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January 20, 2003

Alameda County

JAN 22 2003

Environmental Health

Mr. Barney Chan
Hazardous Materials Specialists
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Clayton Project No.70-97066.00.001

Subject: Fourth Quarter 2002 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 2002 groundwater monitoring event performed at 630 29th Avenue in Oakland, California.

If you have any comments or questions regarding the report please contact the undersigned (925) 426-2600.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Krzeminski".

Mike Krzeminski
Environmental Consultant
Environmental Services

A handwritten signature in black ink, appearing to read "Jon A. Rosso, P.E.". To the right of the signature is the handwritten date "1/22/03".

Jon A. Rosso, P.E.
Director

WBC/mk

cc: Donna Profitt Bank of America
 Rita Repko Clayton



**Fourth Quarter 2002
Groundwater Monitoring Results
for the
Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California**

Clayton Project No. 70-97066.00

January 20, 2003

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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, 2002 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 2002 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 16, 2002. Groundwater samples were collected from ten monitoring wells (MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12 and MW-13).

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 16, 2002, 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 eight monitoring wells (MW-6 through MW-13) 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], and temperature) 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 2002 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 2002 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 2002 monitoring event, the groundwater gradient was determined to be **0.015 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 2002 groundwater elevation contour map with the groundwater flow direction indicated is presented on Figure 2.

Note on Figure 2, the groundwater elevations at monitoring wells MW-2, MW-9 and to a lesser degree in MW-7 are “elevated or mounded” when compared to surrounding wells and recent historical trends. The groundwater level measurements were made in mid-December following approximately two weeks of heavy rains, as much of the ground surface surrounding the site is paved, the mounding is most likely due to leakage from piping or the transmission of water through the utility trench backfill material associated

with the 30-inch storm drain that run along 29th Avenue and/or the sanitary sewer system located in East 7th Street and 29th Avenue.

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 8 of 10 samples tested, and ranged in concentration from 62 micrograms per liter ($\mu\text{g/L}$) to 29,000 $\mu\text{g/L}$.
- Benzene was detected in 6 of 10 samples tested, and ranged in concentration from 26 $\mu\text{g/L}$ to 5,500 $\mu\text{g/L}$.
- Toluene was detected in 6 of 10 samples tested, and ranged in concentration from 0.54 $\mu\text{g/L}$ to 3,900 $\mu\text{g/L}$.
- Ethylbenzene was detected in 10 of 10 samples tested, and ranged in concentration from 1.0 $\mu\text{g/L}$ to 500 $\mu\text{g/L}$.
- Total Xylenes was detected in 9 of 10 samples tested, and ranged in concentration from 3.7 $\mu\text{g/L}$ to 2,300 $\mu\text{g/L}$.

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 2002 monitoring event are presented in Figures 3a and 3b, respectively.

4.3. HALOGENATED VOLATILE ORGANIC COMPOUNDS

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

- 1,2-Dichloroethane (1,2-DCA) was detected in 4 of 10 samples tested, and ranged in concentration from 1.0 $\mu\text{g/L}$ to 8.9 $\mu\text{g/L}$.
- Trichloroethene (TCE) was detected in 8 of 10 samples tested, and ranged in concentration from 0.5 $\mu\text{g/L}$ to 200 $\mu\text{g/L}$.
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 5 of 10 samples tested, and ranged in concentration from 1.1 $\mu\text{g/L}$ to 330 $\mu\text{g/L}$.
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 4 of 10 samples tested, and ranged in concentration from 6.9 $\mu\text{g/L}$ to 60 $\mu\text{g/L}$.
- Vinyl Chloride (VC) was detected in 3 of 10 samples tested, and ranged in concentration from 0.9 $\mu\text{g/L}$ to 4.7 $\mu\text{g/L}$.

The concentrations of TCE (contoured) and 1,2-DCE detected in groundwater samples collected from monitoring wells for the Fourth Quarter 2002 monitoring event are presented in Figures 4.

5. CONCLUSION

The groundwater gradient determined for the Fourth Quarter 2002 monitoring event was found to be 0.015 ft/ft to the west, and is consistent with past determinations. The highest concentrations of TPH-g and benzene occur beneath the central portion of the subject building in the area of monitoring wells MW-1, 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.

The highest concentrations of TPH-g and BTEX compounds, found beneath the central portion of the building, have significantly decreased this sampling event; while concentrations of these compounds in the down gradient wells (MW-7, MW-11, MW-12, and MW-13) have either maintained or exceeded the concentrations detected in previous sampling event. The reduction in concentrations beneath the central portion of the building can be attributed to natural attenuation, or more likely to recent bioremediation efforts that included ORC placement in the former UST pit and hydrogen peroxide injection within select monitoring wells. The effectiveness and sustainability of the bioremediation efforts should become more apparent through continued monitoring at the site.

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-2, MW-8, MW-11, MW-12, and MW-13. Concentrations of TCE in these wells have slightly increased from those detected in the previous quarter, while concentrations of cis-1,2-DCE have decreased significantly. Additionally, concentrations of these compounds are more widely distributed than previously found, as indicated by the low concentrations of these compounds in monitoring wells MW-2, MW-6, MW-7, and MW-10. The source of TCE and 1,2-DCE are unknown and appear to be originating off-site. The detection of trace concentrations of TCE within monitoring wells MW-6, MW-7 and MW-10 in combination with groundwater mounding through the central portion of the site may be indicating that TCE and 1,2-DCE are either leaking from piping or being transmitted through the utility trench backfill material associated with either the storm drain or sanitary sewer system and spreading across the site.

Report prepared by: Warren R. Chamberlain Jr.

Mike Krzeminski
Environmental Consultant

Report reviewed by: Jon Rosso

Jon Rosso, P.E.
Director, Environmental Services
San Francisco Regional Office

January 20, 2003

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	12/16/2002	16.69	3.91	12.78
	9/11/2002		6.17	10.52
	6/28/2002		5.61	11.08
	3/25/2002		2.77	13.92
	12/3/2001		4.17	12.52
	9/25/2001		6.76	9.93
	6/20/2001		5.85	10.84
	3/21/2001		4.29	12.40
	12/19/2000		5.50	11.19
	9/22/2000		6.30	10.39
	6/15/2000		4.82	11.87
	2/8/1999		3.60	13.09
MW-2	12/16/2002	20.79	11.15	9.64
	9/11/2002		10.89	9.90
	6/28/2002		10.65	10.14
	3/25/2002		9.21	11.58
	12/3/2001		11.13	9.66
	9/25/2001		11.78	9.01
	6/20/2001		10.92	9.87
	3/21/2001		10.01	10.78
	12/19/2000		11.38	9.41
	9/22/2000		11.49	9.30
	6/15/2000		10.46	10.33
	2/8/1999		14.20	6.59
MW-3	Removed from monitoring program in October 2001			
	9/25/2001	21.10	10.74	10.36
	6/20/2001		10.14	10.96
	3/21/2001		8.95	12.15
	12/19/2000		9.72	11.38
	9/22/2000		15.30	5.80
	6/15/2000		10.56	10.54
	2/8/1999		7.45	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-4	Removed from monitoring program in October 2001			
	9/25/2001	17.78	7.40	10.38
	6/20/2001		6.78	11.00
	3/21/2001		5.77	12.01
	12/19/2000		6.40	11.38
	9/22/2000		6.90	10.88
	6/15/2000		6.30	11.48
	2/8/1999		4.13	13.65
MW-5	Removed from monitoring program in October 2001			
	9/25/2001	21.12	10.34	10.78
	6/20/2001		9.90	11.22
	3/21/2001		8.68	12.44
	12/19/2000		9.99	11.13
	9/22/2000		9.99	11.13
	6/15/2000		10.36	10.76
	2/8/1999		7.62	13.50
MW-6	12/16/2002	16.60	3.93	12.67
	9/11/2002		5.43	11.17
	6/28/2002		5.83	10.77
	3/25/2002		3.93	12.67
	12/3/2001		4.72	11.88
	9/25/2001		6.68	9.92
	6/20/2001		6.13	10.47
	3/21/2001		4.70	11.90
	12/19/2000		5.93	10.67
	9/22/2000		6.54	10.06
	6/15/2000		5.47	11.13
MW-7	12/16/2002	15.47	5.01	10.46
	9/11/2002		6.95	8.52
	6/28/2002		6.94	8.53
	3/25/2002		6.04	9.43
	12/3/2001		6.48	8.99
	9/25/2001		7.25	8.22
	6/20/2001		6.90	8.57
	3/21/2001		5.53	9.94
	12/19/2000		7.20	8.27
	9/22/2000		7.51	7.96
	6/15/2000		6.40	9.07

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-8	12/16/2002	17.58	5.63	11.95
	9/11/2002		8.40	9.18
	6/28/2002		7.71	9.87
	3/25/2002		5.40	12.18
	12/3/2001		6.58	11.00
	9/25/2001		8.89	8.69
	6/20/2001		7.96	9.62
	3/21/2001		6.40	11.18
	12/19/2000		7.71	9.87
	9/22/2000		8.33	9.25
MW-9	6/15/2000		7.14	10.44
	12/16/2002	17.58	6.58	11.00
	9/11/2002		6.91	10.67
	6/28/2002		7.71	9.87
	3/25/2002		4.98	12.63
MW-10	12/3/2001		5.79	11.82
	12/16/2002	16.92	3.74	13.18
	9/11/2002		6.16	10.76
	6/28/2002		5.65	11.27
	3/25/2002		3.00	13.92
MW-11	12/3/2001		4.22	12.70
	12/16/2002	14.87	3.92	10.95
	9/11/2002		6.91	7.96
	6/28/2002		6.35	8.52
	3/25/2002		4.68	10.19
MW-12	12/3/2001		5.67	9.20
	12/16/2002	14.05	4.94	9.93
	9/11/2002		6.82	8.05
MW-13	6/28/2002		6.13	8.74
	12/16/2002	13.39	3.90	10.97
	9/11/2002		6.66	8.21
	6/28/2002		6.21	8.66

