
method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 15 mV

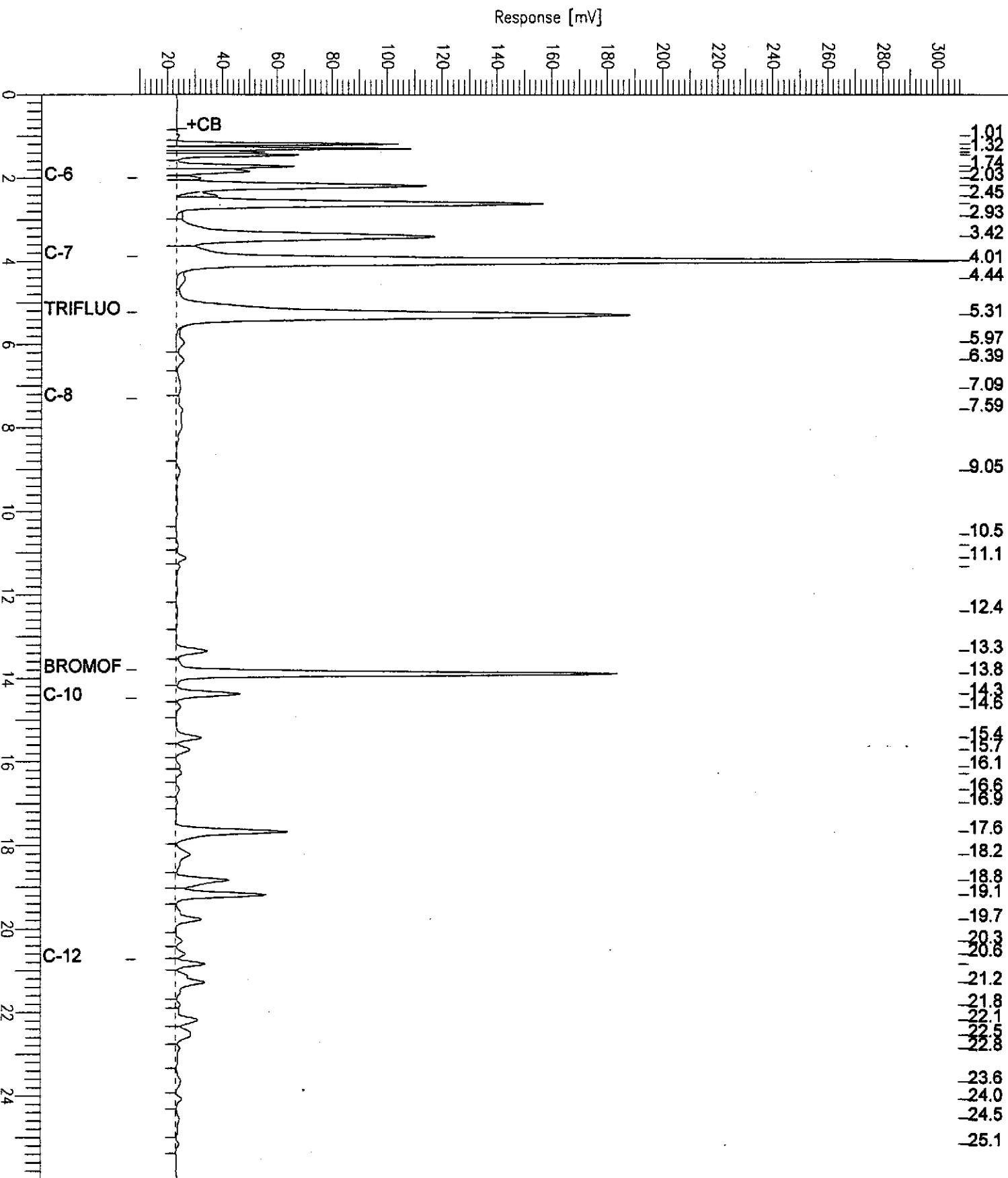
Sample #: D1 Page 1 of 1
Date : 12/9/01 02:18 AM
Time of Injection: 12/9/01 01:52 AM
Low Point : 14.86 mV High Point : 186.13 mV
Plot Scale: 171.3 mV