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	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-1	12/16/2002	20,000	NA	2,800	490	500	2,300	<4.2	<4.2	<4.2	<4.2	<4.2
	9/11/2002	27,000	NA	3,200	1,900	720	3,500	<4.2	<4.2	<4.2	<4.2	<4.2
	6/28/2002	26,000	NA	3,200	1,800	640	2,900	<3.1	<3.1	<3.1	<3.1	<3.1
	3/25/2002	11,000	NA	3,200	1,200	73	1,860	<5	<5	<5	<5	<5
	12/3/2001	15,000	NA	2,800	1,200	310	1,660	<3.1	<3.1	<3.1	<3.1	<3.1
	9/26/2001	16,000	NA	1,100	130	< 10	320	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
	6/21/2001	12,000	NA	2,000	880	180	1,180	3.0	<0.5	<0.5	<0.5	<0.5
	3/21/2000	21,000	NA	3,200	1,700	290	2,600	<2.5	<2.5	<2.5	<2.5	<2.5
	12/19/2000	25,000	NA	3,200	1,900	480	3,300	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/2000	25,000	<500	3,100	1,800	470	3,600	NA	NA	NA	NA	NA
	6/15/2000	29,000	NA	3,900	<100	1,900	4,200	<5.0	<5.0	<5.0	<5.0	<5.0
	2/8/1999	48,000	NA	3,900	6,300	970	4,300	<30	NA	NA	NA	NA
MW-2	12/16/2002	6,000	NA	1,600	410	150	402	2.7	4.5	69	6.9	<2.5
	9/11/2002	23,000	NA	6,600	1,000	600	1,320	10	<6.3	<6.3	<6.3	<6.3
	6/28/2002	8,400	NA	2,200	680	21	220	8.8	<3.1	<3.1	<3.1	<3.1
	3/25/2002	21,000	NA	11,000	3,700	1,000	2,790	<17	<17	<17	<17	<17
	12/3/2001	45,000	NA	13,000	5,100	950	2,930	14	<7.1	<7.1	<7.1	<7.1
	9/26/2001	26,000	NA	12,000	3,900	590	1,960	11	< 10	< 10	< 10	< 10
	6/21/2001	30,000	NA	8,600	2,600	440	1,230	5.6	<0.5	<0.5	<0.5	<0.5
	3/23/2001	34,000	NA	10,000	3,200	410	1,220	14	<13	<13	<13	<13
	12/19/2000	43,000	NA	9,800	4,000	810	2,430	21	<13	<13	<13	<13
	9/22/2000	24,000	<500	10,000	2,700	370	1,200	NA	NA	NA	NA	NA
	6/29/2000	31,000	NA	11,000	930	4,400	250	25	<5.0	<5.0	<5.0	<5.0
	2/8/1999	41,000	NA	11,000	4,900	650	1,720	60	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	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-3 Removed from sampling program in October 2001												
	9/26/2001	59,000	NA	12,000	13,000	780	3,680	990	<8.3	<8.3	<8.3	<8.3
	6/21/2001	34,000	NA	5,900	6,200	340	1,550	120	2.4	0.8	<0.5	<0.5
	3/22/2001	1,300	NA	98	67	51	104	2.3	<0.5	<0.5	<0.5	<0.5
	12/19/2000	50,000	NA	1,200	1,600	510	1,810	350	<8.3	<8.3	<8.3	<8.3
	9/22/2000	83,000	<1,000	16,000	20,000	1,300	7,000	NA	NA	NA	NA	NA
	6/29/2000	39,000	NA	7,800	630	8,000	3,400	600	<5.0	<5.0	<5.0	<5.0
	2/8/1999	35,000	NA	1,200	3,400	1,400	4,900	<30	NA	NA	NA	NA
MW-4 Removed from sampling program in October 2001												
	9/26/2001	17,000	NA	7,900	<50	440	581	1.9	<0.5	8.1	<0.5	<0.5
	6/21/2001	11,000	NA	2,300	26	570	641	1.4	<0.5	3.3	<0.5	<0.5
	3/22/2001	5,600	NA	1,100	13	310	303	<0.5	<0.5	1.6	<0.5	<0.5
	12/19/2000	2,200	NA	200	2.9	100	81.4	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/2000	12,000	<500	2,800	82	1,100	1,300	NA	NA	NA	NA	NA
	6/15/2000	2,300	NA	230	<5	10	94	0.88	<0.5	2.1	<0.5	<0.5
	2/8/1999	15,000	NA	670	90	780	940	<30	NA	NA	NA	NA
MW-5 Removed from sampling program in October 2001												
	9/26/2001	5,100	NA	2,400	1,200	<10	460	22	<3.6	<3.6	<3.6	<3.6
	6/21/2001	18,000	NA	3,400	2,300	350	1,020	21	<0.5* ³	<0.5	<0.5	<0.5
	3/22/2001	6,200	NA	1,500	360	310	288	3.3	<0.5	<0.5	<0.5	<0.5
	12/19/2000	21,000	NA	3,200	1,100	1,100	1,300	15	<4.2	<4.2	<4.2	<4.2
	9/27/2000	16,000	<500	4,300	3,100	420	1,600	NA	NA	NA	NA	NA
	6/29/2000	3,900	NA	1,500	28	330	260	36	<0.5	<0.5	<0.5	<0.5
	2/8/1999	4,900	NA	780	440	230	370	<0.5	<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	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-6	12/16/2002	62	NA	< 0.5	0.54	3.0	8.39	1.0* ⁴	0.7	< 0.5	< 0.5	< 0.5
	9/11/2002	120	NA	< 0.5	< 0.5	< 0.5	< 0.5	<0.5* ⁴	< 0.5	< 0.5	< 0.5	< 0.5
	6/28/2002	120	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5
	3/25/2002	1,200	NA	22	8.0	5.7	13.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/3/2001	72	NA	<0.5	<0.5	<0.5	<0.5	1.6* ⁵	< 0.5	< 0.5	< 0.5	< 0.5
	9/25/2001	760	NA	<0.5	<0.5	<0.5	2.9	<0.5* ⁴	< 0.5	< 0.5	< 0.5	< 0.5
	6/21/2001	420	NA	<0.5	<0.5	0.59	1.00	0.9	< 0.5	< 0.5	< 0.5	< 0.5
	3/21/2001	820	NA	<0.5	<0.5	1.4	0.52	<0.5* ²	< 0.5	< 0.5	< 0.5	< 0.5
	12/19/2000	320	NA	<0.5	<0.5	<0.5	<0.5	<0.5* ¹	< 0.5	< 0.5	< 0.5	< 0.5
	9/22/2000	71	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
MW-7	6/15/2000	1,100	NA	3.8	2.2	2.1	4.8	0.78	< 0.5	< 0.5	< 0.5	< 0.5
	12/16/2002	<50	NA	<0.5	<0.5	1.6	3.7	<0.5	0.5	< 0.5	< 0.5	< 0.5
	9/11/2002	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
	6/28/2002	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/25/2002	<50	NA	0.56	0.75	<0.5	0.69	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/3/2001	82	NA	24	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
	9/25/2001	< 50	NA	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	6/21/2001	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/21/2001	160	NA	59	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/19/2000	<50	NA	1.6	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5
	9/22/2000	<50	<5	2	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	6/15/2000	1,000	NA	250	<10	<10	16	<0.5	< 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	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-8	12/16/2002	95	NA	26	<0.5	1	<0.5	2.2	17	330	36	4.7
	9/11/2002	2,000	NA	390	1.6	39	<1.0	<3.6	17	1,000	60	91
	6/28/2002	2,200	NA	410	<1.0	40	<1.0	4.9	18	900	54	80
	3/25/2002	990	NA	280	7.2	1.4	6.8	3.6	10	790	33	49
	12/3/2001	1,200	NA	190	14	2.7	11.3	<2.5	100	650	44	31
	9/25/2001	1,500	NA	170	4.3	1.6	2.7	5.0	36	820	59	53
	6/21/2001	2,400	NA	490	<2.5	29	<2.5	4.9	28	910	48	75
	3/21/2001	3,500	NA	530	<2.5	21	<2.5	<3.6	32	760	39	58
	12/19/2000	2,700	NA	410	<2.5	4.8	<2.5	9.1	130	1,000	67	48
	9/22/2000	1,800	<25	340	<2.5	<2.5	<2.5	NA	NA	NA	NA	NA
MW-9	6/15/2000	5,400	NA	150	<5	8.9	8.7	<13	210	1,100	73	25
	12/16/2002	29,000	NA	5,500	3,900	300	1,860	8.9	<5	<5	<5	<5
	9/11/2002	57,000	NA	8,300	6,100	340	4,700	18	<10	<10	<10	<10
	6/28/2002	60,000	NA	5,800	7,400	1,100	5,400	<13	<13	<13	<13	<13
	3/25/2002	71,000	NA	15,000	17,000	1,900	8,000	<31	<31	<31	<31	<31
MW-10	12/16/2002	<50	NA	<0.5	0.65	3.0	7.53	<0.5	0.8	<0.5	<0.5	<0.5
	9/11/2002	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/28/2002	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/25/2002	51	NA	2.5	3.6	0.53	2.27	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2001	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-11	12/16/2002	160	NA	42	0.89	4.8	11.1	<0.5	3.6	1.1	<0.5	<0.5
	9/11/2002	120	NA	66	<0.5	0.74	<0.5	<0.5	<0.5	0.6	<0.5	<0.5
	6/28/2002	<50	NA	7.7	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
	3/25/2002	130	NA	11	20	3.3	14.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2001	1,600	NA	470	<0.5	3.7	<0.5	<0.5	<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	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-12	12/16/2002	130	NA	<0.5	0.9	4.2	9.9	<0.5	200	57	60	0.9
	9/11/2002	89	NA	<0.5	<0.5	<0.5	<0.5	<0.5	180	46	51	0.9
	6/28/2002	71	NA	<0.5	<0.5	<0.5	<0.5	<0.5	170	42	47	0.9
MW-13	12/16/2002	4,800	NA	90	<0.5	85	24	<0.5	76	250	9.4	1.8
	9/11/2002	4,500	NA	58	7.5	150	14	<0.5	63 ^{*7}	410	13	<1.3
	6/28/2002	5,600	NA	120	55	130	9.5	<0.5	61 ^{*6}	430	14	4.4

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 $\mu\text{g/L}$.

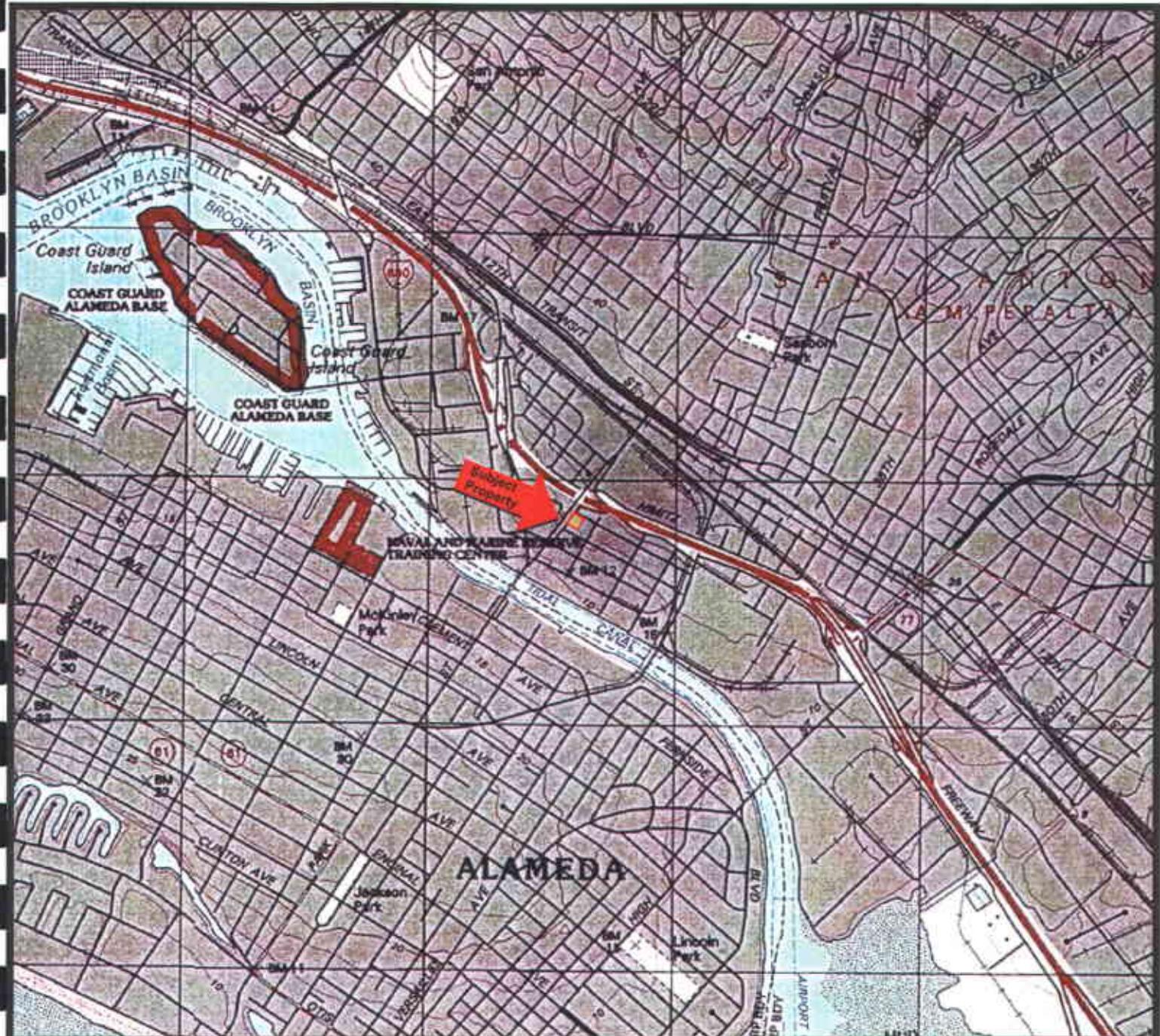
^{*3} Freon -11 detected at 0.6 $\mu\text{g/L}$.

^{*4} 1,1-DCA detected at 0.9 $\mu\text{g/L}$

^{*5} 1,1-DCA detected at 0.7 $\mu\text{g/L}$

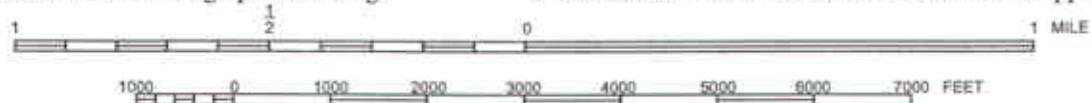
^{*6} 1,1-DCE detected at 4.7 $\mu\text{g/L}$

^{*7} 1,1-DCE detected at 5.2 $\mu\text{g/L}$



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

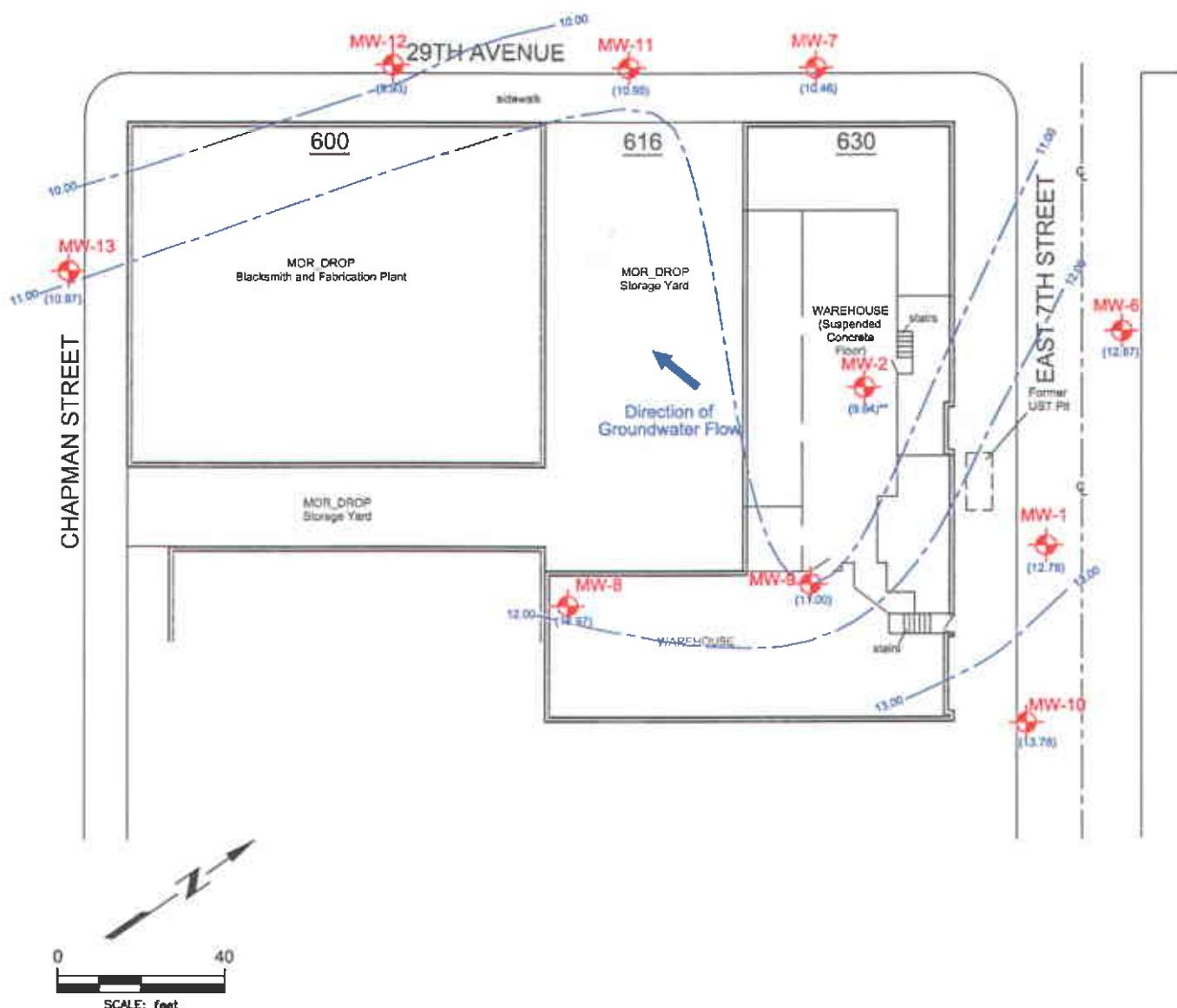


PROPERTY LOCATION MAP
Former Lemoine Sausage Factory
630 29th Avenue
Oakland, California
Clayton Project No. 70-97066.00

Figure

1

Clayton
GROUP SERVICES



Note:

Water table elevation contours are approximate.

** Groundwater elevation not used in contouring.

LEGEND

● Existing Monitoring Well Location

(10.52) Groundwater Elevation in Feet above Mean Sea Level

10.00 - - - Groundwater Surface Contour and Elevation

GROUNDWATER ELEVATION CONTOUR MAP
(December 16, 2002)

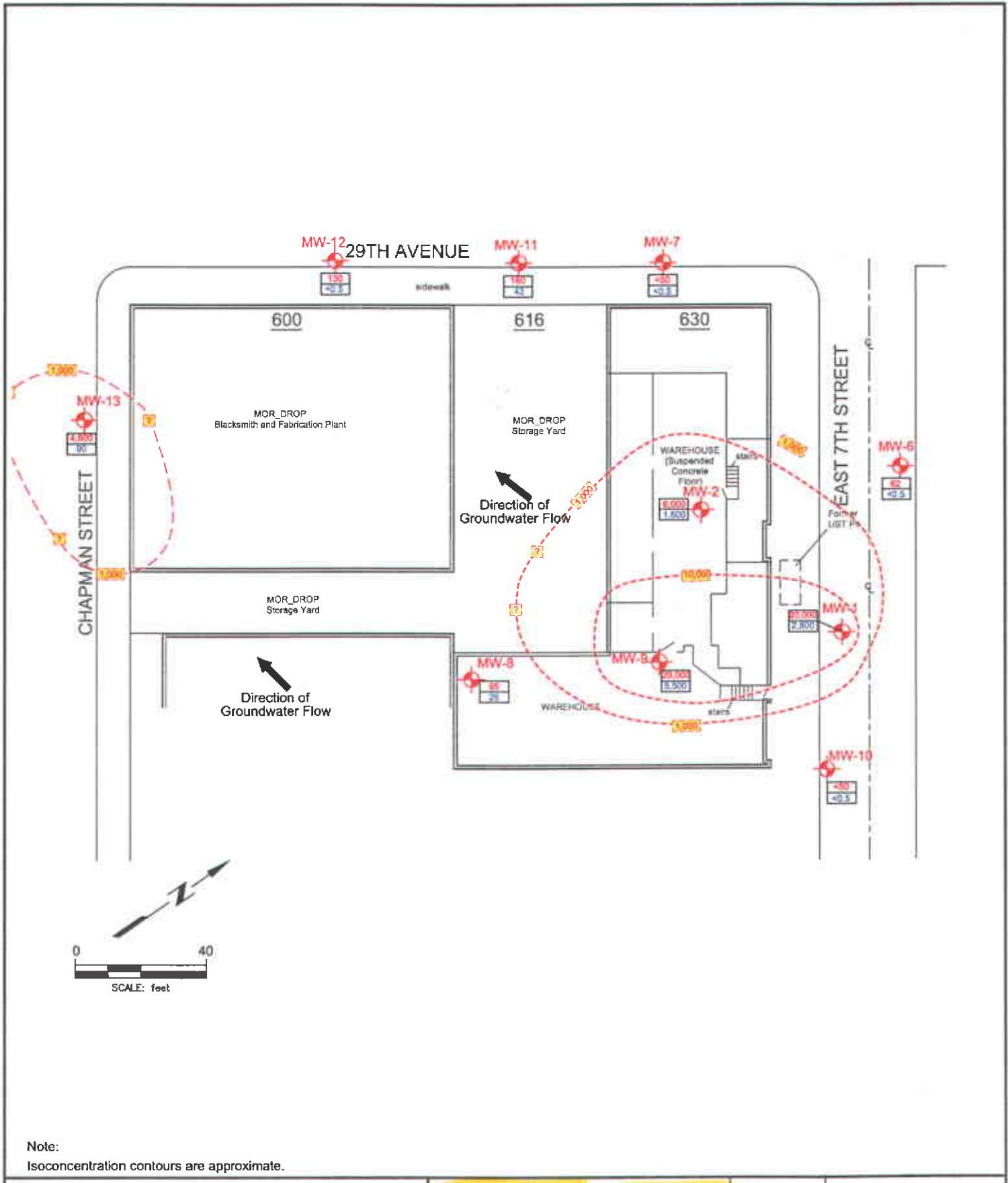
FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure

2

1/13/02
Q4TH_02.dwg





Note:

Isoconcentration contours are approximate.

LEGEND

- MW-1 Existing Monitoring Well Location
- 6,000 TPH-G Concentration (micrograms per liter)
- 1,600 Benzene Concentration (micrograms per liter)
- 1,000 Isoconcentration Contour (micrograms per liter)

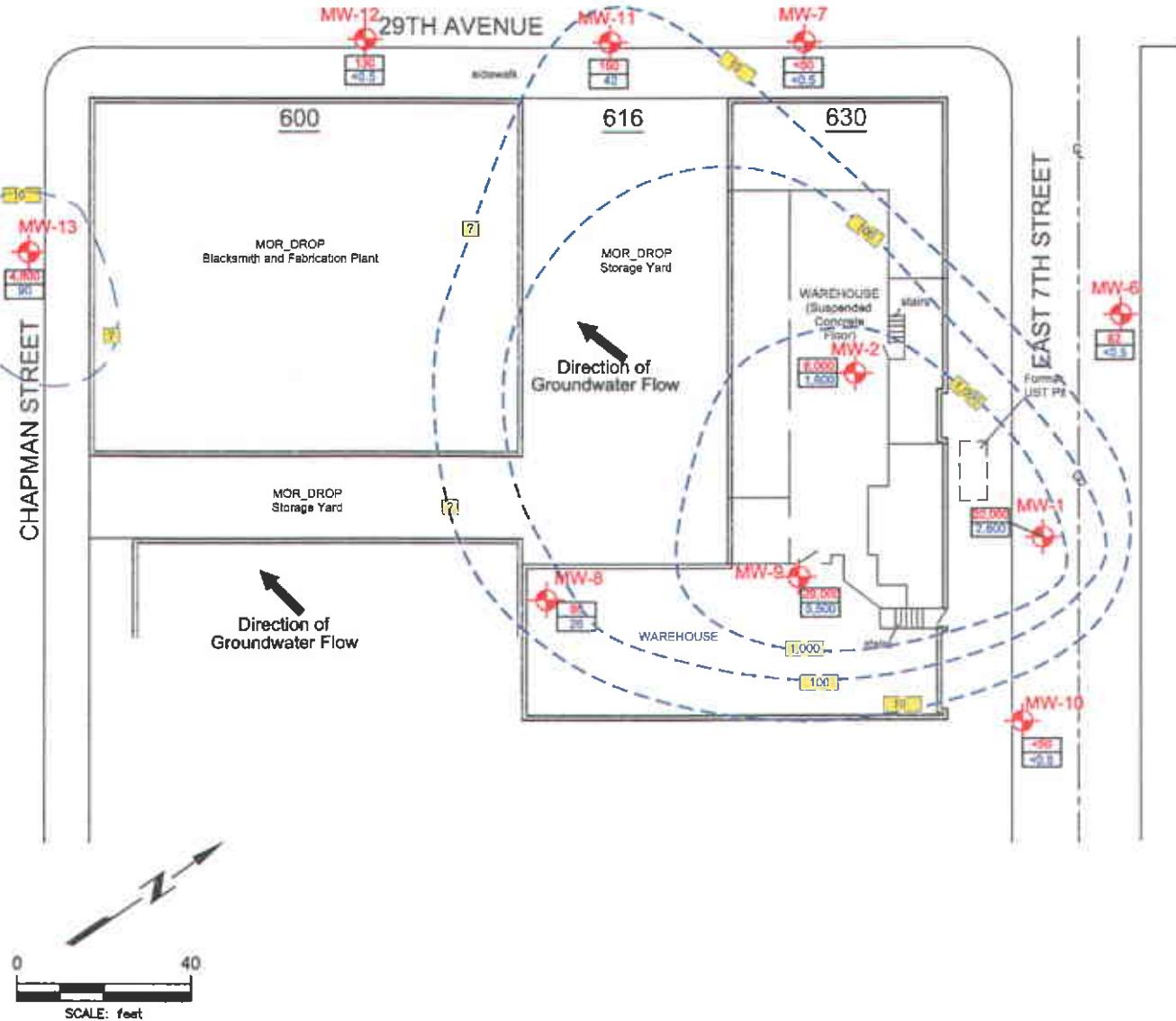
TPH as Gasoline
CONCENTRATIONS IN GROUNDWATER
December, 2002
FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure

3a

1/13/02
Q4TH_02.dwg





Note:

Isoconcentration contours are approximate.

LEGEND

- MW-1 Existing Monitoring Well Location
- TPH-G Concentration (micrograms per liter)
- Benzene Concentration (micrograms per liter)
- Isoconcentration Contour (micrograms per liter)

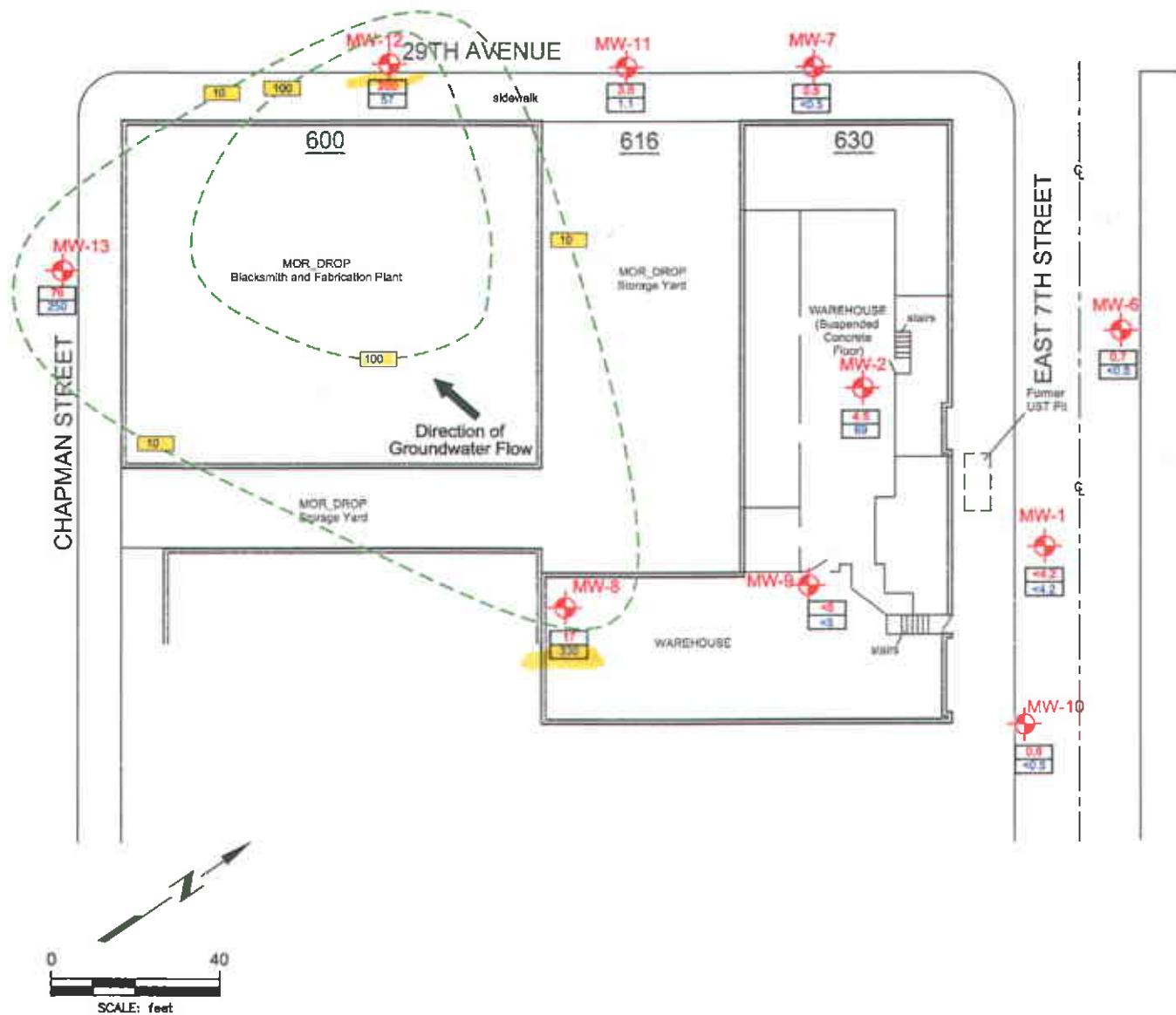
BENZENE CONCENTRATIONS IN GROUNDWATER
December, 2002
FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure

3b

1/13/02
Q4TH_02.dwg





LEGEND

MW-12 Existing Monitoring Well Location

180 TCE Concentration (micrograms per liter)

46 cis 1,2-DCE Concentration (micrograms per liter)

100 TCE Isoconcentration Contour (micrograms per liter)

TCE and cis-1,2 DCE CONCENTRATIONS IN GROUNDWATER
December, 2002
FORMER LEMOINE SAUSAGE FACTORY
630 29TH AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00

Figure

4

1/13/02
Q4TH_02.dwg



APPENDIX A

FOURTH QUARTER (DECEMBER) 2002 GROUNDWATER SAMPLING LOGS

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	12-14
	Oakland, California	Purge Method:	Bur.1er
Sampling Location:	MW-1	Date & Time Sampled:	12-14 13:15
Top of Casing:	16.69 (ft, msl)	Sampling Method:	Bur.1er
Depth to Water:	3.41	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	12.78	Preservatives:	HGL
Well Bottom	7.69	# of Containers:	5
Water Column:	12.78	Field Tech:	MR
Well Casing Volume:	5.04 (WC* 0.01)	Weather Conditions:	rainy
Casing Volumes Purged:	0.0509		
Purge Rate:	3/4" dia well		

Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	Redox Potential (mVolts)	Temperature ($^{\circ}\text{F}$ or $^{\circ}\text{C}$)	Dissolved Oxygen (mg/L)
13:10	0	7.04	0.325	-62	16.2	-
13:15	.05	6.98	0.346	-64	16.3	-
13:14	.05	6.97	0.421	-67	16.3	-
13:13	.05	6.94	0.419	-67	16.3	-
:		Bur.1er dry @ 13:13				
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Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory		Job #:	70-97066		
	630 29th Avenue		Date Purged:	12-16		
	Oakland, California		Purge Method:	Butler		
Sampling Location:	MW-2		Date & Time Sampled:	12-16 15:30		
Top of Casing:	20.79	(ft, msl)	Sampling Method:	Butler		
Depth to Water:	11.15		Sample Type:	TPHG/BTEX /8021B		
Groundwater Elevation	9.64		Preservatives:	HCL		
Well Bottom	0.79		# of Containers:	6		
Water Column:	8.85		Field Tech:	MK		
Well Casing Volume:	.08	(WC* 0.01)	Weather Conditions:	rainy		
Casing Volumes Purged:						
Purge Rate:	3/4" dia well					
Time	Volume Removed (gal)	pH	Specific Conductivity (μ mhos/cm) $\times 10$	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
15:10	0	6.78	12.56	-47	16.6	-
15:18	108	6.81	18.24	-54	16.8	-
15:18	108	6.62	31.20	-56	16.9	-
15:21	Bailed Dry @ 15:21					-
15:25						-
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Field Notes:						