GC07 TVH 'A' Data File RTX 502

Sample Name : 155768-008,68607
fileName : G:\GC07\DATA\342A024.raw
method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: D1 Page 1 of 1
Date : 12/9/01 05:08 AM
Time of Injection: 12/9/01 04:42 AM
Low Point : 9.06 mV High Point : 308.11 mV
Plot Scale: 299.1 mV

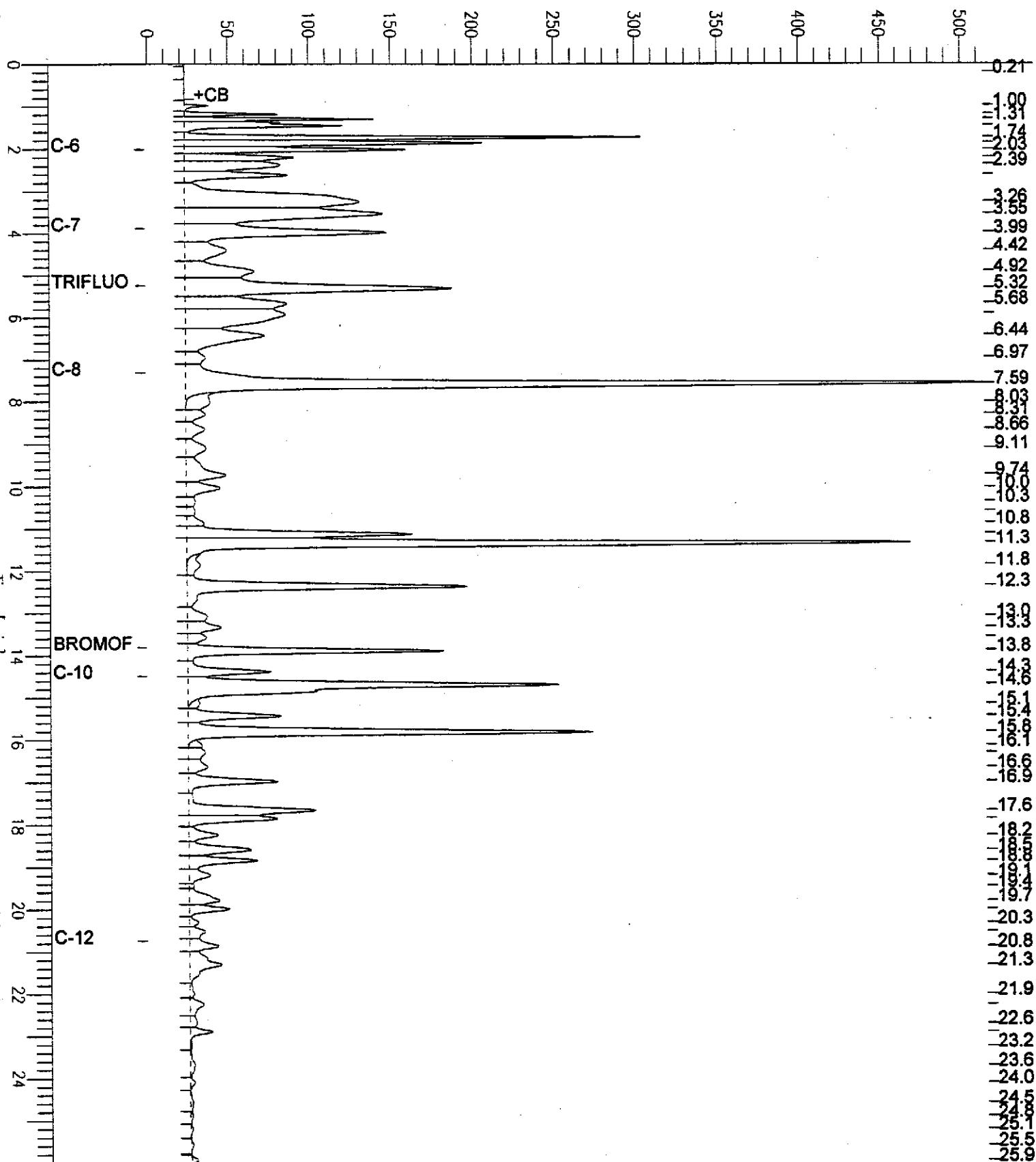


GC07 TVH 'A' Data File RTX 502

Sample Name : CCV/LCS_QC164497,68573,01WS2177,5/5000
 File Name : G:\GC07\DATA\341A002.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: -2 mV

Sample #: Page 1 of 1
 Date : 12/7/01 01:08 PM
 Time of Injection: 12/7/01 12:42 PM
 Low Point : -1.75 mV High Point : 514.49 mV
 Plot Scale: 516.2 mV

Response [mV]





Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC164497	Batch#:	68573
Matrix:	Water	Analyzed:	12/07/01
Units:	ug/L		

Analyte	Spiked	Result	SDFC	Limits
Gasoline C7-C12	2,000	1,970	98	73-121

Surrogate	SDFC	Limits
Trifluorotoluene (FID)	121	59-135
Bromofluorobenzene (FID)	94	60-140



Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC164630	Batch#:	68607
Matrix:	Water	Analyzed:	12/08/01
Units:	ug/L		

Analyste	Spiked	Result	REC	limits
Gasoline C7-C12	2,000	1,833	92	73-121

Surrogate	REC	limits
Trifluorotoluene (FID)	115	59-135
Bromofluorobenzene (FID)	87	60-140



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	68573
Units:	ug/L	Analyzed:	12/07/01
Diln Fac:	1.000		

Type: BS Lab ID: QC164500