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066			
	630 29th Avenue	Date Purged:	12-16			
	Oakland, California	Purge Method:	pump			
Sampling Location:	MW-6	Date & Time Sampled:	12-16 19:20			
Top of Casing:	16.6 (ft, msl)	Sampling Method:	Builer			
Depth to Water:	3.93	Sample Type:	TPHG/BTEX /8021B			
Groundwater Elevation	12.67	Preservatives:	HCl			
Well Bottom	-3.40	# of Containers:	10			
Water Column:	16.07	Field Tech:	MV			
Well Casing Volume:	2.5 (WC* 0.16)	Weather Conditions:	rainy			
Casing Volumes Purged:	4	Purge Rate:	2" dia well			
Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos/cm} \times 10^4$)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
18:50	0	6.85	0.811	-47	19.4	-
18:56	2.5	6.92	0.898	-53	19.4	-
19:03	2.5	6.88	0.916	-56	19.5	-
19:10	2.5	6.84	0.945	-59	19.6	-
19:15	2.5	6.84	1.031	-59	19.7	-
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Field Notes:						

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066			
	630 29th Avenue	Date Purged:	12-16			
	Oakland, California	Purge Method:	Submersible			
Sampling Location:	MW-7	Date & Time Sampled:	12-16 13:00			
Top of Casing:	15.47 (ft, msl)	Sampling Method:	Buile			
Depth to Water:	5.01	Sample Type:	TPHG/BTEX/8021B			
Groundwater Elevation	10.46	Preservatives:	HCL			
Well Bottom	-4.53	# of Containers:	1			
Water Column:	14.94	Field Tech:	MK			
Well Casing Volume:	11.172.3 (WC* 0.16)	Weather Conditions:	rainy			
Casing Volumes Purged:	4	Purge Rate:	2" dia well			
Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos/cm}$)	Redox Potential (mVolts)	Temperature ($^{\circ}\text{F or }^{\circ}\text{C}$)	Dissolved Oxygen (mg/L)
12:40	0	6.84	0.641	-52	18.4	~
12:43	162.3	6.88	0.712	-54	18.4	~
12:48	1.0	6.99	0.941	-54	18.3	~
12:52	1.0	7.01	0.743	-61	18.4	~
12:56	1.0	6.916	0.622	-58	18.3	~
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Field Notes:	Dilution w/ rain water may give skewed results					

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066			
	630 29th Avenue	Date Purged:	12-14			
	Oakland, California	Purge Method:	Burster			
Sampling Location:	MW-8	Date & Time Sampled:	12-14 15:00			
Top of Casing:	17.58 (ft, msl)	Sampling Method:	Burster			
Depth to Water:	5.63	Sample Type:	TPHG/BTEX /8021B			
Groundwater Elevation	11.95	Preservatives:	HCL			
Well Bottom	-2.42	# of Containers:	6			
Water Column:	14.37	Field Tech:	mk			
Well Casing Volume:	10.5 gal (WC* 0.16)	Weather Conditions:	Rainy			
Casing Volumes Purged:	2.35					
Purge Rate:	45	2" dia well				
Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos/cm}$)	Redox Potential (mVolts)	Temperature ($^{\circ}\text{F or }^{\circ}\text{C}$)	Dissolved Oxygen (mg/L)
14:20	0	7.14	0.601	-69	15.4	-
14:35	2.3	7.08	0.761	-72	15.5	-
14:46	2.3	7.06	0.842	-78	15.5	-
14:45	2.3	7.04	1.097	-87	15.7	-
14:50	2.3	7.05	1.110	-89	15.9	-
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Field Notes:						

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory		Job #:	70-97066		
	630 29th Avenue		Date Purged:	12-14		
	Oakland, California		Purge Method:	Builer		
Sampling Location:	MW-9		Date & Time Sampled:	12-10 16:45		
Top of Casing:	17.61	(ft, msl)	Sampling Method:	Builer		
Depth to Water:	4.58		Sample Type:	TPHG/BTEX /8021B		
Groundwater Elevation	11.03		Preservatives:	HCL		
Well Bottom	2.61		# of Containers:	1		
Water Column:	8.42		Field Tech:	mx		
Well Casing Volume:	1.34	(WC* 0.16)	Weather Conditions:	rainy		
Casing Volumes Purged:						
Purge Rate: 2" dia well						
Time	Volume Removed (gal)	pH	Specific Conductivity (μ mhos/cm) $\times 10^3$	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
15:45	0	6.72	0.249	-47	16.8	-
15:50	1.3	6.54	0.2448	-45	16.9	-
15:55	1.3	6.41	0.232	-38	17.2	-
16:00	1.3	6.33	0.262	-34	17.2	-
16:05	1.3	6.31	0.274	-37	17.6	-
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<u>Field Notes:</u>						

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	12-16
	Oakland, California	Purge Method:	Submersible pump
Sampling Location:	MW-10	Date & Time Sampled:	12-16 13:50
Top of Casing:	16.92 (ft, msl)	Sampling Method:	Buoy
Depth to Water:	3.74	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	13.18	Preservatives:	HCl
Well Bottom	7.92	# of Containers:	6
Water Column:	5.24	Field Tech:	mk
Well Casing Volume:	0.84 (WC* 0.16)	Weather Conditions:	Nwly
Casing Volumes Purged:	4	Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos/cm} \times 1.0$)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
13:30	0	7.24	0.483	-77	16.4	-
13:33	0.8	7.15	0.484	-69	17.2	-
13:34	0.8	7.12	0.489	-65	17.8	-
13:42	0.8	7.09	0.510	-67	18.3	-
13:46	0.8	7.05	0.491	-62	18.9	-
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Field Notes:

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory		Job #:	70-97066		
	630 29th Avenue		Date Purged:	12-16		
	Oakland, California		Purge Method:	Submersible pump		
Sampling Location:	MW-11		Date & Time Sampled:	12-16 12:15		
Top of Casing:	14.87	(ft, msl)	Sampling Method:	Boiler		
Depth to Water:	3.91		Sample Type:	TPHG/BTEX/8021B		
Groundwater Elevation	10.95		Preservatives:	14L		
Well Bottom	-0.13		# of Containers:	6		
Water Column:	11.08		Field Tech:	M5		
Well Casing Volume:	1.79	(WC* 0.16)	Weather Conditions:	rainy		
Casing Volumes Purged:	4		Purge Rate:	2" dia well		
Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos/cm}$) $\times 10^3$	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
12:15	0	6.82	131.6	-53	18.4	-
12:18	1.7	6.92	0.241	-58	18.1	-
12:22	1.7	7.07	0.224	-71	17.2	-
12:25	1.7	7.04	0.321	-75	17.1	-
12:28	1.7	6.78	0.710	-76	16.8	-
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<u>Field Notes:</u>						

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066			
	630 29th Avenue	Date Purged:	12-16			
	Oakland, California	Purge Method:	Submersible			
Sampling Location:	MW-12	Date & Time Sampled:	12-16 11:07			
Top of Casing:	14.05 (ft, msl)	Sampling Method:	Builer			
Depth to Water:	14.94	Sample Type:	TPHG/BTEX /8021B			
Groundwater Elevation	9.93	Preservatives:	HCl			
Well Bottom	-0.95	# of Containers:	1			
Water Column:	10.04	Field Tech:	mc			
Well Casing Volume:	1.4 (WC* 0.16)	Weather Conditions:	rainy			
Casing Volumes Purged:	4					
Purge Rate:			2" dia well			
Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos/cm}$)	Redox Potential (mVolts)	Temperature (°F or °C)	Dissolved Oxygen (mg/L)
11:45	0	6.81	1.86	-46	18.6	-
11:48	1.6	6.82	1.64	-48	18.8	-
11:53	1.6	6.84	1.12	-53	19.2	-
11:58	1.6	6.87	1.13	-55	19.4	-
12:00	1.6	6.87	1.16	-56	19.8	-
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:						
<u>Field Notes:</u>						

FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	12-14
	Oakland, California	Purge Method:	submersible pump
Sampling Location:	MW-13	Date & Time Sampled:	12-16 11:35
Top of Casing:	13.39 (ft, msl)	Sampling Method:	Builer
Depth to Water:	3.90	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	10.97	Preservatives:	HCL
Well Bottom	-1.61	# of Containers:	4
Water Column:	4.47 11.10	Field Tech:	JK
Well Casing Volume:	1.50177 (WC* 0.16)	Weather Conditions:	Rainy
Casing Volumes Purged:	4		
Purge Rate:		2" dia well	

Time	Volume Removed (gal)	pH	Specific Conductivity ($\mu\text{mhos/cm}$) $\times 1.0$	Redox Potential (mVolts)	Temperature ($^{\circ}\text{F or } ^{\circ}\text{C}$)	Dissolved Oxygen (mg/L)
11:15	1.50	6.35	0.688	-29	27.4	-
11:20	1.50	6.73	0.691	-42	24.9	-
11:23	1.50	6.70	0.695	-43	24.8	-
11:26	1.50	6.68	0.713	-40	24.7	-
11:30	1.50	6.69	0.714	-39	24.7	-
:						
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Field Notes:						

APPENDIX B**FOURTH QUARTER (DECEMBER) 2002****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

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

Prepared for:

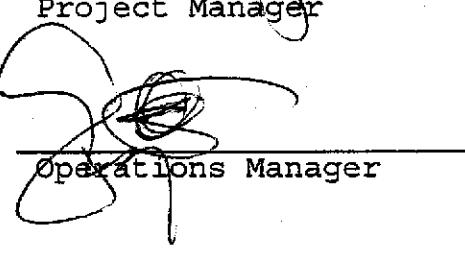
Clayton Group Services
6920 Koll Center Parkway
Suite 216
Pleasanton, CA 94566

Date: 30-DEC-02
Lab Job Number: 162670
Project ID: 70-97066.00
Location: Sausage Factory 02Q4

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.

NELAP # 01107CA

Page 1 of 40



CHAIN OF CUSTODY

162670

Page 1 of 1Lab: Curtis&TompkinsTAT: Standard

Report results to:

Name Warren Chamberlain
 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
 E-mail: wchamberlain@claytongrp.com

Project Information

Project No. 70-97066.00
 Name Sausage Factory
 Location 630 29th Avenue, Oakland
 Global_Id T0600102114
 Log_code CGSP

Special instructions and/or specific regulatory requirements:

Sample Identification	Sample Date	Sample Time	Matrix/ Media	No. of Conts.	Analyses Requested												Preservative
					TPH as Gasoline/BTEX												
MW-01 02Q4	16-Dec-02	13:25	L	6	X	X											HCI
MW-02 02Q4	16-Dec-02	15:30	L	6	X	X											HCI
MW-06 02Q4	16-Dec-02	14:20	L	6	X	X											HCI
MW-07 02Q4	16-Dec-02	13:00	L	6	X	X											HCI
MW-08 02Q4	16-Dec-02	15:00	L	6	Y	Y											HCI
MW-09 02Q4	16-Dec-02	16:15	L	6	X	X											HCI
MW-10 02Q4	16-Dec-02	13:40	L	6	X	X											HCI
MW-11 02Q4	16-Dec-02	10:35	L	6	X	Y											HCI
MW-12 02Q4	16-Dec-02	12:07	L	6	X	X											HCI
MW-13 02Q4	16-Dec-02	11:35	L	6	X	X											HCI

Collected by: Mike Kizmirey Date/Time 12/16Relinquished by: Mike Kizmirey Date/Time _____

Relinquished by: _____ Date/Time _____

Method of Shipment: _____

Collector's Signature: Mike KizmireyDate/Time 12/16Received by: Mike KizmireyDate/Time 12-17-02Received by: Mike Kizmirey

Date/Time _____

Sample Condition on Rcpt: _____

11:15

AB2886 Electronic Delivery

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

No errors were found in your EDF upload file.

If you want to submit this file to the SWRCB,
choose the "Upload EDD" option in the above
menu and follow the instructions.

When you complete the submittal process, you will be
given a confirmation number for your submittal.

Because you have not chosen a facility, field point
names have not been checked.

Logged in as CTBERK
(LABORATORY)

CONTACT SITE ADMINISTRATOR.



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/02
Units:	ug/L	Received:	12/17/02

Field ID: MW-01 Diln Fac: 25.00
Type: SAMPLE Batch#: 77835
Lab ID: 162670-001 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	20,000	1,300	8015B(M)
Benzene	2,800	13	EPA 8021B
Toluene	490	13	EPA 8021B
Ethylbenzene	500	13	EPA 8021B
m,p-Xylenes	1,400	13	EPA 8021B
o-Xylene	900	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	68-145	8015B(M)
Bromofluorobenzene (FID)	95	66-143	8015B(M)
Trifluorotoluene (PID)	105	53-143	EPA 8021B
Bromofluorobenzene (PID)	100	52-142	EPA 8021B

Field ID: MW-02 Diln Fac: 5.000
Type: SAMPLE Batch#: 77835
Lab ID: 162670-002 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	6,000	250	8015B(M)
Benzene	1,600	2.5	EPA 8021B
Toluene	410	2.5	EPA 8021B
Ethylbenzene	150	2.5	EPA 8021B
m,p-Xylenes	320	2.5	EPA 8021B
o-Xylene	82	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	102	68-145	8015B(M)
Bromofluorobenzene (FID)	100	66-143	8015B(M)
Trifluorotoluene (PID)	110	53-143	EPA 8021B
Bromofluorobenzene (PID)	104	52-142	EPA 8021B

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Page 1 of 6



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/02
Units:	ug/L	Received:	12/17/02

Field ID: MW-06 Diln Fac: 1.000
Type: SAMPLE Batch#: 77812
Lab ID: 162670-003 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	62	50	8015B(M)
Benzene	ND	0.50	EPA 8021B
Toluene	0.54	0.50	EPA 8021B
Ethylbenzene	3.0	0.50	EPA 8021B
m,p-Xylenes	7.5	0.50	EPA 8021B
o-Xylene	0.89	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	68-145	8015B(M)
Bromofluorobenzene (FID)	98	66-143	8015B(M)
Trifluorotoluene (PID)	95	53-143	EPA 8021B
Bromofluorobenzene (PID)	98	52-142	EPA 8021B

Field ID: MW-07 Diln Fac: 1.000
Type: SAMPLE Batch#: 77812
Lab ID: 162670-004 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B(M)
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	1.6	0.50	EPA 8021B
m,p-Xylenes	3.7	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	68-145	8015B(M)
Bromofluorobenzene (FID)	95	66-143	8015B(M)
Trifluorotoluene (PID)	95	53-143	EPA 8021B
Bromofluorobenzene (PID)	96	52-142	EPA 8021B

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/02
Units:	ug/L	Received:	12/17/02

Field ID: MW-08 Diln Fac: 1.000
Type: SAMPLE Batch#: 77835
Lab ID: 162670-005 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	95 Y	50	8015B(M)
Benzene	26	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	1.1	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	68-145	8015B(M)
Bromofluorobenzene (FID)	99	66-143	8015B(M)
Trifluorotoluene (PID)	109	53-143	EPA 8021B
Bromofluorobenzene (PID)	102	52-142	EPA 8021B

Field ID: MW-09 Diln Fac: 25.00
Type: SAMPLE Batch#: 77835
Lab ID: 162670-006 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	29,000	1,300	8015B(M)
Benzene	5,500	13	EPA 8021B
Toluene	3,900	13	EPA 8021B
Ethylbenzene	300	13	EPA 8021B
m,p-Xylenes	1,300	13	EPA 8021B
o-Xylene	560	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	68-145	8015B(M)
Bromofluorobenzene (FID)	98	66-143	8015B(M)
Trifluorotoluene (PID)	109	53-143	EPA 8021B
Bromofluorobenzene (PID)	103	52-142	EPA 8021B

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Page 3 of 6



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/02
Units:	ug/L	Received:	12/17/02

Field ID: MW-10 Diln Fac: 1.000
Type: SAMPLE Batch#: 77835
Lab ID: 162670-007 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B(M)
Benzene	ND	0.50	EPA 8021B
Toluene	0.65	0.50	EPA 8021B
Ethylbenzene	3.0	0.50	EPA 8021B
m,p-Xylenes	6.8	0.50	EPA 8021B
o-Xylene	0.73	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	68-145	8015B(M)
Bromofluorobenzene (FID)	98	66-143	8015B(M)
Trifluorotoluene (PID)	96	53-143	EPA 8021B
Bromofluorobenzene (PID)	98	52-142	EPA 8021B

Field ID: MW-11 Diln Fac: 1.000
Type: SAMPLE Batch#: 77812
Lab ID: 162670-008 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	160	50	8015B(M)
Benzene	42	0.50	EPA 8021B
Toluene	0.89 C	0.50	EPA 8021B
Ethylbenzene	4.8	0.50	EPA 8021B
m,p-Xylenes	10	0.50	EPA 8021B
o-Xylene	1.1	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	68-145	8015B(M)
Bromofluorobenzene (FID)	97	66-143	8015B(M)
Trifluorotoluene (PID)	100	53-143	EPA 8021B
Bromofluorobenzene (PID)	99	52-142	EPA 8021B

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/02
Units:	ug/L	Received:	12/17/02

Field ID: MW-12 Diln Fac: 1.000
Type: SAMPLE Batch#: 77812
Lab ID: 162670-009 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	130	50	8015B(M)
Benzene	ND	0.50	EPA 8021B
Toluene	0.86	0.50	EPA 8021B
Ethylbenzene	4.2	0.50	EPA 8021B
m,p-Xylenes	8.9	0.50	EPA 8021B
o-Xylene	1.0	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	68-145	8015B(M)
Bromofluorobenzene (FID)	97	66-143	8015B(M)
Trifluorotoluene (PID)	113	53-143	EPA 8021B
Bromofluorobenzene (PID)	99	52-142	EPA 8021B

Field ID: MW-13 Diln Fac: 1.000
Type: SAMPLE Batch#: 77812
Lab ID: 162670-010 Analyzed: 12/21/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	4,800	50	8015B(M)
Benzene	90 C	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	85	0.50	EPA 8021B
m,p-Xylenes	18	0.50	EPA 8021B
o-Xylene	6.0	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	113	68-145	8015B(M)
Bromofluorobenzene (FID)	135	66-143	8015B(M)
Trifluorotoluene (PID)	137	53-143	EPA 8021B
Bromofluorobenzene (PID)	116	52-142	EPA 8021B

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

GC07 TVH 'A' Data File RTX 502

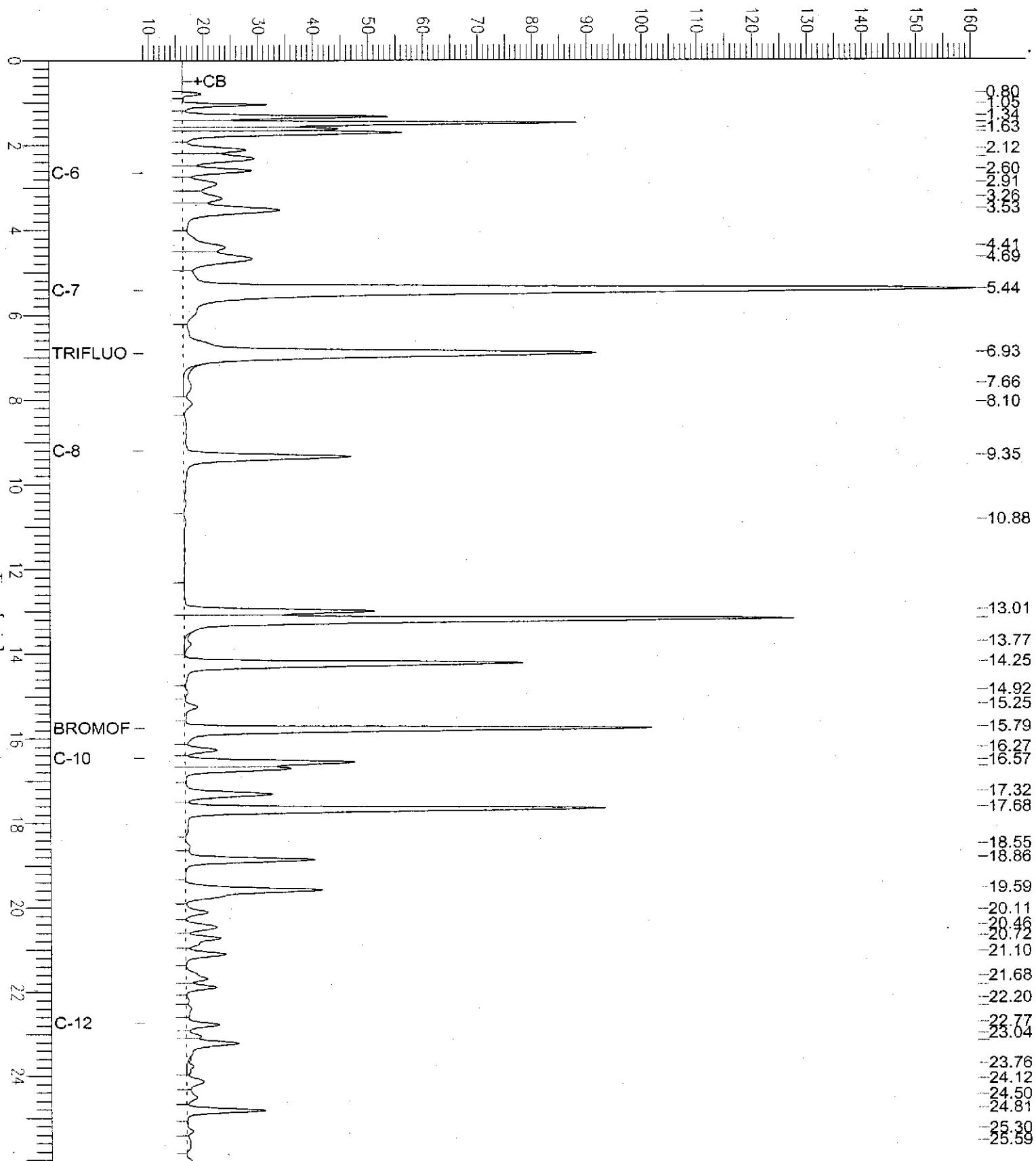
Sample Name : 162670-001,77835
 fileName : G:\GC07\DATA\355A008.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: c1
 Date : 12/21/02 06:44 PM
 Time of Injection: 12/21/02 06:18 PM
 Low Point : 8.93 mV High Point : 160.96 mV
 Plot Scale: 152.0 mV

Page 1 of 1

MW-01

Response [mV]



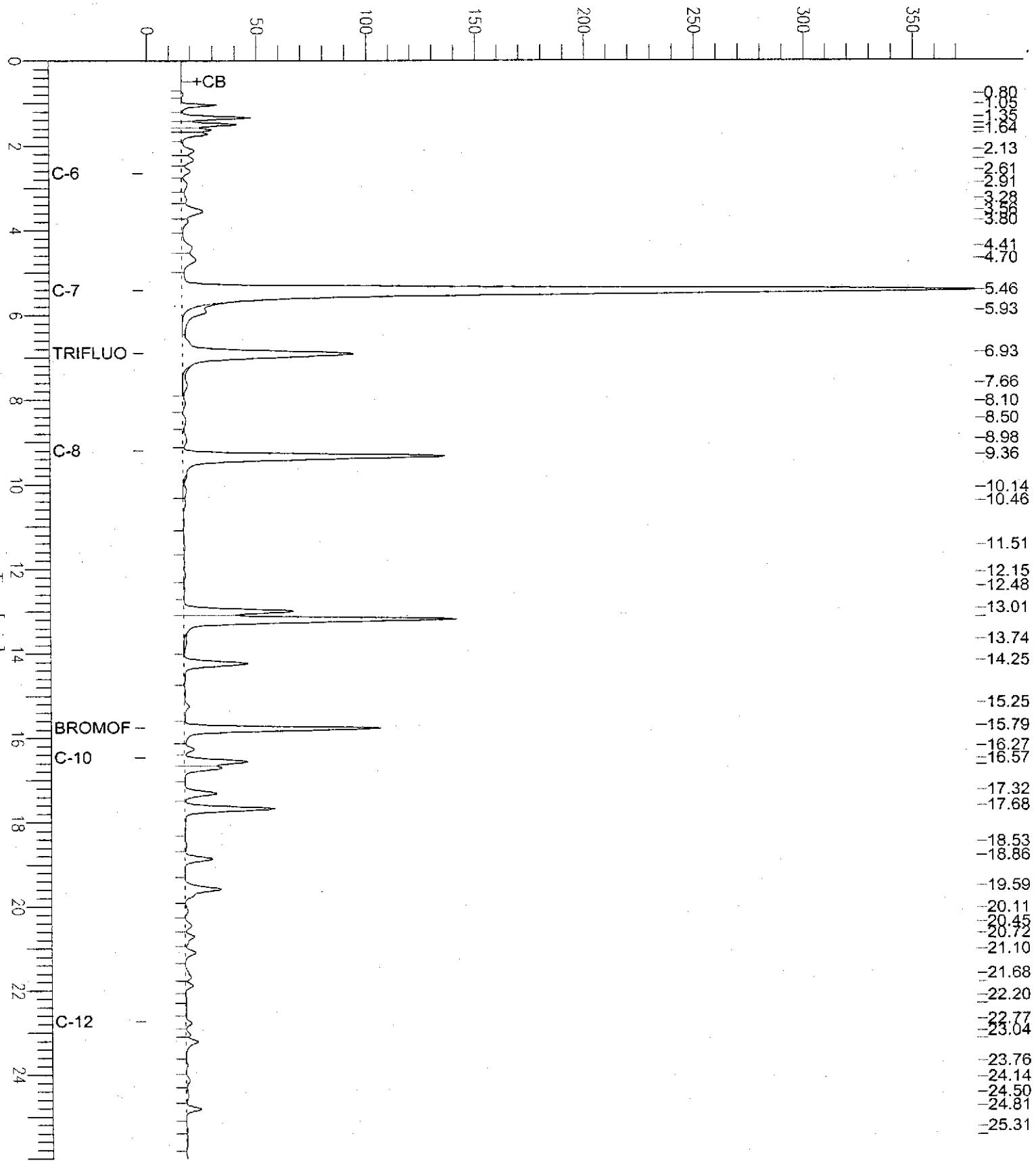
GC07 TVH 'A' Data File RTX 502

Sample Name : 162670-002,77835
 fileName : G:\GC07\DATA\355A006.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: -2 mV

Sample #: c1 Page 1 of 1
 Date : 12/21/02 05:34 PM
 Time of Injection: 12/21/02 05:08 PM
 Low Point : -2.14 mV High Point : 378.07 mV
 Plot Scale: 380.2 mV

MW-02

Response [mV]



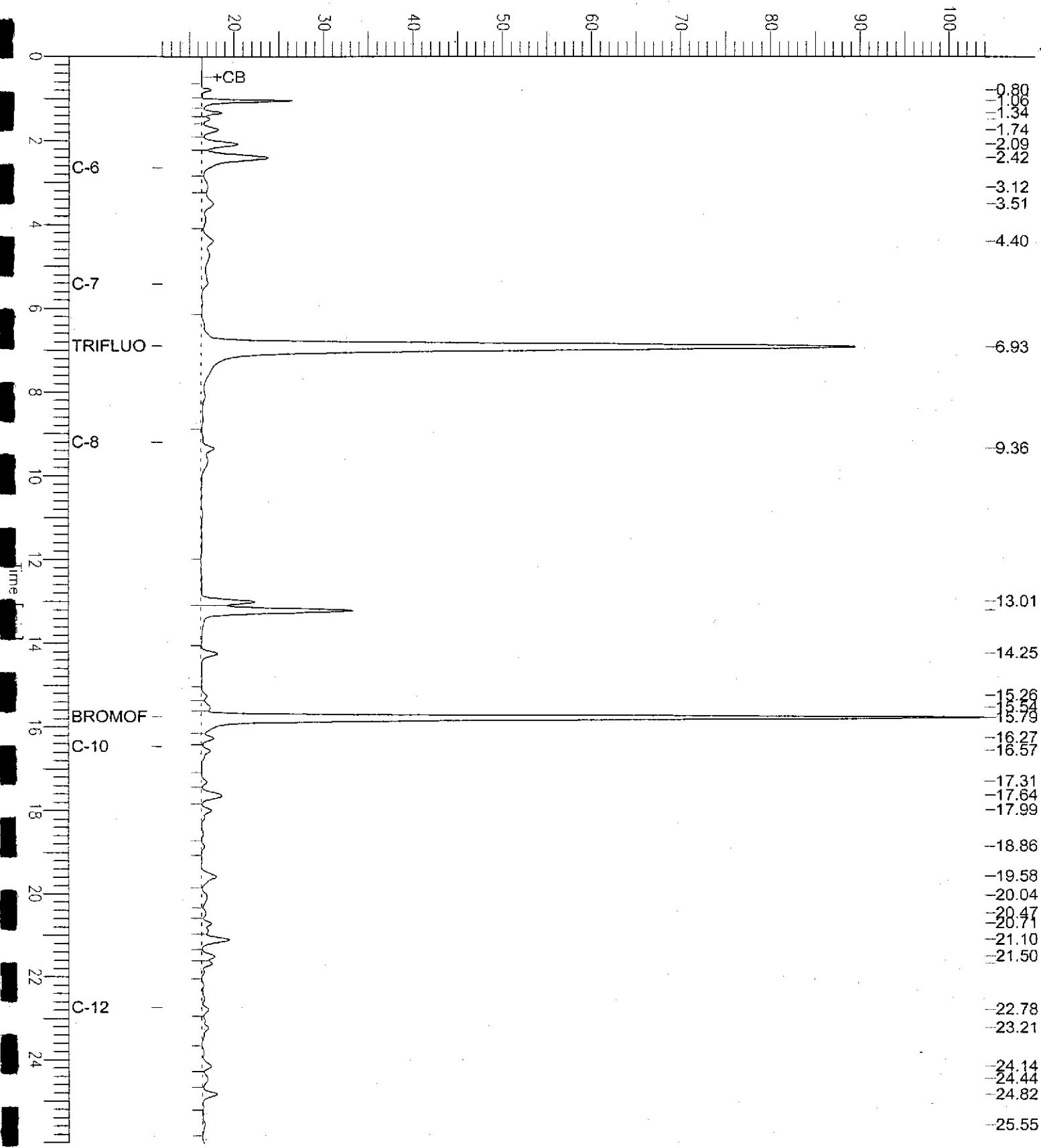
GC07 TVH 'A' Data File RTX 502

Sample Name : 162670-003_77812
 fileName : G:\GC07\DATA\354A018.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 : 12/21/02 01:57 AM
 Time of Injection: 12/21/02 01:31 AM
 Low Point : 11.96 mV High Point : 104.12 mV
 Plot Scale: 92.2 mV