Analyte	Spiked	Result	RREC	Limits
Benzene	20.00	19.28	96	67-117
Toluene	20.00	18.27	91	69-117
Ethylbenzene	20.00	19.17	96	68-124
m,p-Xylenes	40.00	38.34	96	70-125
o-Xylene	20.00	20.31	102	65-129

Surrogate	RREC	Limits
Trifluorotoluene (PID)	92	56-142
Bromofluorobenzene (PID)	85	55-149

Type: BSD Lab ID: QC164501

Analyte	Spiked	Result	RREC	Limits	RPD	Unit
Benzene	20.00	18.68	93	67-117	3	20
Toluene	20.00	17.56	88	69-117	4	20
Ethylbenzene	20.00	18.41	92	68-124	4	20
m,p-Xylenes	40.00	37.59	94	70-125	2	20
o-Xylene	20.00	19.74	99	65-129	3	20

Surrogate	RREC	Limits
Trifluorotoluene (PID)	90	56-142
Bromofluorobenzene (PID)	83	55-149



Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	68607
Units:	ug/L	Analyzed:	12/08/01
Diln Fac:	1.000		

Type: BS Lab ID: QC164633

Analyte	Spiked	Result	%Rec	Minutes
Benzene	20.00	18.26	91	67-117
Toluene	20.00	17.34	87	69-117
Ethylbenzene	20.00	17.52	88	68-124
m,p-Xylenes	40.00	35.31	88	70-125
o-Xylene	20.00	18.81	94	65-129

Surrogate	SPREC	Minutes
Trifluorotoluene (PID)	89	56-142
Bromofluorobenzene (PID)	80	55-149

Type: BSD Lab ID: QC164634

Analyte	Spiked	Result	SPREC	Minutes	SPD	BLW
Benzene	20.00	18.91	95	67-117	4	20
Toluene	20.00	17.78	89	69-117	3	20
Ethylbenzene	20.00	18.11	91	68-124	3	20
m,p-Xylenes	40.00	37.31	93	70-125	6	20
o-Xylene	20.00	19.76	99	65-129	5	20

Surrogate	SPREC	Minutes
Trifluorotoluene (PID)	89	56-142
Bromofluorobenzene (PID)	81	55-149