MW - 06

Response [mV]



GC07 TVH 'A' Data File RTX 502

Sample Name : 162670-005,77835
 fileName : G:\GC07\DATA\355A005.raw
 method : TVHBTEXE
 Start Time : 0.00 min
 Scale Factor: 1.0

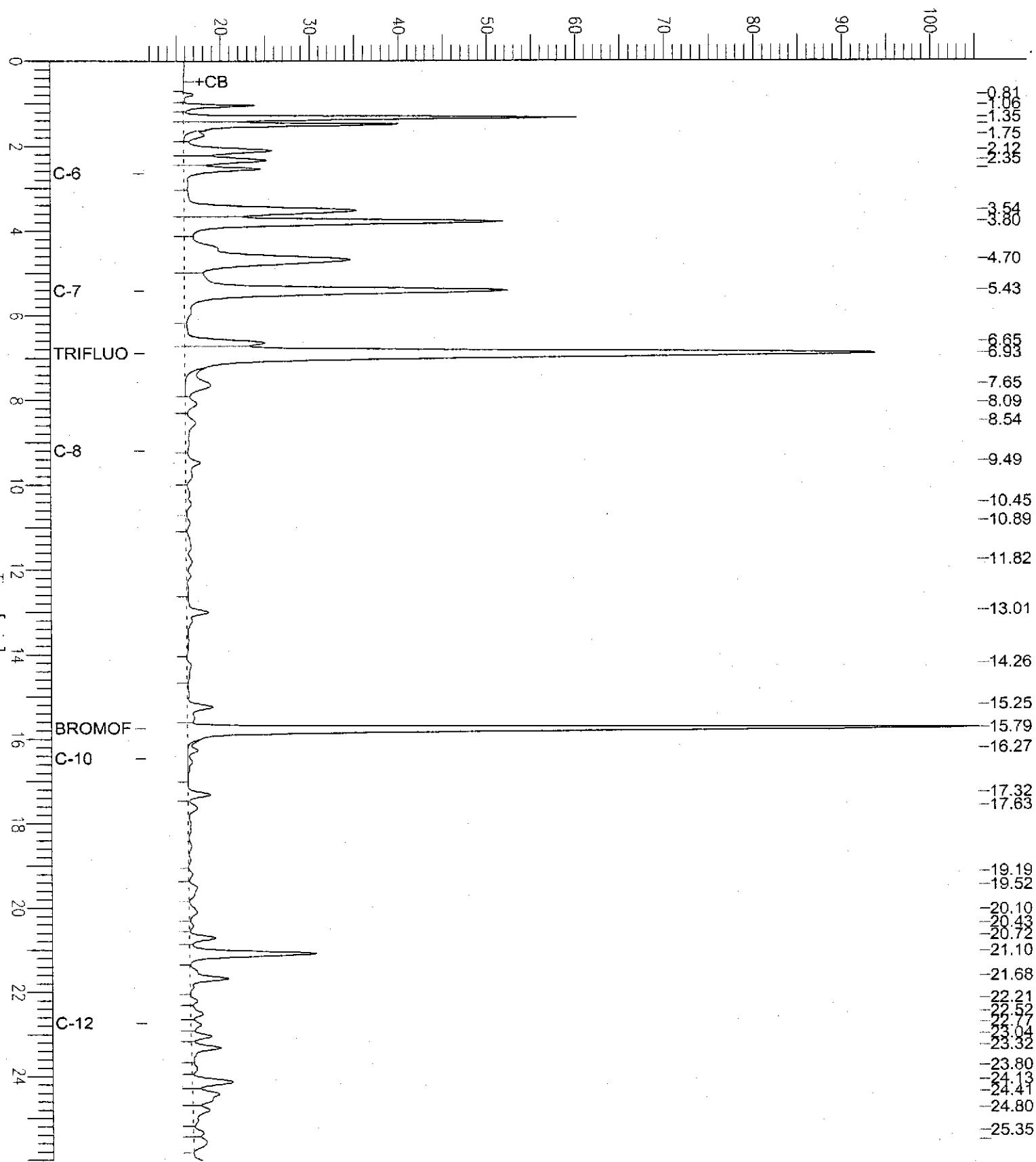
End Time : 26.00 min
 Plot Offset: 11 mV

Sample #: d1
 Date : 12/21/02 05:00 PM
 Time of Injection: 12/21/02 04:34 PM
 Low Point : 11.34 mV
 High Point : 105.29 mV
 Plot Scale: 94.0 mV

Page 1 of 1

MW - 08

Response [mV]



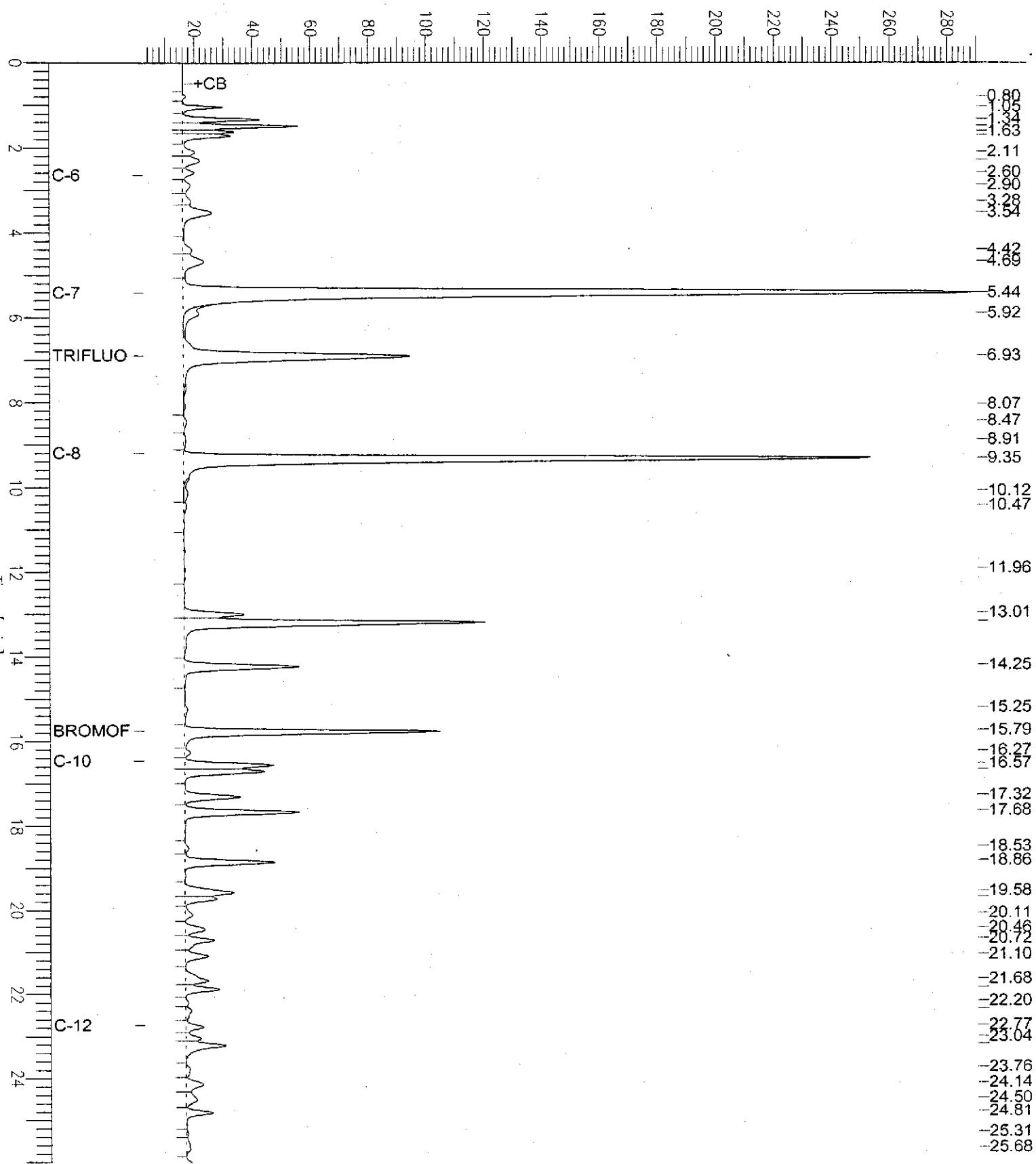
GC07 TVH 'A' Data File RTX 502

Sample Name : 162670-006,77835
 fileName : G:\GC07\DATA\355A007.raw
 method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: 2 mV

Sample #: c1 Page 1 of 1
 Date : 12/21/02 06:10 PM
 Time of Injection: 12/21/02 05:43 PM
 Low Point : 2.37 mV High Point : 290.24 mV
 Plot Scale: 287.9 mV

MW-09

Response [mV]



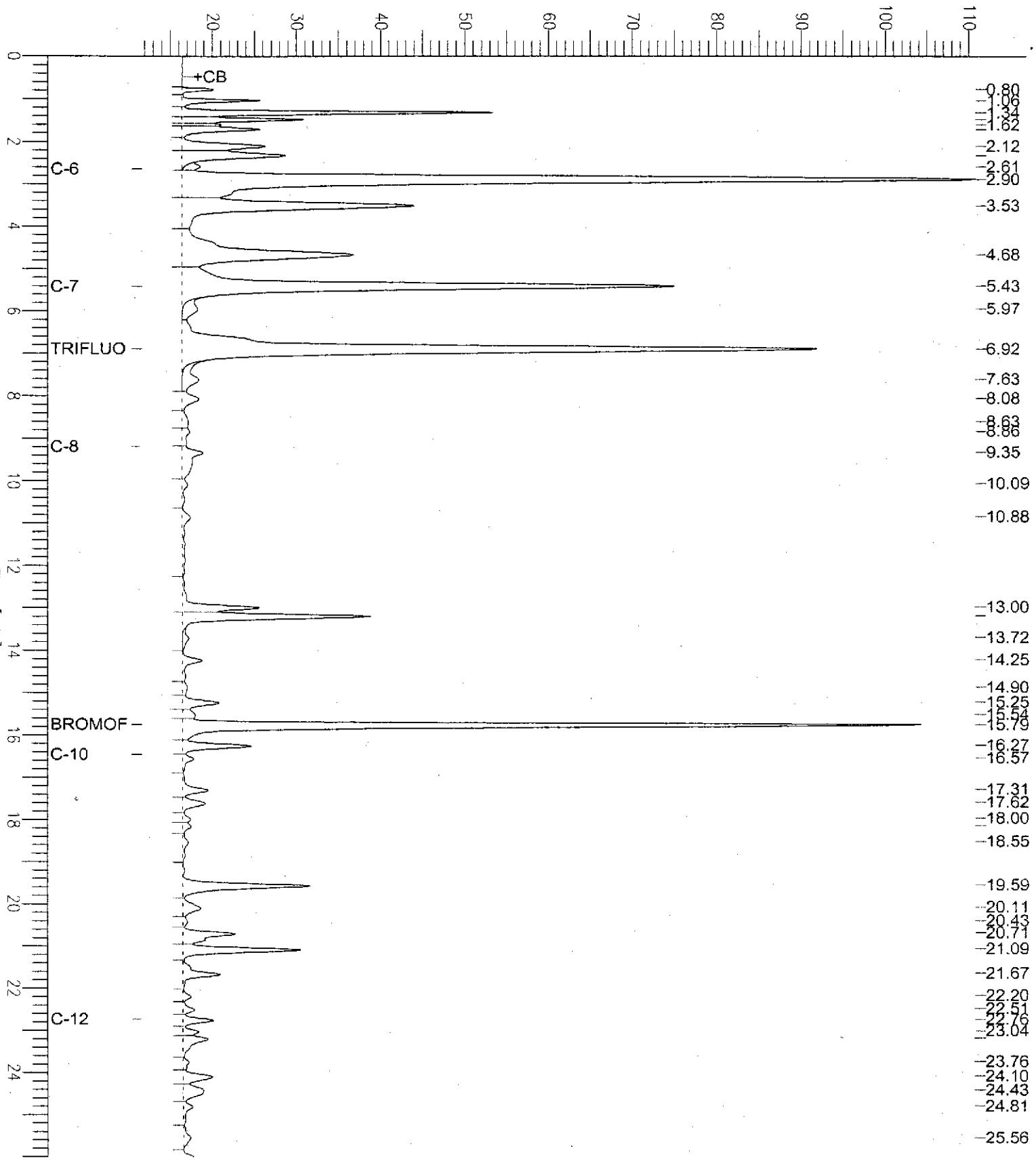
GC07 TVH 'A' Data File RTX 502

Sample Name : 162670-008,77812
 fileName : G:\GC07\DATA\354A020.raw
 method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: 12 mV

Sample #: d1 Page 1 of 1
 Date : 12/21/02 03:07 AM
 Time of Injection: 12/21/02 02:41 AM
 Low Point : 11.68 mV High Point : 110.86 mV
 Plot Scale: 99.2 mV