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	68613
Units:	ug/L	Analyzed:	12/09/01
Diln Fac:	1.000		

Type: BS Lab ID: QC164658

Analyte	Spiked	Result	#REC	Lim/its
Benzene	20.00	17.93	90	67-117
Toluene	20.00	16.91	85	69-117
Ethylbenzene	20.00	17.43	87	68-124
m,p-Xylenes	40.00	36.25	91	70-125
o-Xylene	20.00	18.94	95	65-129

Surrogate	#REC	Lim/its
Trifluorotoluene (PID)	90	56-142
Bromofluorobenzene (PID)	81	55-149

Type: BSD Lab ID: QC164659

Analyte	Spiked	Result	#REC	Lim/its	SPD	Ext
Benzene	20.00	17.82	89	67-117	1	20
Toluene	20.00	16.73	84	69-117	1	20
Ethylbenzene	20.00	17.89	89	68-124	3	20
m,p-Xylenes	40.00	35.71	89	70-125	2	20
o-Xylene	20.00	18.89	94	65-129	0	20

Surrogate	#REC	Lim/its
Trifluorotoluene (PID)	90	56-142
Bromofluorobenzene (PID)	82	55-149

PD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZZ	Batch#:	68573
MSS Lab ID:	155857-001	Sampled:	12/06/01
Matrix:	Water	Received:	12/06/01
Units:	ug/L	Analyzed:	12/08/01
Diln Fac:	1.000		

Type: MS Lab ID: QC164498

Analyte	MSS Result	Spiked	Result	REC	Limits
Gasoline C7-C12	22.95	2,000	1,904	94	65-131
<hr/>					
Surrogate	REC Limits				
Trifluorotoluene (FID)	125	59-135			
Bromofluorobenzene (FID)	104	60-140			

Type: MSD Lab ID: QC164499

Analyte	Spiked	Result	REC	Limits	RPD	Trim
Gasoline C7-C12	2,000	1,887	93	65-131	1	20
<hr/>						
Surrogate	REC Limits					
Trifluorotoluene (FID)	125	59-135				
Bromofluorobenzene (FID)	103	60-140				



Curtis & Tompkins, Ltd.

Gasoline by GC/FID CA LUFT

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Batch#:	68607
MSS Lab ID:	155870-002	Sampled:	12/06/01
Matrix:	Water	Received:	12/06/01
Units:	ug/L	Analyzed:	12/08/01
Diln Fac:	1.000		

Type: MS Lab ID: QC164631

Analysis	MSS Result	Spiked	Result	Spec Limits	RPD	Units
Gasoline C7-C12	<20.00	2,000	1,925	96	65-131	
<hr/>						
Surrogate	Spec Limits					
Trifluorotoluene (FID)	125	59-135				
Bromofluorobenzene (FID)	101	60-140				

Type: MSD Lab ID: QC164632

Analysis	Spiked	Result	Spec Limits	RPD	Units
Gasoline C7-C12	2,000	1,919	96	65-131	0
<hr/>					
Surrogate	Spec Limits				
Trifluorotoluene (FID)	123	59-135			
Bromofluorobenzene (FID)	102	60-140			



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	68679
Lab ID:	155768-001	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/11/01
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	ND	3.1
Bromomethane	ND	6.3
Chloroethane	ND	6.3
Trichlorofluoromethane	ND	3.1
Freon 113	ND	6.3
1,1-Dichloroethene	ND	3.1
Methylene Chloride	ND	130
trans-1,2-Dichloroethene	ND	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	ND	3.1
Chloroform	ND	6.3
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	ND	3.1
Trichloroethene	ND	3.1
1,2-Dichloropropane	ND	3.1
Bromodichloromethane	ND	3.1
cis-1,3-Dichloropropene	ND	3.1
trans-1,3-Dichloropropene	ND	3.1
1,1,2-Trichloroethane	ND	3.1
Tetrachloroethene	ND	3.1
Dibromochloromethane	ND	3.1
Chlorobenzene	ND	3.1
Bromoform	ND	3.1
1,1,2,2-Tetrachloroethane	ND	3.1
1,3-Dichlorobenzene	ND	3.1
1,4-Dichlorobenzene	ND	3.1
1,2-Dichlorobenzene	ND	3.1

Surrogate	IRIC	RL
1,2-Dichloroethane-d4	110	78-123
Toluene-d8	103	80-110
Bromofluorobenzene	100	80-115

D= Not Detected

L= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	68679
Lab ID:	155768-002	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/11/01
Diln Fac:	14.29		

Analyte	Result	RI
Chloromethane	ND	14
Vinyl Chloride	ND	7.1
Bromomethane	ND	14
Chloroethane	ND	14
Trichlorofluoromethane	ND	7.1
Freon 113	ND	14
1,1-Dichloroethene	ND	7.1
Methylene Chloride	ND	290
trans-1,2-Dichloroethene	ND	7.1
1,1-Dichloroethane	ND	7.1
cis-1,2-Dichloroethene	ND	7.1
Chloroform	ND	14
1,1,1-Trichloroethane	ND	7.1
Carbon Tetrachloride	ND	7.1
1,2-Dichloroethane	14	7.1
Trichloroethene	ND	7.1
1,2-Dichloropropane	ND	7.1
Bromodichloromethane	ND	7.1
cis-1,3-Dichloropropene	ND	7.1
trans-1,3-Dichloropropene	ND	7.1
1,1,2-Trichloroethane	ND	7.1
Tetrachloroethene	ND	7.1
Dibromochloromethane	ND	7.1
Chlorobenzene	ND	7.1
Bromoform	ND	7.1
1,1,2,2-Tetrachloroethane	ND	7.1
1,3-Dichlorobenzene	ND	7.1
1,4-Dichlorobenzene	ND	7.1
1,2-Dichlorobenzene	ND	7.1

Surrogate	Spec	Ratio
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	96	80-115

D= Not Detected

L= Reporting Limit



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	68636
Lab ID:	155768-003	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/10/01
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	0.7	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	1.6	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	QREC	Limits
1,2-Dichloroethane-d4	103	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 #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	68636
Lab ID:	155768-004	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/10/01
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	SRM	Limits
1,2-Dichloroethane-d4	115	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	97	80-115

ND= Not Detected

RL= Reporting Limit

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Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	68679
Lab ID:	155768-005	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/11/01
Diln Fac:	5.000		

Analyte	Result	RI
Chloromethane	ND	5.0
Vinyl Chloride	31	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	44	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	650	2.5
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	100	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	GRBC	LMWL
1,2-Dichloroethane-d4	101	78-123
Toluene-d8	103	80-110
Bromofluorobenzene	104	80-115

D= Not Detected

L= Reporting Limit



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-9	Batch#:	68679
Lab ID:	155768-006	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/11/01
Diln Fac:	20.00		

Analyte	Result	RL
Chloromethane	ND	20
Vinyl Chloride	ND	10
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	10
Freon 113	ND	20
1,1-Dichloroethene	ND	10
Methylene Chloride	ND	400
trans-1,2-Dichloroethene	ND	10
1,1-Dichloroethane	ND	10
cis-1,2-Dichloroethene	ND	10
Chloroform	ND	20
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	10
1,2-Dichloroethane	ND	10
Trichloroethene	ND	10
1,2-Dichloropropane	ND	10
Bromodichloromethane	ND	10
cis-1,3-Dichloropropene	ND	10
trans-1,3-Dichloropropene	ND	10
1,1,2-Trichloroethane	ND	10
Tetrachloroethene	ND	10
Dibromochloromethane	ND	10
Chlorobenzene	ND	10
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10

Surrogate	QSEC	Limits
1,2-Dichloroethane-d4	106	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	95	80-115

D= Not Detected

L= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-10	Batch#:	68636
Lab ID:	155768-007	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/11/01
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	Range
1,2-Dichloroethane-d4	105	78-123
Toluene-d8	95	80-110
Bromofluorobenzene	108	80-115

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	68705
Lab ID:	155768-008	Sampled:	12/03/01
Matrix:	Water	Received:	12/04/01
Units:	ug/L	Analyzed:	12/12/01
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	IRPC	ISLNTS
1,2-Dichloroethane-d4	87	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	94	80-115

D= Not Detected

L= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC164758	Batch#:	68636
Matrix:	Water	Analyzed:	12/10/01
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	105	78-123
Toluene-d8	102	80-110
Bromofluorobenzene	96	80-115

D= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC164759	Batch#:	68636
Matrix:	Water	Analyzed:	12/10/01
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	AREC	Limits
1,2-Dichloroethane-d4	105	78-123
Toluene-d8	102	80-110
Bromofluorobenzene	94	80-115

D= Not Detected

L= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC164931	Batch#:	68679
Matrix:	Water	Analyzed:	12/11/01
Units:	ug/L		

Analyte	Result	RI
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	1.2 b	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	112	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	108	80-115

b= See narrative

D= Not Detected

L= Reporting Limit

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC165020	Batch#:	68705
Matrix:	Water	Analyzed:	12/12/01
Units:	ug/L		

Analyte	Result	RI
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	RT(RC)	Limits
1,2-Dichloroethane-d4	87	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	96	80-115

D= Not Detected

L= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	68636
Units:	ug/L	Analyzed:	12/10/01
Diln Fac:	1.000		

Type: BS Lab ID: QC164756

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	47.32	95	74-132
Trichloroethene	50.00	42.75	85	80-119
Chlorobenzene	50.00	43.04	86	80-117

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	109	80-110
Bromofluorobenzene	95	80-115

Type: BSD Lab ID: QC164757

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	46.30	93	74-132	2	20
Trichloroethene	50.00	40.98	82	80-119	4	20
Chlorobenzene	50.00	45.36	91	80-117	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	110	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	101	80-115



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	68679
Units:	ug/L	Analyzed:	12/11/01
Diln Fac:	1.000		

Type: BS Lab ID: QC164929

Analyte	Spiked	Result	%RBC	Limits
1,1-Dichloroethene	50.00	47.64	95	74-132
Trichloroethene	50.00	41.72	83	80-119
Chlorobenzene	50.00	40.99	82	80-117

Surrogate	RBC	Limits
1,2-Dichloroethane-d4	105	78-123
Toluene-d8	104	80-110
Bromofluorobenzene	107	80-115

Type: BSD Lab ID: QC164930

Analyte	Spiked	Result	%RBC	Limits	SPD	Limits
1,1-Dichloroethene	50.00	47.21	94	74-132	1	20
Trichloroethene	50.00	43.47	87	80-119	4	20
Chlorobenzene	50.00	42.81	86	80-117	4	20

Surrogate	RBC	Limits
1,2-Dichloroethane-d4	103	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	101	80-115



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	155768	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	68705
Units:	ug/L	Analyzed:	12/12/01
Diln Fac:	1.000		

Type: BS Lab ID: QC165017

Analyte	Spiked	Result	SRM	Limits
1,1-Dichloroethene	50.00	53.91	108	74-132
Trichloroethene	50.00	46.07	92	80-119
Chlorobenzene	50.00	48.85	98	80-117

Surrogate	SRM	Limits
1,2-Dichloroethane-d4	87	78-123
Toluene-d8	96	80-110
Bromofluorobenzene	93	80-115

Type: BSD Lab ID: QC165018

Analyte	Spiked	Result	SRM	Limits	RPD	Lim
1,1-Dichloroethene	50.00	51.33	103	74-132	5	20
Trichloroethene	50.00	44.69	89	80-119	3	20
Chlorobenzene	50.00	48.99	98	80-117	0	20

Surrogate	SRM	Limits
1,2-Dichloroethane-d4	87	78-123
Toluene-d8	95	80-110
Bromofluorobenzene	93	80-115