MW - 11

Response [mV]



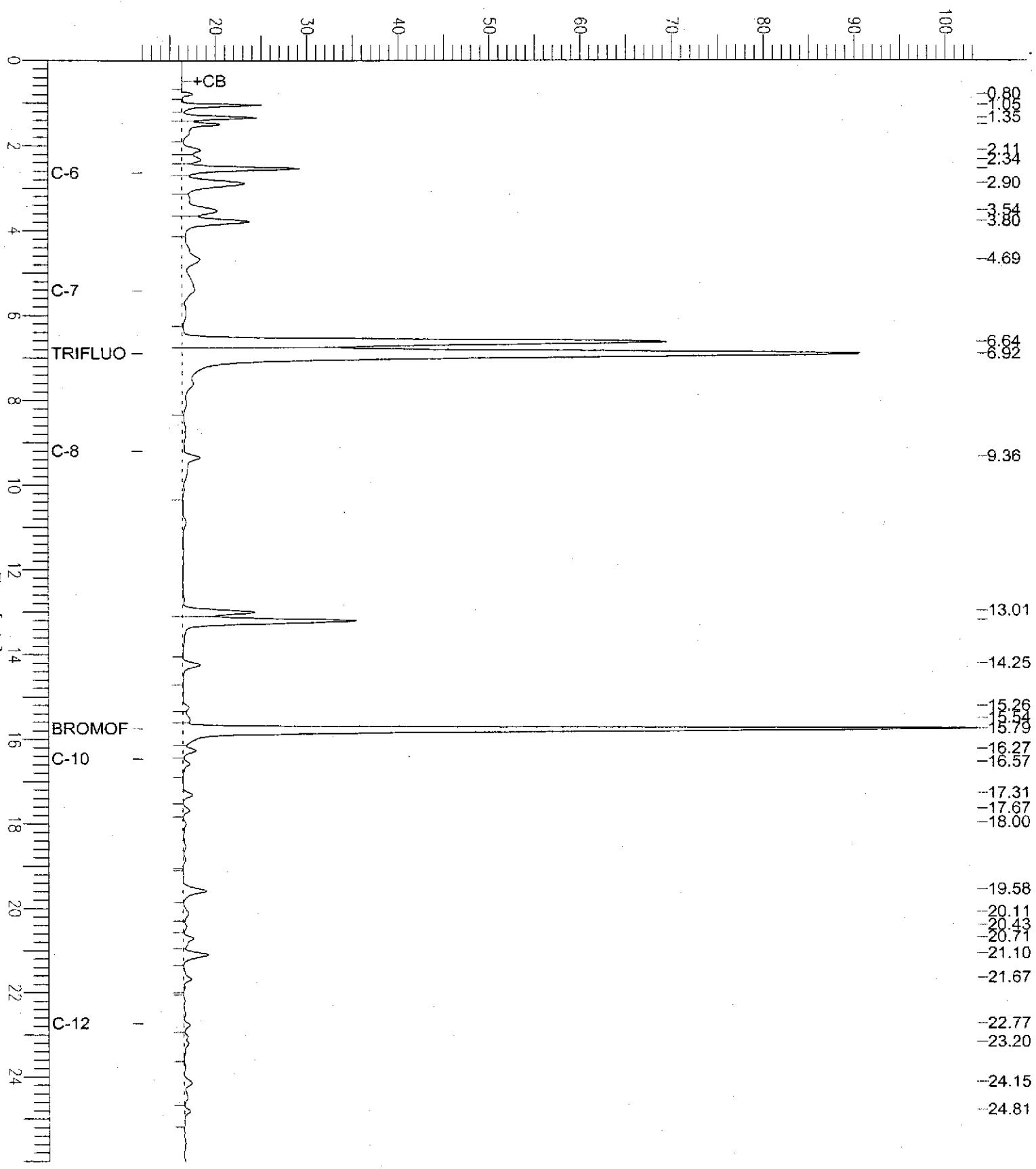
GC07 TVH 'A' Data File RTX 502

Sample Name : 162670-009,77812
 fileName : G:\GC07\DATA\354A021.raw
 Method : TVHBTXE
 Start Time : 0.00 min. End Time : 26.00 min.
 Scale Factor: 1.0 Plot Offset: 12 mV

Sample #: d1 Page 1 of 1
 Date : 12/21/02 03:42 AM
 Time of Injection: 12/21/02 03:16 AM
 Low Point : 11.96 mV High Point : 103.46 mV
 Plot Scale: 91.5 mV

MW -12

Response [mV]



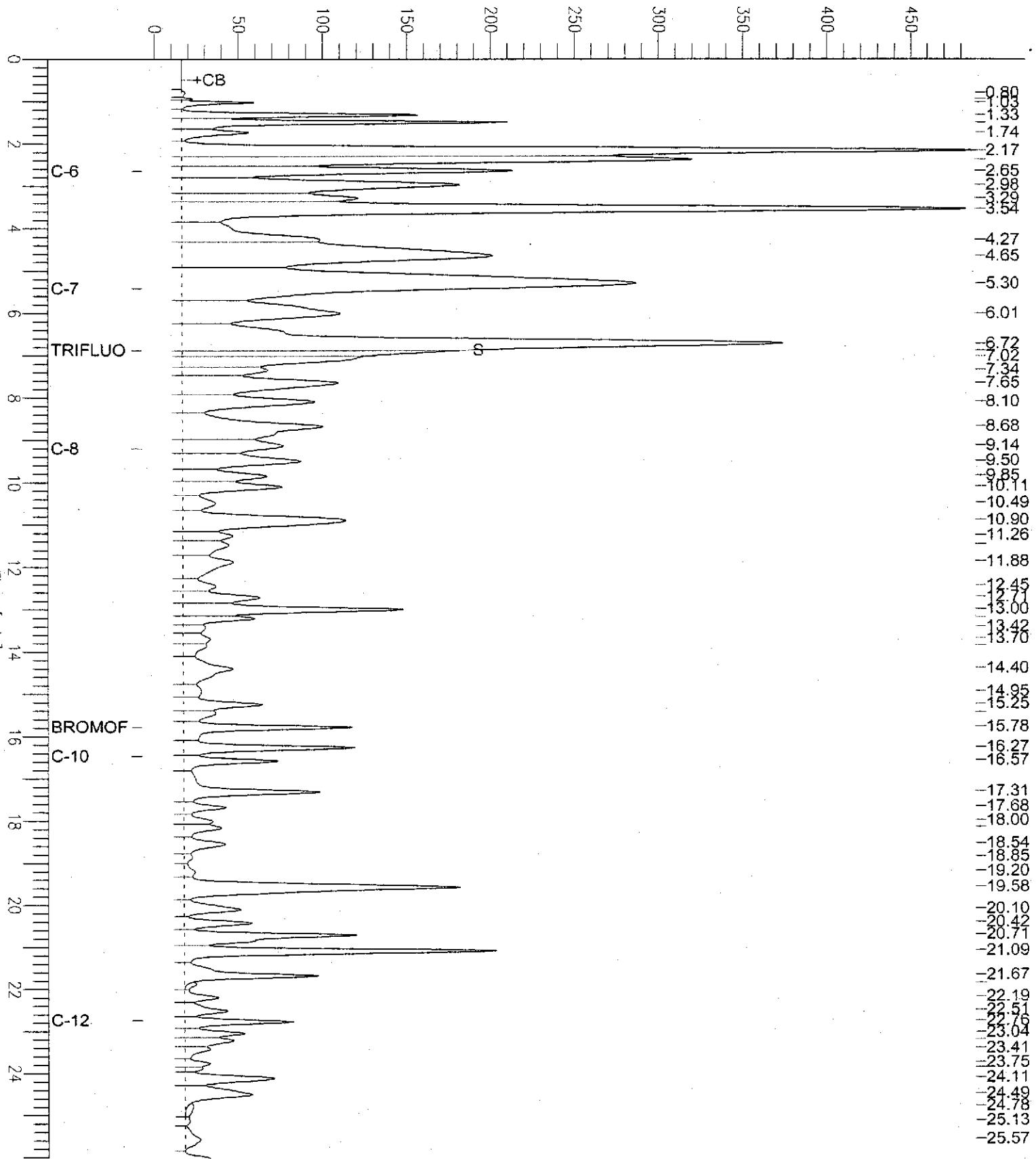
GC07 TVH 'A' Data File RTX 502

Sample Name : 162670-010,77812
 fileName : G:\GC07\DATA\354A022.raw
 method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: -7 mV

Sample #: c1 Page 1 of 1
 Date : 12/21/02 10:50 AM
 Time of Injection: 12/21/02 03:51 AM
 Low Point : -7.33 mV High Point : 488.40 mV
 Plot Scale: 495.7 mV

MW-13

Response [mV]



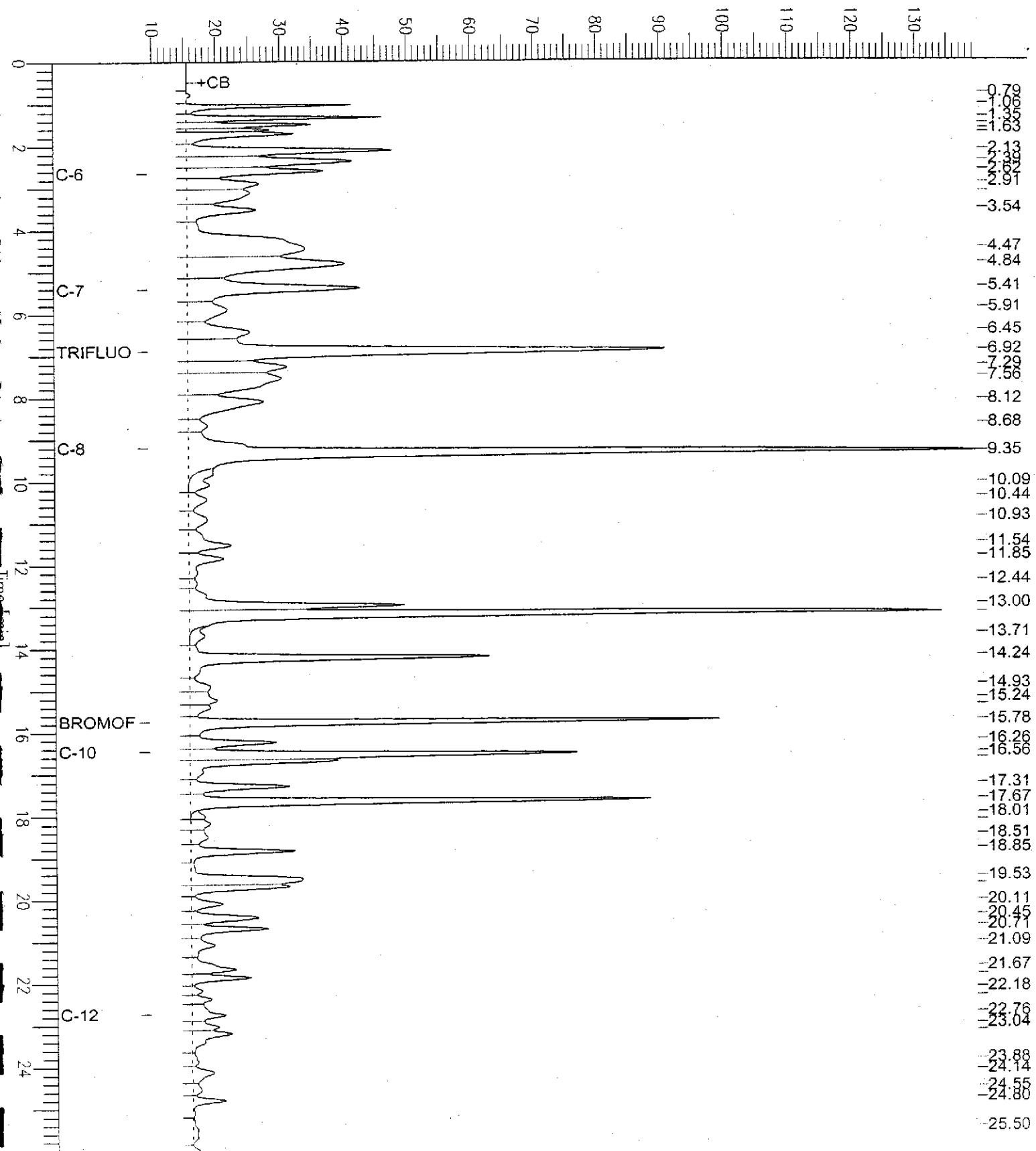
GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc199565,77812,02ws1992,2.5/5000
 File Name : G:\GC07\DATA\354A002.raw
 Method : TVHBTXE
 Start Time : 0.00 min End Time : 26.00 min
 Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: Page 1 of 1
 Date : 12/20/02 04:18 PM
 Time of Injection: 12/20/02 03:52 PM
 Low Point : 9.20 mV High Point : 139.87 mV
 Plot Scale: 130.7 mV

Gasoline

Response [mV]





Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/02
Units:	ug/L	Received:	12/17/02

Type: BLANK Batch#: 77812
Lab ID: QC199564 Analyzed: 12/20/02
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B (M)
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	68-145	8015B (M)
Bromofluorobenzene (FID)	97	66-143	8015B (M)
Trifluorotoluene (PID)	98	53-143	EPA 8021B
Bromofluorobenzene (PID)	97	52-142	EPA 8021B

Type: BLANK Batch#: 77835
Lab ID: QC199644 Analyzed: 12/21/02
Diln Fac: 1.000

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B (M)
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	91	68-145	8015B (M)
Bromofluorobenzene (FID)	94	66-143	8015B (M)
Trifluorotoluene (PID)	95	53-143	EPA 8021B
Bromofluorobenzene (PID)	96	52-142	EPA 8021B

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

Y= Sample exhibits fuel pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC199565	Batch#:	77812
Matrix:	Water	Analyzed:	12/20/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12	1,000	1,017	102	79-120	8015B(M)
Benzene		NA			
Toluene		NA			
Ethylbenzene		NA			
m,p-Xylenes		NA			
o-Xylene		NA			

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	102	68-145	8015B(M)
Bromofluorobenzene (FID)	94	66-143	8015B(M)
Trifluorotoluene (PID)	105	53-143	EPA 8021B
Bromofluorobenzene (PID)	94	52-142	EPA 8021B



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory	02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B	
Project#:	70-97066.00			
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC199566	Batch#:	77812	
Matrix:	Water	Analyzed:	12/20/02	
Units:	ug/L			

Analyte	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12		NA			
Benzene	10.00	9.703	97	65-122	EPA 8021B
Toluene	10.00	9.615	96	67-121	EPA 8021B
Ethylbenzene	10.00	9.153	92	70-121	EPA 8021B
m,p-Xylenes	20.00	17.17	86	72-125	EPA 8021B
o-Xylene	10.00	9.852	99	73-122	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	91	68-145	8015B(M)
Bromofluorobenzene (FID)	98	66-143	8015B(M)
Trifluorotoluene (PID)	96	53-143	EPA 8021B
Bromofluorobenzene (PID)	98	52-142	EPA 8021B

NA= Not Analyzed

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC199645	Batch#:	77835
Matrix:	Water	Analyzed:	12/21/02
Units:	ug/L		

Analyte	Spiked	Result	SREC	Limits
Gasoline C7-C12	1,000	1,046	105	79-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m, p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	SREC	Limits
Trifluorotoluene (FID)		105	68-145
Bromofluorobenzene (FID)		98	66-143
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

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Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC199646	Batch#:	77835
Matrix:	Water	Analyzed:	12/21/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	10.00	9.122	91	65-122
Toluene	10.00	9.543	95	67-121
Ethylbenzene	10.00	9.702	97	70-121
m,p-Xylenes	20.00	17.93	90	72-125
o-Xylene	10.00	10.04	100	73-122

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)	90	53-143	
Bromofluorobenzene (PID)	92	52-142	

NA= Not Analyzed

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Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory	02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B	
Project#:	70-97066.00			
Field ID:	ZZZZZZZZZZ	Batch#:	77812	
MSS Lab ID:	162689-001	Sampled:	12/18/02	
Matrix:	Water	Received:	12/18/02	
Units:	ug/L	Analyzed:	12/20/02	
Diln Fac:	1.000			

Type: MS Lab ID: QC199567

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analysis
Gasoline C7-C12			NA			
Benzene	<0.06500	20.00	19.93	100	52-149	EPA 8021B
Toluene	<0.06000	20.00	20.55	103	69-130	EPA 8021B
Ethylbenzene	<0.03800	20.00	20.02	100	70-131	EPA 8021B
m,p-Xylenes	<0.03400	40.00	37.45	94	68-137	EPA 8021B
o-Xylene	<0.03600	20.00	20.86	104	73-133	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	68-145	8015B(M)
Bromofluorobenzene (FID)	103	66-143	8015B(M)
Trifluorotoluene (PID)	102	53-143	EPA 8021B
Bromofluorobenzene (PID)	103	52-142	EPA 8021B

Type: MSD Lab ID: QC199568

Analyte	Spiked	Result	%REC	Limits	RPD Lim	Analysis
Gasoline C7-C12		NA				
Benzene	20.00	19.22	96	52-149	4	30 EPA 8021B
Toluene	20.00	21.97	110	69-130	7	30 EPA 8021B
Ethylbenzene	20.00	19.32	97	70-131	4	30 EPA 8021B
m,p-Xylenes	40.00	37.15	93	68-137	1	30 EPA 8021B
o-Xylene	20.00	20.53	103	73-133	2	30 EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	68-145	8015B(M)
Bromofluorobenzene (FID)	101	66-143	8015B(M)
Trifluorotoluene (PID)	98	53-143	EPA 8021B
Bromofluorobenzene (PID)	100	52-142	EPA 8021B

NA= Not Analyzed

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZ	Batch#:	77835
MSS Lab ID:	162672-003	Sampled:	12/16/02
Matrix:	Water	Received:	12/16/02
Units:	ug/L	Analyzed:	12/22/02
Diln Fac:	1.000		

Type: MS Lab ID: QC199670

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<18.00	2,000	2,105	105	67-120
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	108	68-145	
Bromofluorobenzene (FID)	101	66-143	
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC199671

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,950	98	67-120	8	20
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	111	68-145	
Bromofluorobenzene (FID)	105	66-143	
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-01	Batch#:	77737
Lab ID:	162670-001	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/19/02
Diln Fac:	8.333		

Analyte	Result	RL
Chloromethane	ND	8.3
Vinyl Chloride	ND	4.2
Bromomethane	ND	8.3
Chloroethane	ND	8.3
Trichlorofluoromethane	ND	8.3
Freon 113	ND	8.3
1,1-Dichloroethene	ND	4.2
Methylene Chloride	ND	170
trans-1,2-Dichloroethene	ND	4.2
1,1-Dichloroethane	ND	4.2
cis-1,2-Dichloroethene	ND	4.2
Chloroform	ND	8.3
1,1,1-Trichloroethane	ND	4.2
Carbon Tetrachloride	ND	4.2
1,2-Dichloroethane	ND	4.2
Trichloroethene	ND	4.2
1,2-Dichloropropane	ND	4.2
Bromodichloromethane	ND	4.2
cis-1,3-Dichloropropene	ND	4.2
trans-1,3-Dichloropropene	ND	4.2
1,1,2-Trichloroethane	ND	4.2
Tetrachloroethene	ND	4.2
Dibromochloromethane	ND	4.2
Chlorobenzene	ND	4.2
Bromoform	ND	4.2
1,1,2,2-Tetrachloroethane	ND	4.2
1,3-Dichlorobenzene	ND	4.2
1,4-Dichlorobenzene	ND	4.2
1,2-Dichlorobenzene	ND	4.2

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	87	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-02	Batch#:	77737
Lab ID:	162670-002	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/19/02
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	6.9	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	69	2.5
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	2.7	2.5
Trichloroethene	4.5	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	88	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	93	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-06	Batch#:	77693
Lab ID:	162670-003	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/18/02
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	1.0
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	1.0	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	0.7	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	96	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	93	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-07	Batch#:	77693
Lab ID:	162670-004	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/18/02
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	1.0
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	0.5	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	95	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	94	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-08	Batch#:	77786
Lab ID:	162670-005	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/20/02
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	4.7	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	36	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	330	1.0
Chloroform	ND	2.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	2.2	1.0
Trichloroethene	17	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	% REC	Limits
1,2-Dichloroethane-d4	96	77-130
Toluene-d8	96	80-120
Bromofluorobenzene	93	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-09	Batch#:	77737
Lab ID:	162670-006	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/20/02
Diln Fac:	10.00		

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	5.0
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	10
Freon 113	ND	10
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	200
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	10
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	8.9	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	REC	Limits
1,2-Dichloroethane-d4	88	77-130
Toluene-d8	98	80-120
Bromofluorobenzene	92	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-10	Batch#:	77737
Lab ID:	162670-007	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/19/02
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	1.0
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	0.8	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	96	77-130
Toluene-d8	96	80-120
Bromofluorobenzene	93	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	77737
Lab ID:	162670-008	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/19/02
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	1.0
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	1.1	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	3.6	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	91	77-130
Toluene-d8	95	80-120
Bromofluorobenzene	92	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-12	Units:	ug/L
Lab ID:	162670-009	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Chloromethane	ND	1.0	1.000	77737	12/19/02
Vinyl Chloride	0.9	0.5	1.000	77737	12/19/02
Bromomethane	ND	1.0	1.000	77737	12/19/02
Chloroethane	ND	1.0	1.000	77737	12/19/02
Trichlorofluoromethane	ND	1.0	1.000	77737	12/19/02
Freon 113	ND	1.0	1.000	77737	12/19/02
1,1-Dichloroethene	ND	0.5	1.000	77737	12/19/02
Methylene Chloride	ND	20	1.000	77737	12/19/02
trans-1,2-Dichloroethene	60	0.5	1.000	77737	12/19/02
1,1-Dichloroethane	ND	0.5	1.000	77737	12/19/02
cis-1,2-Dichloroethene	57	0.5	1.000	77737	12/19/02
Chloroform	ND	1.0	1.000	77737	12/19/02
1,1,1-Trichloroethane	ND	0.5	1.000	77737	12/19/02
Carbon Tetrachloride	ND	0.5	1.000	77737	12/19/02
1,2-Dichloroethane	ND	0.5	1.000	77737	12/19/02
Trichloroethene	200	1.0	2.000	77786	12/20/02
1,2-Dichloropropane	ND	0.5	1.000	77737	12/19/02
Bromodichloromethane	ND	0.5	1.000	77737	12/19/02
cis-1,3-Dichloropropene	ND	0.5	1.000	77737	12/19/02
trans-1,3-Dichloropropene	ND	0.5	1.000	77737	12/19/02
1,1,2-Trichloroethane	ND	0.5	1.000	77737	12/19/02
Tetrachloroethene	ND	0.5	1.000	77737	12/19/02
Dibromochloromethane	ND	0.5	1.000	77737	12/19/02
Chlorobenzene	ND	0.5	1.000	77737	12/19/02
Bromoform	ND	0.5	1.000	77737	12/19/02
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	77737	12/19/02
1,3-Dichlorobenzene	ND	0.5	1.000	77737	12/19/02
1,4-Dichlorobenzene	ND	0.5	1.000	77737	12/19/02
1,2-Dichlorobenzene	ND	0.5	1.000	77737	12/19/02

Surrogate	REC	Limits	Diln Fac	Batch#	Analyzed
1,2-Dichloroethane-d4	96	77-130	1.000	77737	12/19/02
Toluene-d8	100	80-120	1.000	77737	12/19/02
Bromofluorobenzene	95	80-120	1.000	77737	12/19/02

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-13	Batch#:	77737
Lab ID:	162670-010	Sampled:	12/16/02
Matrix:	Water	Received:	12/17/02
Units:	ug/L	Analyzed:	12/19/02
Diln Fac:	2.500		

Analyte	Result	RL
Chloromethane	ND	2.5
Vinyl Chloride	1.8	1.3
Bromomethane	ND	2.5
Chloroethane	ND	2.5
Trichlorofluoromethane	ND	2.5
Freon 113	ND	2.5
1,1-Dichloroethene	3.2	1.3
Methylene Chloride	ND	50
trans-1,2-Dichloroethene	9.4	1.3
1,1-Dichloroethane	ND	1.3
cis-1,2-Dichloroethene	250	1.3
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	1.3
Carbon Tetrachloride	ND	1.3
1,2-Dichloroethane	ND	1.3
Trichloroethene	76	1.3
1,2-Dichloropropane	ND	1.3
Bromodichloromethane	ND	1.3
cis-1,3-Dichloropropene	ND	1.3
trans-1,3-Dichloropropene	ND	1.3
1,1,2-Trichloroethane	ND	1.3
Tetrachloroethene	ND	1.3
Dibromochloromethane	ND	1.3
Chlorobenzene	ND	1.3
Bromoform	ND	1.3
1,1,2,2-Tetrachloroethane	ND	1.3
1,3-Dichlorobenzene	ND	1.3
1,4-Dichlorobenzene	ND	1.3
1,2-Dichlorobenzene	ND	1.3

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	88	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	92	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC199110	Batch#:	77693
Matrix:	Water	Analyzed:	12/18/02
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	1.0
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	92	77-130
Toluene-d8	91	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC199302	Batch#:	77737
Matrix:	Water	Analyzed:	12/19/02
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	1.0
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	97	77-130
Toluene-d8	95	80-120
Bromofluorobenzene	92	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC199474	Batch#:	77786
Matrix:	Water	Analyzed:	12/20/02
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	1.0
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	97	77-130
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-120

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	77693
Units:	ug/L	Analyzed:	12/18/02
Diln Fac:	1.000		

Type: BS Lab ID: QC199107

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	60.43	121	71-131
Trichloroethene	50.00	48.05	96	78-120
Chlorobenzene	50.00	52.76	106	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	90	80-120

Type: BSD Lab ID: QC199108

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	56.39	113	71-131	7	20
Trichloroethene	50.00	47.11	94	78-120	2	20
Chlorobenzene	50.00	51.19	102	80-120	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	77737
Units:	ug/L	Analyzed:	12/19/02
Diln Fac:	1.000		

Type: BS Lab ID: QC199299

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	54.67	109	71-131
Trichloroethene	50.00	45.98	92	78-120
Chlorobenzene	50.00	50.42	101	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	89	77-130
Toluene-d8	98	80-120
Bromofluorobenzene	90	80-120

Type: BSD Lab ID: QC199300

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	55.38	111	71-131	1	20
Trichloroethene	50.00	46.62	93	78-120	1	20
Chlorobenzene	50.00	49.11	98	80-120	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	91	80-120



Curtis & Tompkins, Ltd.

Purgeable Halocarbons by GC/MS

Lab #:	162670	Location:	Sausage Factory 02Q4
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	77786
Units:	ug/L	Analyzed:	12/20/02
Diln Fac:	1.000		

Type: BS Lab ID: QC199472

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	55.88	112	71-131
Trichloroethene	50.00	48.76	98	78-120
Chlorobenzene	50.00	51.42	103	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	89	80-120

Type: BSD Lab ID: QC199473

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	55.57	111	71-131	1	20
Trichloroethene	50.00	47.51	95	78-120	3	20
Chlorobenzene	50.00	50.94	102	80-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	93	77-130
Toluene-d8	97	80-120
Bromofluorobenzene	87	80-120

RPD= Relative Percent Difference

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CHAIN OF CUSTODY

Page 1 of 1Lab: Curtis&TompkinsTAT: Standard

Report results to:

Name Warren Chamberlain
 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
 E-mail: wchamberlain@claytongrp.com

Special instructions and/or specific regulatory requirements:

Project Information

Project No. 70-97066.00
 Name Sausage Factory
 Location 630 29th Avenue, Oakland
 Global Id T0600102114
 Log code CGSP

Sample Identification	Sample Date	Sampling Time	Matrix / Medium	Number of Cans	Analyses Requested												Preservative
					TPH as Gasoline/BTEX	8021B											
MW-01 02Q4	16-Dec-02	13:25	L	6	X	X											HCI
MW-02 02Q4	16-Dec-02	15:30	L	6	X	X											HCI
MW-06 02Q4	16-Dec-02	19:20	L	6	X	X											HCI
MW-07 02Q4	16-Dec-02	13:00	L	6	X	X											HCI
MW-08 02Q4	16-Dec-02	15:00	L	6	Y	Y											HCI
MW-09 02Q4	16-Dec-02	16:15	L	6	X	X											HCI
MW-10 02Q4	16-Dec-02	13:40	L	6	X	X											HCI
MW-11 02Q4	16-Dec-02	12:35	L	6	X	Y											HCI
MW-12 02Q4	16-Dec-02	12:07	L	6	X	X											HCI
MW-13 02Q4	16-Dec-02	11:35	L	6	X	X											HCI

Collected by: Mike Kizminski Date/Time 12/17/02 11:15
 Relinquished by: Date/Time
 Relinquished by: Date/Time
 Method of Shipment:

Collector's Signature: Date/Time 12/17/02 11:15
 Received by: Date/Time 12-17-02 11:15
 Received by: Date/Time
 Sample Condition on Rcpt: