

6920 Koll Center Parkway  
Suite 216  
Pleasanton, CA 94566  
925.426.2600  
Fax 925.426.0106



November 8, 2001

NOV 14 2001

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

# 6070 / 334

Clayton Project No.70-97066.00.000

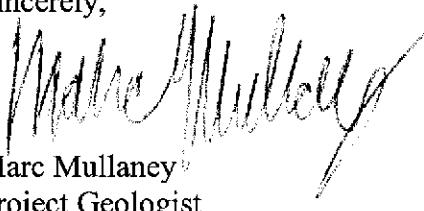
Subject: Third Quarter 2001 Groundwater Monitoring Results for the property at  
630 29<sup>th</sup> Avenue in Oakland, California

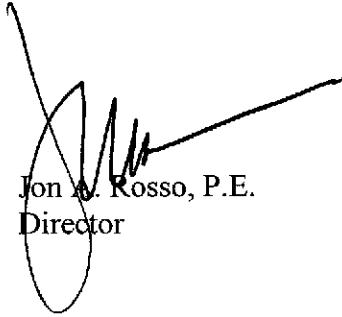
Dear Mr. Chan:

Clayton is pleased to present the results for the Third Quarter 2001 groundwater monitoring event performed at 630 29<sup>th</sup> 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/mrm

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

**Third Quarter 2001  
Groundwater Monitoring Results  
for the  
Former Lemoine Sausage Facility  
630 29<sup>th</sup> Avenue  
Oakland, California**

**Clayton Project No. 70-97066.00**

**November 8, 2001**

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## **1. INTRODUCTION**

Clayton Group Services, Inc., (Clayton) has prepared this quarterly groundwater monitoring report to document the results of the Third Quarter, 2001 groundwater monitoring event for the former Lemoine Sausage Facility located at 630 29<sup>th</sup> 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 Third 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 7<sup>th</sup> 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 September 25 and 26, 2001. Groundwater samples were collected from eight monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8).

#### **3.1. GROUNDWATER LEVEL MEASUREMENTS**

Depth to water was measured in each monitoring well to determine the groundwater elevation, and the site's groundwater gradient and flow direction. The depth to water in each monitoring well was measured on September 25, 2001, with an electronic water level probe. The depth to water in each monitoring well was measured from the surveyed reference elevation represented as a V-notch at the top of the well casing (TOC) to the water surface within the well casing. By subtracting the measured depth to water from the TOC elevation in each monitoring well, the groundwater elevation at each monitoring point was calculated.

#### **3.2. GROUNDWATER PURGING**

Five monitoring wells (MW-1 through MW-5) are constructed with  $\frac{3}{4}$ -inch diameter PVC well casings and three monitoring wells (MW-6 through MW-8) are constructed with 2-inch diameter PVC well casings. Prior to collecting a groundwater sample from each monitoring well, approximately four well casing volumes of water were removed or the well casing was purged dry. The  $\frac{3}{4}$ -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 Third 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 Third Quarter 2001 groundwater sampling event are presented in Appendix B.

## **4. FINDINGS**

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

### **4.1. GROUNDWATER FLOW CONDITIONS**

A site piezometric surface (water table) map was produced by using the surveyed monitoring well coordinates and contouring the corresponding groundwater elevation data. The magnitude of the local groundwater gradient was determined using groundwater elevations from monitoring wells MW-1 and MW-7. The direction of groundwater flow is inferred to be perpendicular to the piezometric equipotential contours. ~~For the Third Quarter 2001 monitoring event, the groundwater gradient was determined to be 0.013 feet per foot (ft/ft) towards the west.~~

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The Third 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 760 micrograms per liter ( $\mu\text{g}/\text{L}$ ) to 59,000  $\mu\text{g}/\text{L}$ .
- Benzene was detected in 6 of 8 samples tested, and ranged in concentration from 1.6  $\mu\text{g}/\text{L}$  to 12,000  $\mu\text{g}/\text{L}$ .
- Toluene was detected in 5 of 8 samples tested, and ranged in concentration from 4.3  $\mu\text{g}/\text{L}$  to 13,000  $\mu\text{g}/\text{L}$ .
- Ethylbenzene was detected in 4 of 8 samples tested, and ranged in concentration from 1.6  $\mu\text{g}/\text{L}$  to 780  $\mu\text{g}/\text{L}$ .
- Total Xylenes was detected in 7 of 8 samples tested, and ranged in concentration from 2.7  $\mu\text{g}/\text{L}$  to 3,680  $\mu\text{g}/\text{L}$ .

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 Third 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 5 of 8 samples tested, and ranged in concentration from 1.9  $\mu\text{g}/\text{L}$  to 990  $\mu\text{g}/\text{L}$ .
- Trichloroethene (TCE) was detected in 1 of 8 samples tested, at 36  $\mu\text{g}/\text{L}$ .
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 2 of 8 samples tested, and ranged in concentration from 8.1  $\mu\text{g}/\text{L}$  to 820  $\mu\text{g}/\text{L}$ .
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 1 of 8 samples tested, at 59  $\mu\text{g}/\text{L}$ .
- Vinyl Chloride (VC) was detected in 1 of 8 samples tested, at 53  $\mu\text{g}/\text{L}$ .

#### **5. CONCLUSION**

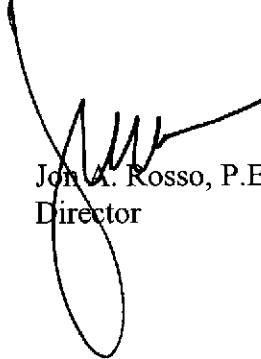
The groundwater gradient determined for the Third Quarter 2001 monitoring event was found to be 0.013 ft/ft to the west, and is consistent with past determinations. The highest concentrations of TPH-g and benzene occur in the beneath the central portion of the subject building in the area of monitoring wells MW-2 and MW-3. The locations of monitoring wells MW-6 and MW-7 define the eastern and northern edge of the hydrocarbon plume. The distribution of the former gasoline fuel additive 1,2-DCA appears to be associated with the petroleum hydrocarbon release.

Non gasoline related chlorinated volatile organic compounds TCE, cis-1,2-DCE, trans-1,2-DCE and VC were detected in groundwater samples collected from monitoring wells MW-4 and 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	9/25/2001	16.69	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	9/25/2001	20.79	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	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
MW-4	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	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

**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)
<b>MW-6</b>	9/25/2001	16.60	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
<b>MW-7</b>	9/25/2001	15.47	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
<b>MW-8</b>	9/25/2001	17.58	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
	6/15/2000		7.14	10.44

Notes:

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

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

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
<b>MW-1</b>	9/26/2001	16,000	NA	1100	< 10	130	320	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
	6/21/2001	12,000	NA	2,000	180	880	1,180	3.0	<0.5	<0.5	<0.5	<0.5
	3/21/2000	21,000	NA	3,200	290	1,700	2,600	<2.5	<2.5	<2.5	<2.5	<2.5
	12/19/2000	25,000	NA	3,200	480	1,900	3,300	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/2000	25,000	<500	3,100	470	1,800	3,600	NA	NA	NA	NA	NA
	6/15/2000	29,000	NA	3,900	1,900	<100	4,200	<5.0	<5.0	<5.0	<5.0	<5.0
	2/8/1999	48,000	NA	3,900	970	6,300	4,300	<30	NA	NA	NA	NA
<b>MW-2</b>	9/26/2001	26,000	NA	12,000	590	3,900	1,960	11	< 10	< 10	< 10	< 10
	6/21/2001	30,000	NA	8,600	440	2,600	1,230	5.6	<0.5	<0.5	<0.5	<0.5
	3/23/2001	34,000	NA	10,000	410	3,200	1,220	14	<13	<13	<13	<13
	12/19/2000	43,000	NA	9,800	810	4,000	2,430	21	<13	<13	<13	<13
	9/22/2000	24,000	<500	10,000	370	2,700	1,200	NA	NA	NA	NA	NA
	6/29/2000	31,000	NA	11,000	4,400	930	250	25	<5.0	<5.0	<5.0	<5.0
	2/8/1999	41,000	NA	11,000	650	4,900	1,720	60	NA	NA	NA	NA
<b>MW-3</b>	9/26/2001	59,000	NA	12,000	780	13,000	3,680	990	< 8.3	< 8.3	< 8.3	< 8.3
	6/21/2001	34,000	NA	5,900	340	6,200	1,550	120	2.4	0.8	<0.5	<0.5
	3/22/2001	1,300	NA	98	51	67	104	2.3	<0.5	<0.5	<0.5	<0.5
	12/19/2000	50,000	NA	1,200	510	1,600	1,810	350	<8.3	<8.3	<8.3	<8.3
	9/22/2000	83,000	<1,000	16,000	1,300	20,000	7,000	NA	NA	NA	NA	NA
	6/29/2000	39,000	NA	7,800	8,000	630	3,400	600	<5.0	<5.0	<5.0	<5.0
	2/8/1999	35,000	NA	1,200	1,400	3,400	4,900	<30	NA	NA	NA	NA
<b>MW-4</b>	9/26/2001	17,000	NA	7,900	440	< 50	581	1.9	< 0.5	8.1	< 0.5	< 0.5
	6/21/2001	11,000	NA	2,300	570	26	641	1.4	<0.5	3.3	<0.5	<0.5
	3/22/2001	5,600	NA	1,100	310	13	303	<0.5	<0.5	1.6	<0.5	<0.5
	12/19/2000	2,200	NA	200	100	2.9	81.4	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/2000	12,000	<500	2,800	1,100	82	1,300	NA	NA	NA	NA	NA
	6/15/2000	2,300	NA	230	10	<5	94	0.88	<0.5	2.1	<0.5	<0.5
	2/8/1999	15,000	NA	670	780	90	940	<30	NA	NA	NA	NA

Table 2

**Summary of Monitoring Well Groundwater Analytical Data  
Former Lemoine Sausage Facility**

**630 29th Avenue  
Oakland, California**

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
<b>MW-5</b>	9/26/2001	5,100	NA	2,400	< 10	1,200	460	22	< 3.6	< 3.6	< 3.6	< 3.6
	6/21/2001	18,000	NA	3,400	350	2,300	1,020	21	<0.5* <sup>3</sup>	<0.5	<0.5	<0.5
	3/22/2001	6,200	NA	1,500	310	360	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	420	3,100	1,600	NA	NA	NA	NA	NA
	6/29/2000	3,900	NA	1,500	330	28	260	36	<0.5	<0.5	<0.5	<0.5
	2/8/1999	4,900	NA	780	230	440	370	<0.5	<0.5	<0.5	<0.5	<0.5
<b>MW-6</b>	9/25/2001	760	NA	< 0.50	< 0.50	< 0.50	2.9	<0.5* <sup>4</sup>	< 0.5	< 0.5	< 0.5	< 0.5
	6/21/2001	420	NA	<0.5	0.59	<0.5	1.00	0.9	<0.5	<0.5	<0.5	<0.5
	3/21/2001	820	NA	<0.5	1.4	<0.5	0.52	<0.5* <sup>2</sup>	<0.5	<0.5	<0.5	<0.5
	12/19/2000	320	NA	<0.5	<0.5	<0.5	<0.5	<0.5* <sup>1</sup>	<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
	6/15/2000	1,100	NA	3.8	2.1	2.2	4.8	0.78	<0.5	<0.5	<0.5	<0.5
<b>MW-7</b>	9/25/2001	< 50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 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	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
<b>MW-8</b>	9/25/2001	1,500	NA	170	1.6	4.3	2.7	5.0	36	820	59	53
	6/21/2001	2,400	NA	490	29	<2.5	<2.5	4.9	28	910	48	75
	3/21/2001	3,500	NA	530	21	<2.5	<2.5	<3.6	32	760	39	58
	12/19/2000	2,700	NA	410	4.8	<2.5	<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
	6/15/2000	5,400	NA	150	8.9	<5	8.7	<13	210	1,100	73	25

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.

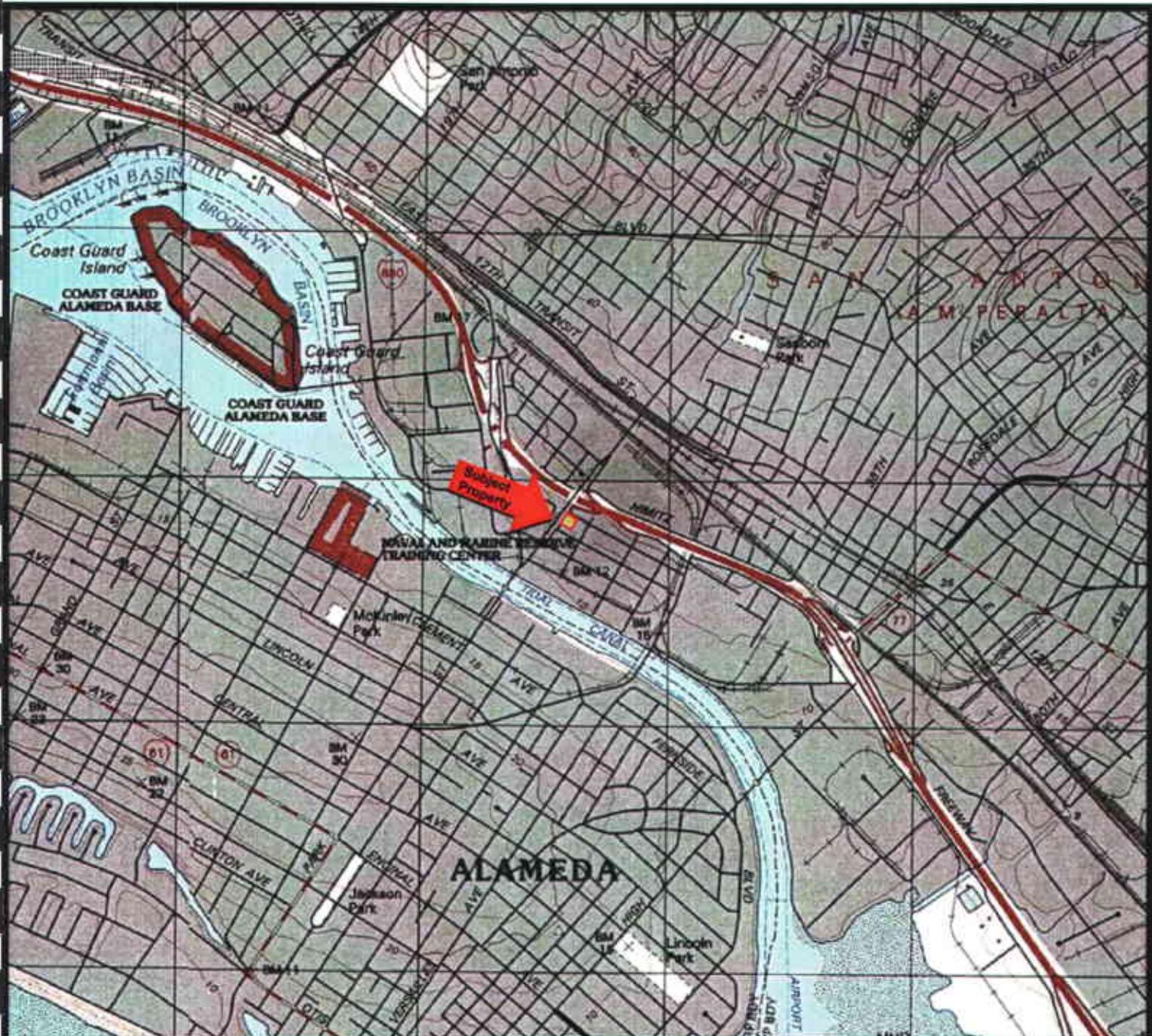
5. MTBE = methyl tert-butyl ether.
6. TCE = Trichlororethene.
7. DCE = Dichlororethene.
8. VC= Vinyl Chloride.

\*<sup>1</sup> 1,1-DCA detected at 1.1  $\mu\text{g/L}$ .

\*<sup>2</sup> 1,1-DCA detected at 0.9  $\mu\text{g/L}$ .

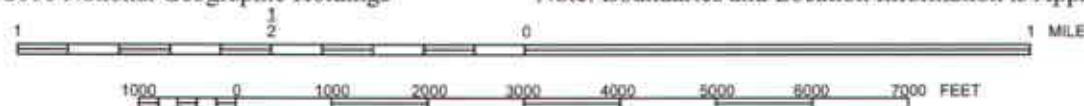
\*<sup>3</sup> Freon -11 detected at 0.6  $\mu\text{g/L}$ .

\*<sup>4</sup> 1,1 Dichloroethane at 0.9  $\mu\text{g/L}$



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

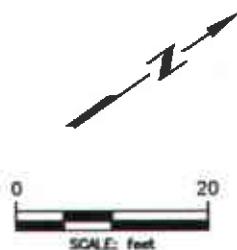
1

**Clayton**  
GROUP SERVICES

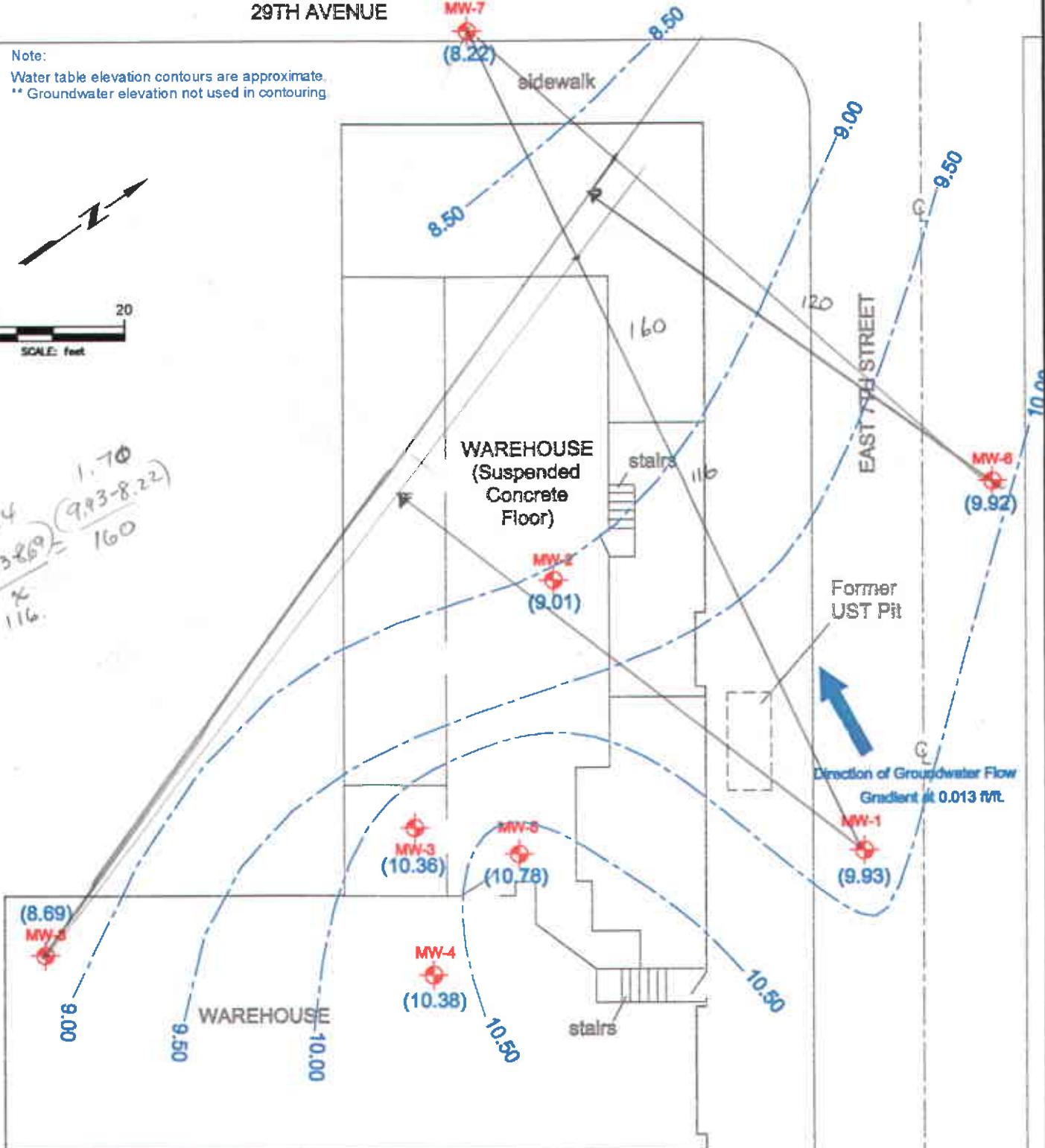
# 29TH AVENUE

Note:

Water table elevation contours are approximate.  
\*\* Groundwater elevation not used in contouring.



$1.24 + 1.10 = 2.34$   
 $(9.93 - 2.34) = 7.59$   
 $7.59 - 1.16 = 6.43$



## LEGEND

- MW-1 Monitoring Well Location  
(9.91) Groundwater Elevation in Feet above Mean Sea Level
- 10.50 - - - Groundwater Surface Contour and Elevation

## GROUNDWATER ELEVATION CONTOUR MAP (Sept 25, 2001)

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

Figure

2

11/5/01  
Q3RD\_01.DWG

**Clayton**  
GROUP SERVICES

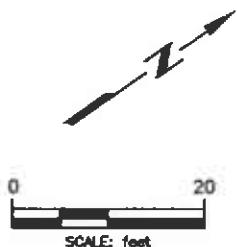
## 29TH AVENUE

MW-7  
2"

Note:  
Isoconcentration contours are approximate.

<50
<0.5

sidewalk



EAST 7TH STREET

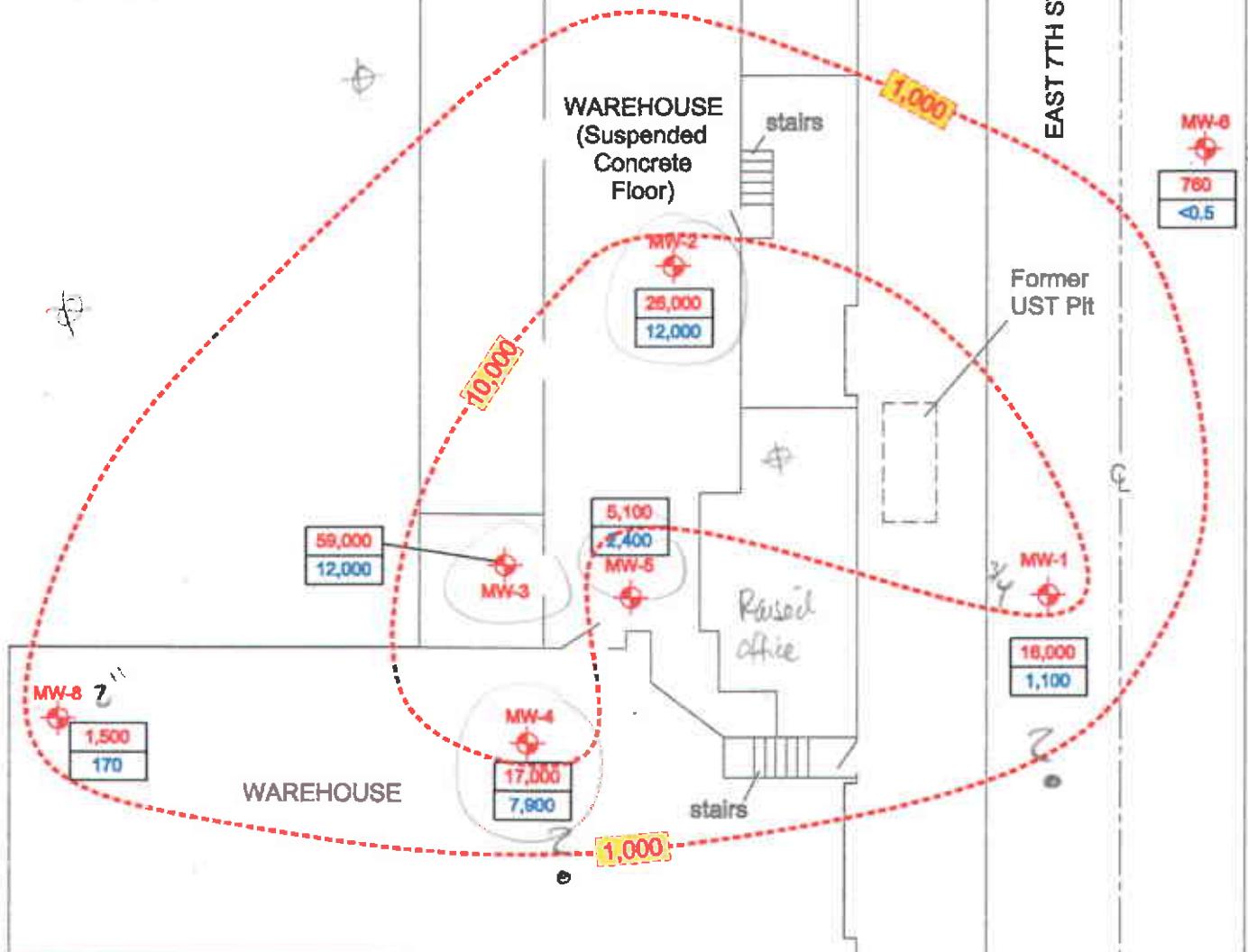
MW-6  
2"

760
<0.5

Former UST Plt

MW-1  
2"

16,000
1,100



## LEGEND

MW-1 Monitoring Well Location

TPH-G Concentration (micrograms per liter)

Benzene Concentration (micrograms per liter)

1,000 Isoconcentration Contour (micrograms per liter)

TPH as Gasoline

CONCENTRATIONS IN GROUNDWATER  
September 2001

FORMER LEMOINE SAUSAGE FACTORY

630 29TH AVENUE

OAKLAND, CALIFORNIA

Clayton Project No. 70-97066.00

Figure

3a

11/5/01

Q3RD\_01.DWG

Clayton  
GROUP SERVICES

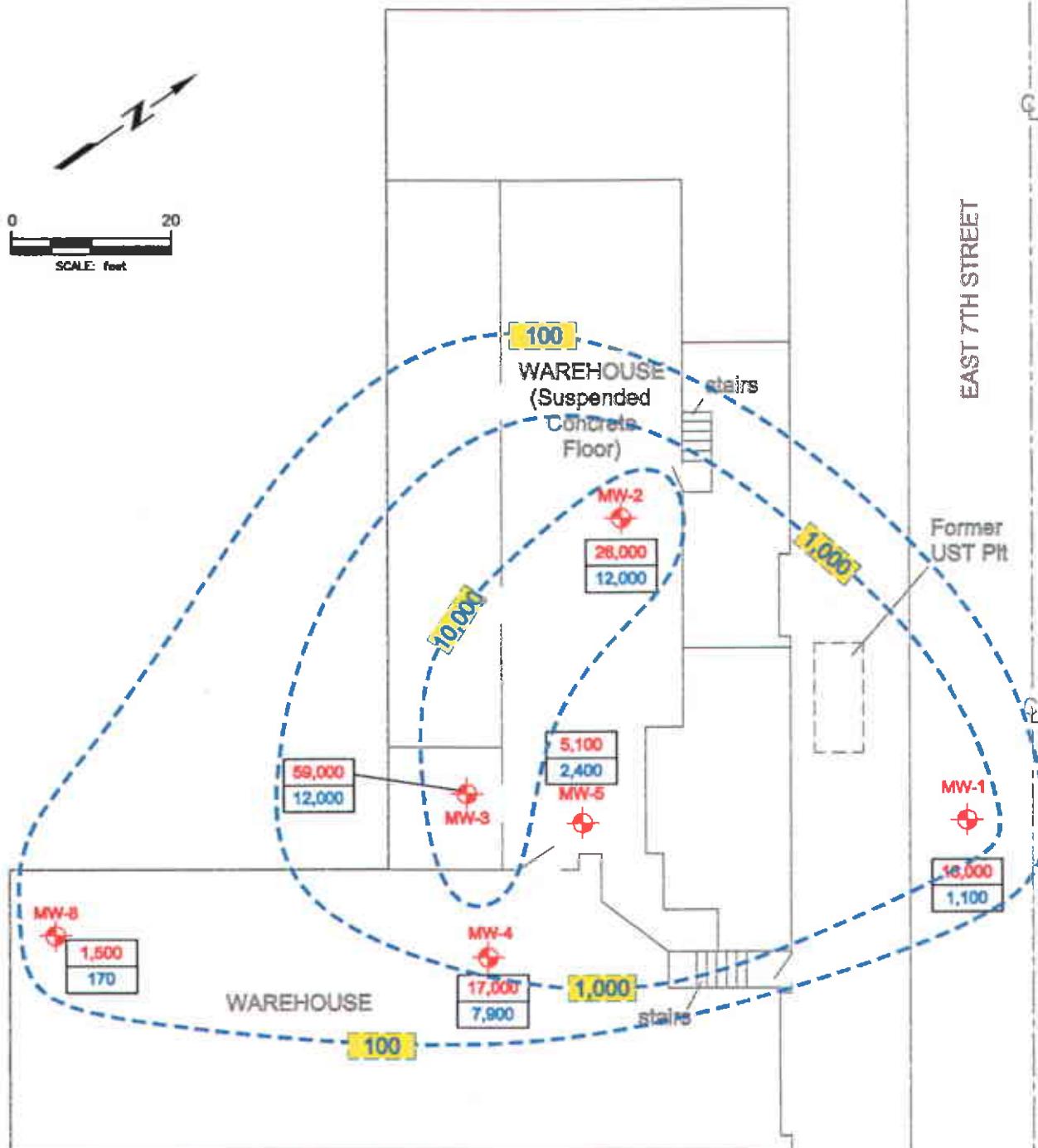
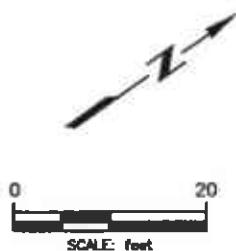
## 29TH AVENUE

MW-7

Note:  
Isoconcentration contours are approximate.

<50
<0.5

sidewalk



MW-6

760

&lt;0.5

EAST 7TH STREET

MW-1

16,000

1,100

Figure  
**3b**

Clayton  
GROUP SERVICES

11/5/01  
Q3RD\_01.DWG

LEGEND	
	Monitoring Well Location
	TPH-G Concentration (micrograms per liter)
	Benzene Concentration (micrograms per liter)
	Isoconcentration Contour (micrograms per liter)

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

## **APPENDIX A**

### **THIRD QUARTER (SEPTEMBER) 2001 GROUNDWATER SAMPLING LOGS**

### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory		Job #:	70-97066
630 29th Avenue		Date Purged:		9/25/2001
Oakland, California		Purge Method:		Peristaltic Pump
Sampling Location:	<b>MW-1</b>		Date & Time Sampled: 9/26/01 1300	
Top of Casing:	16.69	(ft, msl)	Sampling Method:	Disposable Bailer
Depth to Water:	6.76	Feet	Sample Type:	TPHG/BTEX /8010
Groundwater Elevation	9.93	(ft, msl)	Preservatives:	Ice
Well Bottom	7.69	(ft, msl)	# of Containers:	4 VOAs
Water Column:	2.24	Feet	Field Tech:	Marc Mullaney
Well Casing Volume:	0.02	(WC* 0.16)	Weather Conditions:	Sunny, Warm
Casing Volumes Purged:	2.23			
Purge Rate:	0.03	GPM		
			3/4" dia well	

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu$ mhos/cm)	Redox Potential (mVolts)	Temperature (°C)	Turbidity (NTU)
1405	0.05	6.93	0.696	31	24.7	182.3
:	Pumped Dry					
:						
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Field Notes:

Dissolved Oxygen = 0.61 mg/L

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9/25/2001
	Oakland, California	Purge Method:	Peristaltic Pump
Sampling Location:	<b>MW-2</b>	Date & Time Sampled: 9/26/01 1330	
Top of Casing:	20.79	(ft, msl)	Sampling Method: Disposable Bailer
Depth to Water:	11.78	Feet	Sample Type: TPHG/BTEX /8010
Groundwater Elevation	9.01	(ft, msl)	Preservatives: Ice
Well Bottom	0.79	(ft, msl)	# of Containers: 4 VOAs
Water Column:	8.22	Feet	Field Tech: Marc Mullaney
Well Casing Volume:	0.08	(WC* 0.16)	Weather Conditions: Sunny, Warm
Casing Volumes Purged:	5.291970803		
Purge Rate:	0.2175	GPM	3/4" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature (°C)	Turbidity (NTU)
1228	0.13	6.35	9.43	59	18.5	15.30
1233	0.13	6.43	9.54	56	18.0	13.52
1236	0.13	6.40	9.53	57	17.8	10.15
1238	0.05	6.40	9.39	58	17.8	26.7
:	pumped dry					
:						
:						
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:						

Field Notes:

Dissolved Oxygen = 0.70 mg/L

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9/25/2001
	Oakland, California	Purge Method:	Peristaltic Pump
Sampling Location:	<b>MW-3</b>	Date & Time Sampled: 9/26/01 1400	
Top of Casing:	21.10 (ft, msl)	Sampling Method:	Disposable Bailer
Depth to Water:	10.74 Feet	Sample Type:	TPHG/BTEX /8010
Groundwater Elevation	10.36 (ft, msl)	Preservatives:	Ice
Well Bottom	1.10 (ft, msl)	# of Containers:	4 VOAs
Water Column:	9.26 Feet	Field Tech:	Marc Mullaney
Well Casing Volume:	0.09 (WC* 0.16)	Weather Conditions:	Sunny, Warm
Casing Volumes Purged:	2.29		
Purge Rate:	0.02 GPM	3/4" dia well	

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{C}$ )	Turbidity (NTU)
1248	0.06	6.42	16.22	55	17.8	38.3
1253	0.06	6.44	14.99	54	17.5	90.9
1258	0.06	6.40	14.48	58	17.5	188
1301	0.03	6.39	16.33	56	17.5	298
:	Pumped dry					
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:						

Field Notes:

Dissolved Oxygen = 0.80 mg/L

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9/25/2001
	Oakland, California	Purge Method:	Peristaltic Pump
Sampling Location:	<b>MW-4</b>	Date & Time Sampled: 9/25/01 1615	
Top of Casing:	17.78 (ft, msl)	Sampling Method:	Disposable Bailer
Depth to Water:	7.40 Feet	Sample Type:	TPHG/BTEX /8010
Groundwater Elevation	10.38 (ft, msl)	Preservatives:	Ice
Well Bottom	2.78 (ft, msl)	# of Containers:	4 VOAs
Water Column:	7.60 Feet	Field Tech:	Marc Mullaney
Well Casing Volume:	0.08 (WC* 0.16)	Weather Conditions:	Sunny, Warm
Casing Volumes Purged:	1.97		
Purge Rate:	0.014 GPM	3/4" dia well	

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{hos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{C}$ )	Turbidity (NTU)
1336	0.05	6.71	7.97	42	18.0	53.3
1342	0.05	6.79	5.22	36	18.1	121.4
1347	0.05	6.87	4.09	31	18.1	454
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Field Notes:

Dissolved Oxygen = 0.99 mg/L

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9/25/2001
	Oakland, California	Purge Method:	Peristaltic Pump
Sampling Location:	<b>MW-5</b>	Date & Time Sampled:	9/25/01 1345
Top of Casing:	21.12	(ft, msl)	Sampling Method: Disposable Bailer
Depth to Water:	10.34	Feet	Sample Type: TPHG/BTEX /8010
Groundwater Elevation	10.78	(ft, msl)	Preservatives: Ice
Well Bottom	6.12	(ft, msl)	# of Containers: 4 VOAs
Water Column:	4.66	Feet	Field Tech: Marc Mullaney
Well Casing Volume:	0.05	(WC* 0.16)	Weather Conditions: Sunny, Warm
Casing Volumes Purged:	3.76		
Purge Rate:	0.035	GPM	3/4" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu$ hos/cm)	Redox Potential (mVolts)	Temperature (°C)	Turbidity (NTU)
1325	0.125	6.84	8.60	37	18.1	1.14
1330	0.05	6.85	3.41	27	18.5	out of range
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Field Notes:

Dissolved Oxygen = 1.14 mg/L

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory		Job #:	70-97066		
	630 29th Avenue		Date Purged:	9/25/2001		
	Oakland, California		Purge Method:	Disposable Bailer		
Sampling Location:	MW-6		Date & Time Sampled:	9/25/01 1555		
Top of Casing:	16.60	(ft, msl)	Sampling Method:	Disposable Bailer		
Depth to Water:	6.68	Feet	Sample Type:	TPHG/BTEX /8010		
Groundwater Elevation	9.92	(ft, msl)	Preservatives:	Ice		
Well Bottom	-3.40	(ft, msl)	# of Containers:	4 VOAs		
Water Column:	13.32	Feet	Field Tech:	Marc Mullaney		
Well Casing Volume:	2.13	(WC* 0.16)	Weather Conditions:	Sunny, Warm		
Casing Volumes Purged:	3.94					
Purge Rate:	0.44	GPM	2" dia well			
Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{C}$ )	Turbidity (NTU)
1443	0	7.13	1.753	19	21.3	26.5
1447	2.1	7.07	1.664	21	22.4	62.6
1452	2.1	7.08	1.667	23	22.1	85.5
1457	2.1	7.14	1.745	23	22.1	142.3
1502	2.1	7.12	1.767	17	21.9	202
:						
:						
:						
:						
:						
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:						
<b>Field Notes:</b>						
Dissolved Oxygen = 0.32 mg/L						

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9/25/2001
	Oakland, California	Purge Method:	Disposable Bailer
Sampling Location:	<b>MW-7</b>	Date & Time Sampled:	9/25/01 1540
Top of Casing:	15.47	(ft, msl)	Sampling Method: Disposable Bailer
Depth to Water:	7.25	Feet	Sample Type: TPHG/BTEX /8010
Groundwater Elevation	8.22	(ft, msl)	Preservatives: Ice
Well Bottom	-4.53	(ft, msl)	# of Containers: 4 VOAs
Water Column:	12.75	Feet	Field Tech: Marc Mullaney
Well Casing Volume:	2.04	(WC* 0.16)	Weather Conditions: Sunny, Warm
Casing Volumes Purged:	4.12		
Purge Rate:	0.47	GPM	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu$ mhos/cm)	Redox Potential (mVolts)	Temperature (°C)	Turbidity (NTU)
1515	0	7.44	1.261	1	22.5	15.1
1519	2.1	7.27	1.235	7	21.5	119.7
1524	2.1	7.37	1.224	4	20.5	291
1529	2.1	7.31	1.200	8	19.9	799
1533	2.1	7.29	1.200	10	19.5	765
:						
:						
:						
:						
:						
:						
:						

Field Notes:

Dissolved Oxygen = 0.64 mg/L

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9/25/2001
	Oakland, California	Purge Method:	Disposable Bailer
Sampling Location:	<b>MW-8</b>	Date & Time Sampled:	9/25/01 1610
Top of Casing:	17.58	(ft, msl)	Sampling Method: Disposable Bailer
Depth to Water:	8.89	Feet	Sample Type: TPHG/BTEX /8010
Groundwater Elevation	8.69	(ft, msl)	Preservatives: Ice
Well Bottom	-2.42	(ft, msl)	# of Containers: 4 VOAs
Water Column:	11.11	Feet	Field Tech: MRM
Well Casing Volume:	1.78	(WC* 0.16)	Weather Conditions: Sunny, Warm
Casing Volumes Purged:	5.18		
Purge Rate:	0.48	GPM	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature (°C)	Turbidity (NTU)
1417	2	7.04	1.724	23	17.9	12.30
1422	2	7.10	1.724	20	16.8	43.3
1427	2	7.08	1.721	21	16.6	73.7
1431	2	7.11	1.811	19	16.5	310
1436	1.2	7.17	1.919	14	16.4	606
:	Bailed Dry					
:						
:						
:						
:						
:						
:						

Field Notes:

Dissolved Oxygen = 0.28 mg/l

**APPENDIX B**

**THIRD QUARTER (SEPTEMBER) 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

A N A L Y T I C A L   R E P O R T

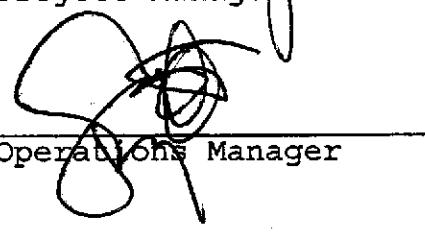
Prepared for:

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

Date: 11-OCT-01  
Lab Job Number: 154382  
Project ID: 70-97066  
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.

CA ELAP # 1459

Page 1 of 22

# CHAIN OF CUSTODY FORM

Page 1 of 1

**Curtis & Tompkins, Ltd.**

Analytical Laboratory Since 1878  
2323 Fifth Street  
Berkeley, CA 94710  
(510)486-0900 Phone  
(510)486-0532 Fax

C&T  
LOGIN # 154382

Analyses

Project No: 70-97066

Sampler: MARC MULLANEY

Project Name: SAUSAGE FACTORY

Report To: CATME

Project P.O.:

Company: CLAYTON

Turnaround Time: STAND

Telephone: 925-426-2656

Fax: 925-426-0106

Laboratory Number	Sample ID.	Sampling Date Time	Matrix	# of Containers	Preservative				Field Notes
					HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE	
	MW-8	9/25/01 1610	X	4			X		X X TPHG/STEX
	MW-6	1 1535	X	4			X		X X Q10
	MW-7	1 1540	X	5			X		X X X X
	MW-4	✓ 1615	X	1			X		X X X X Nitrates + nitrate 300.0
<i>in as other</i>									
<i>Preservation Correct?</i>									
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA									

Notes:

Put MW-4 on Hold since there is only 1 VOA, but more will arrive tomorrow. DPF 9/25/01

RELINQUISHED BY:

Marc Mullany 9/25/01 1733  
DATE/TIME

RECEIVED BY:

Troy Bob 9/28/01  
DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

Signature



Curtis &amp; Tompkins, Ltd.

## Gasoline by GC/FID CA LUFT

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B (M)
Matrix:	Water	Batch#:	66703
Units:	ug/L	Sampled:	09/25/01
Diln Fac:	1.000	Received:	09/25/01

Field ID: MW-8 Lab ID: 154382-001  
Type: SAMPLE Analyzed: 09/28/01

Analyte	Result	RL
Gasoline C7-C12	1,500	50

Surrogate	REC	Limits
Trifluorotoluene (FID)	101	59-135
Bromofluorobenzene (FID)	91	60-140

Field ID: MW-6 Lab ID: 154382-002  
Type: SAMPLE Analyzed: 09/28/01

Analyte	Result	RL
Gasoline C7-C12	760	50

Surrogate	REC	Limits
Trifluorotoluene (FID)	101	59-135
Bromofluorobenzene (FID)	93	60-140

Field ID: MW-7 Lab ID: 154382-003  
Type: SAMPLE Analyzed: 09/28/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	REC	Limits
Trifluorotoluene (FID)	86	59-135
Bromofluorobenzene (FID)	88	60-140

Type: BLANK Analyzed: 09/27/01  
Lab ID: QC157208

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	REC	Limits
Trifluorotoluene (FID)	93	59-135
Bromofluorobenzene (FID)	95	60-140



Curtis &amp; Tompkins, Ltd.

**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	09/25/01
Units:	ug/L	Received:	09/25/01
Diln Fac:	1.000		

Field ID: MW-8                          Batch#: 66700  
Type: SAMPLE                              Analyzed: 09/27/01  
Lab ID: 154382-001

Analyte	Result	RL
Benzene	170	0.50
Toluene	4.3 C	0.50
Ethylbenzene	1.6	0.50
m,p-Xylenes	1.0	0.50
o-Xylene	1.7	0.50

Surrogate	CRPC	Minutes
Trifluorotoluene (PID)	94	56-142
Bromofluorobenzene (PID)	86	55-149

Field ID: MW-6                          Batch#: 66660  
Type: SAMPLE                              Analyzed: 09/26/01  
Lab ID: 154382-002

Analyte	Result	RL
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	1.4	0.50
o-Xylene	1.5	0.50

Surrogate	CRPC	Minutes
Trifluorotoluene (PID)	79	56-142
Bromofluorobenzene (PID)	66	55-149

Field ID: MW-7                          Batch#: 66660  
Type: SAMPLE                              Analyzed: 09/26/01  
Lab ID: 154382-003

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

Surrogate	CRPC	Minutes
Trifluorotoluene (PID)	68	56-142
Bromofluorobenzene (PID)	63	55-149

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

ND= Not Detected

LL= Reporting Limit

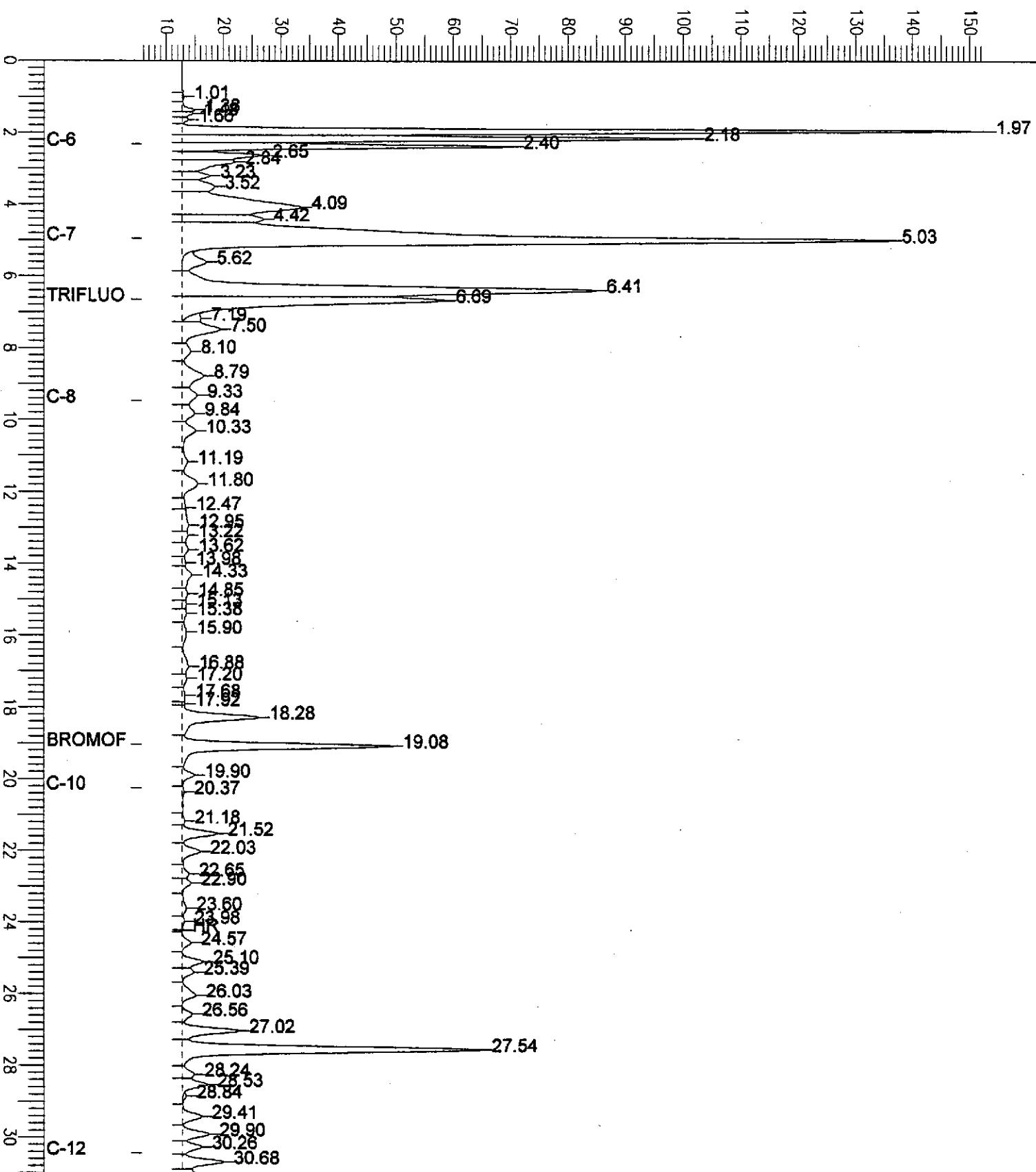
Page 1 of 2

# Chromatogram

Sample Name : 154382-001,66703, tvh only  
FileName : G:\GC05\DATA\270G033.raw  
Method : TVHETXE  
Start Time : 0.00 min End Time : 31.00 min  
Scale Factor: 1.0 Plot Offset: 6 mV

Sample #: c8 Page 1 of 1  
Date : 9/28/01 11:29 AM  
Time of Injection: 9/28/01 10:15 AM  
Low Point : 5.67 mV High Point : 152.87 mV  
Plot Scale: 147.2 mV

Response [mV]

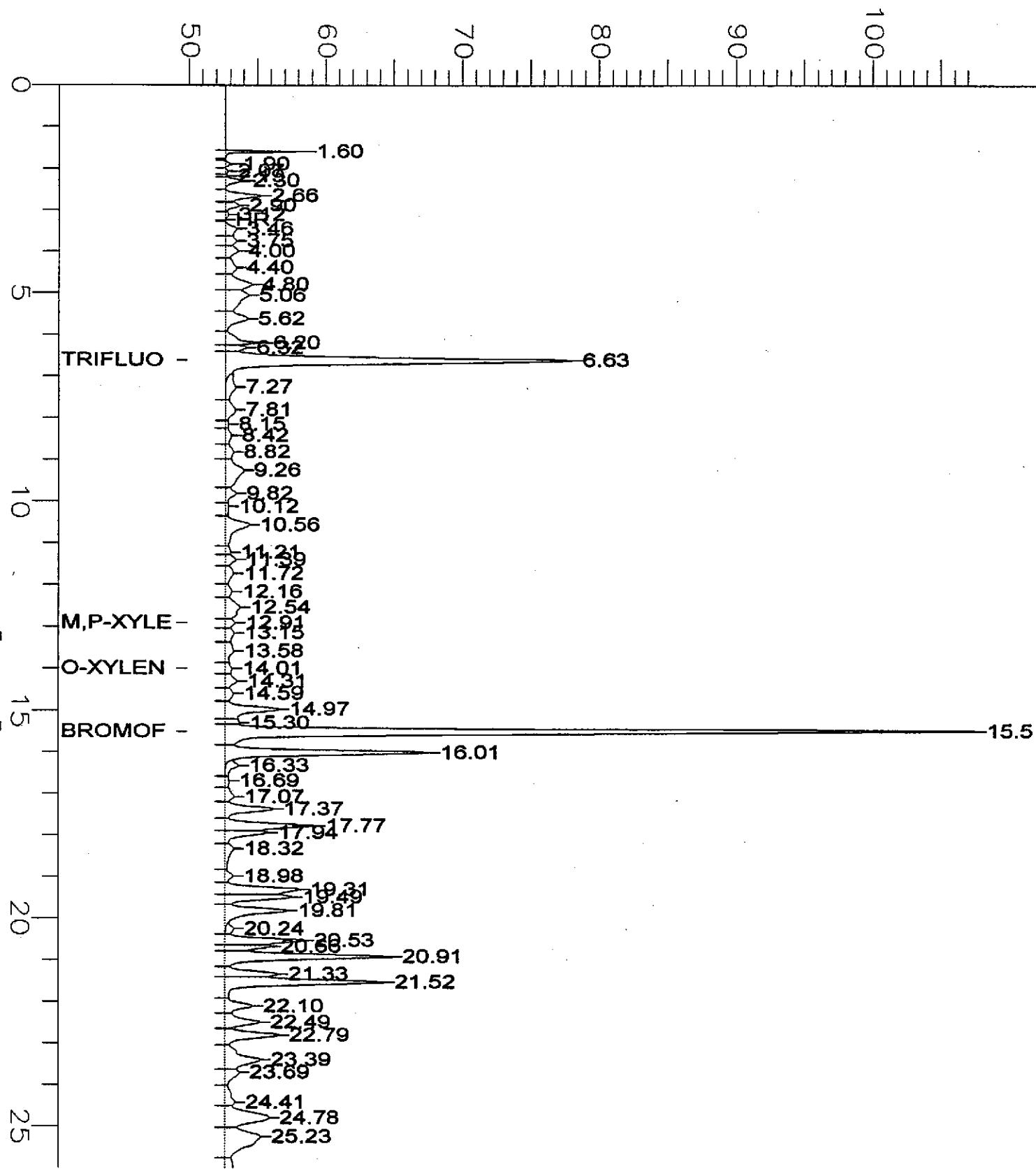


# Chromatogram

Sample Name : 154382-002,66660  
fileName : G:\GC04\DATA\269K010.raw  
method : TVHBTXE  
Start Time : 0.00 min End Time : 26.00 min  
Scale Factor: 1.0 Plot Offset: 50 mV

Sample #: A8 Date : 9/27/01 10:30 AM Page 1 of 1  
Time of Injection: 9/26/01 03:00 PM  
Low Point : 49.84 mV High Point : 107.65 mV  
Plot Scale: 57.8 mV

Response [mV]





Curtis &amp; Tompkins, Ltd.

**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	09/25/01
Units:	ug/L	Received:	09/25/01
Diln Fac:	1.000		

Type: BLANK Batch#: 66650  
Lab ID: QC157052 Analyzed: 09/26/01

Analyte	Result	R.L.
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Substrate	REC	Results
Trifluorotoluene (PID)	68	56-142
Bromofluorobenzene (PID)	63	55-149

Type: BLANK Batch#: 66700  
Lab ID: QC157193 Analyzed: 09/27/01

Analyte	Result	R.L.
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Substrate	REC	Results
Trifluorotoluene (PID)	77	56-142
Bromofluorobenzene (PID)	76	55-149

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

D= Not Detected

L= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

**Gasoline by GC/FID CA LUPT**

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC157209	Batch#:	66703
Matrix:	Water	Analyzed:	09/27/01
Units:	ug/L		

Analyte	Spiked	Result	SRM	Isotopes
Gasoline C7-C12	2,000	2,017	101	73-121

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



Curtis &amp; Tompkins, Ltd.

**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC157056	Batch#:	66660
Matrix:	Water	Analyzed:	09/26/01
Units:	ug/L		

Analyte	Spiked	Result	REC	Limits
Benzene	20.00	16.44	82	67-117
Toluene	20.00	16.78	84	69-117
Ethylbenzene	20.00	16.48	82	68-124
m,p-Xylenes	40.00	34.09	85	70-125
o-Xylene	20.00	17.21	86	65-129

Surrogate	REC	Limits
Trifluorotoluene (PID)	69	56-142
Bromofluorobenzene (PID)	63	55-149



Curtis &amp; Tompkins, Ltd.

**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	66700
Units:	ug/L	Analyzed:	09/27/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157204

Analyte	Spiked	Result	RREC	Limits
Benzene	20.00	16.09	80	67-117
Toluene	20.00	17.00	85	69-117
Ethylbenzene	20.00	16.31	82	68-124
m,p-Xylenes	40.00	34.55	86	70-125
o-Xylene	20.00	17.28	86	65-129

Surrogate	RREC	Limits
Trifluorotoluene (PID)	77	56-142
Bromofluorobenzene (PID)	78	55-149

Type: BSD Lab ID: QC157205

Analyte	Spiked	Result	RREC	Limits	RPD	Lim
Benzene	20.00	16.69	83	67-117	4	20
Toluene	20.00	17.65	88	69-117	4	20
Ethylbenzene	20.00	16.74	84	68-124	3	20
m,p-Xylenes	40.00	35.01	88	70-125	1	20
o-Xylene	20.00	18.36	92	65-129	6	20

Surrogate	RREC	Limits
Trifluorotoluene (PID)	78	56-142
Bromofluorobenzene (PID)	79	55-149

**Gasoline by GC/FID CA LUFT**

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B (M)
Field ID:	ZZZZZZZZZZ	Batch#:	66703
MSS Lab ID:	154251-002	Sampled:	09/18/01
Matrix:	Water	Received:	09/20/01
Units:	ug/L	Analyzed:	09/27/01
Diln Fac:	1.000		

Type: MS Lab ID: QC157210

Analyte	MSS Result	Spiked	Result	SRPC	Limits
Gasoline C7-C12	<24.00	2,000	1,944	97	65-131
<hr/>					
Surrogate	SRPC	Limits			
Trifluorotoluene (FID)	91	59-135			
Bromofluorobenzene (FID)	87	60-140			

Type: MSD Lab ID: QC157211

Analyte	Spiked	Result	SRPC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,974	99	65-131	1	20
<hr/>						
Surrogate	SRPC	Limits				
Trifluorotoluene (FID)	92	59-135				
Bromofluorobenzene (FID)	92	60-140				



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	66663
Lab ID:	154382-001	Sampled:	09/25/01
Matrix:	Water	Received:	09/25/01
Units:	ug/L	Analyzed:	09/26/01
Diln Fac:	7.143		

Analyte	Result	R3
Chloromethane	ND	7.1
Vinyl Chloride	53	3.6
Bromomethane	ND	7.1
Chloroethane	ND	7.1
Trichlorofluoromethane	ND	3.6
Freon 113	ND	7.1
1,1-Dichloroethene	ND	3.6
Methylene Chloride	ND	140
trans-1,2-Dichloroethene	59	3.6
1,1-Dichloroethane	ND	3.6
cis-1,2-Dichloroethene	820	3.6
Chloroform	ND	7.1
1,1,1-Trichloroethane	ND	3.6
Carbon Tetrachloride	ND	3.6
1,2-Dichloroethane	5.0	3.6
Trichloroethene	36	3.6
1,2-Dichloropropane	ND	3.6
Bromodichloromethane	ND	3.6
cis-1,3-Dichloropropene	ND	3.6
trans-1,3-Dichloropropene	ND	3.6
1,1,2-Trichloroethane	ND	3.6
Tetrachloroethene	ND	3.6
Dibromochloromethane	ND	3.6
Chlorobenzene	ND	3.6
Bromoform	ND	3.6
1,1,2,2-Tetrachloroethane	ND	3.6
1,3-Dichlorobenzene	ND	3.6
1,4-Dichlorobenzene	ND	3.6
1,2-Dichlorobenzene	ND	3.6

Surrogate	SRM	Limits
1,2-Dichloroethane-d4	97	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	104	80-115

ND = Not Detected

RL = Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	66663
Lab ID:	154382-002	Sampled:	09/25/01
Matrix:	Water	Received:	09/25/01
Units:	ug/L	Analyzed:	09/26/01
Diln Fac:	1.000		

Analyte	Result	RD
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	0.9	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	REC	Final
1,2-Dichloroethane-d4	96	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	102	80-115

D= Not Detected

L= Reporting Limit



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	66663
Lab ID:	154382-003	Sampled:	09/25/01
Matrix:	Water	Received:	09/25/01
Units:	ug/L	Analyzed:	09/26/01
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	MLRC	Limits
1,2-Dichloroethane-d4	95	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	104	80-115

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC157066	Batch#:	66663
Matrix:	Water	Analyzed:	09/26/01
Units:	ug/L		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	0.5
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
cis-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	Spec	Limits
1,2-Dichloroethane-d4	96	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	104	80-115

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC157063	Batch#:	66663
Matrix:	Water	Analyzed:	09/26/01
Units:	ug/L		

Analyte	Spiked	Result	SPEC	Limits
1,1-Dichloroethene	50.00	51.43	103	74-132
Trichloroethene	50.00	48.80	98	80-119
Chlorobenzene	50.00	48.53	97	80-117

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



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	66663
MSS Lab ID:	154251-005	Sampled:	09/18/01
Matrix:	Water	Received:	09/20/01
Units:	ug/L	Analyzed:	09/27/01
Diln Fac:	1.000		

Type: MS Lab ID: QC157068

Analyte	MSD Result	Spiked	Result	%RBC	Limits
1,1-Dichloroethene	<0.2900	50.00	48.83	98	70-132
Trichloroethene	<0.07300	50.00	48.31	97	62-137
Chlorobenzene	<0.08100	50.00	47.78	96	80-117

## Surrogate %RBC Limits

1,2-Dichloroethane-d4	105	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	100	80-115

Type: MSD Lab ID: QC157069

Analyte	Spiked	Result	%RBC	Limits	RSD	%RSD
1,1-Dichloroethene	50.00	49.30	99	70-132	1	20
Trichloroethene	50.00	47.22	94	62-137	2	20
Chlorobenzene	50.00	48.19	96	80-117	1	20

## Surrogate %RBC Limits

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



Curtis &amp; Tompkins, Ltd.

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	METHOD
Project#:	70-97066	Analysis:	EPA 300.0
Field ID:	MW-7	Sampled:	09/25/01
Matrix:	Water	Received:	09/25/01
Units:	mg/L	Analyzed:	09/26/01
Batch#:	66671		

Type: SAMPLE Lab ID: 154382-003

Analyte	Result	RL	Diln Fac
Nitrogen, Nitrite	0.02 J	0.05	1.000
Nitrogen, Nitrate	23	0.50	10.00

Type: BLANK Diln Fac: 1.000  
Lab ID: QC157079

Analyte	Result	RL
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05

J= Estimated value  
D= Not Detected  
RL= Reporting Limit  
Page 1 of 1

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	METHOD
Project#:	70-97066	Analysis:	EPA 300.0
Matrix:	Water	Batch#:	66671
Units:	mg/L	Analyzed:	09/26/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157080

Analyte	Spiked	Result	REC	Limits	RPD	Lim
Nitrogen, Nitrite	2.000	1.970	98	80-110		
Nitrogen, Nitrate	2.000	2.030	101	80-110		

Type: BSD Lab ID: QC157081

Analyte	Spiked	Result	REC	Limits	RPD	Lim
Nitrogen, Nitrite	2.000	1.980	99	80-110	1	20
Nitrogen, Nitrate	2.000	2.030	102	80-110	0	20

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	METHOD
Project#:	70-97066	Analysis:	EPA 300.0
Field ID:	MW-7	Batch#:	66671
MSS Lab ID:	154382-003	Sampled:	09/25/01
Matrix:	Water	Received:	09/25/01
Units:	mg/L	Analyzed:	09/26/01
Diln Fac:	10.00		

Type: MS                      Lab ID: QC157082

Analyte	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
Nitrogen, Nitrite	0.02000	10.00	10.19	102	80-110		
Nitrogen, Nitrate	23.24	10.00	33.75	105	80-111		

Type: MSD                      Lab ID: QC157083

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Nitrogen, Nitrite	10.00	10.29	103	80-110	1	20
Nitrogen, Nitrate	10.00	33.22	100	80-111	2	20



Curtis &amp; Tompkins, Ltd.

## Orthophosphate Phosphorous

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	METHOD
Project#:	70-97066	Analysis:	EPA 365.2
Analyte:	Orthophosphate (as P)	Batch#:	66749
Field ID:	MW-7	Sampled:	09/25/01
Matrix:	Water	Received:	09/25/01
Units:	mg/L	Analyzed:	09/27/01
Diln Fac:	1.000		

Sample	Lab ID	Result	RL
SAMPLE	154382-003	ND	0.20
BLANK	QC157368	ND	0.20

ND= Not Detected

RL= Reporting Limit

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**Orthophosphate Phosphorous**

Lab #:	154382	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	METHOD
Project#:	70-97066	Analysis:	EPA 365.2
Analyte:	Orthophosphate (as P)	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC157369	Batch#:	66749
Matrix:	Water	Analyzed:	09/27/01

Spiked	Result	SRPQ	limits
0.2000	0.1850	93	80-120

**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: 11-OCT-01  
Lab Job Number: 154410  
Project ID: 70-97066  
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

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# CHAIN OF CUSTODY FORM

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Analytical Laboratory Since 1878

2323 Fifth Street

Berkeley, CA 94710

(510)486-0900 Phone

(510)486-0532 Fax

**Analyses**

C&amp;T

LOGIN # 154410Sampler: MARC MULLANEYReport To: MARC MULLANEYCompany: CLAYTONTelephone: 925-426-2656Fax: 925-426-0106Project No: 70-97066Project Name: SAUSAGE FACTORYProject P.O.: SAMETurnaround Time: STAND

Laboratory Number	Sample ID.	Sampling Date Time	Matrix	# of Containers	Preservative				Field Notes
					HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE	
-1	MW-1	9/26/01 1300	X	4			X		X X
-2	MW-2	1330	X	4			X		X X
-3	MW-3	1400	X	4			X		X X
-4	MW-4	1315	X	2			X		X X
-5	MW-5	1345	X	1			X		X X
For laboratory use only									

Notes:

RELINQUISHED BY:

RECEIVED BY:

Marc Mullany 9/26/01 1514  
DATE/TIMEDeanne Allred 9/26/01  
DATE/TIME 1514

DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

Signature



Curtis &amp; Tompkins, Ltd.

## Gasoline by GC/FID CA LUFT

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B(M)
Matrix:	Water	Sampled:	09/26/01
Units:	ug/L	Received:	09/26/01
Batch#:	66733		

Field ID: MW-1 Diln Fac: 10.00  
Type: SAMPLE Analyzed: 09/29/01  
Lab ID: 154410-001

Analyte	Result	RL
Gasoline C7-C12	16,000	500

Surrogate	SRM#	Limits
Trifluorotoluene (FID)	114	59-135
Bromofluorobenzene (FID)	96	60-140

Field ID: MW-2 Diln Fac: 20.00  
Type: SAMPLE Analyzed: 09/29/01  
Lab ID: 154410-002

Analyte	Result	RL
Gasoline C7-C12	26,000	1,000

Surrogate	SRM#	Limits
Trifluorotoluene (FID)	93	59-135
Bromofluorobenzene (FID)	88	60-140

Field ID: MW-3 Diln Fac: 100.0  
Type: SAMPLE Analyzed: 09/28/01  
Lab ID: 154410-003

Analyte	Result	RL
Gasoline C7-C12	59,000	5,000

Surrogate	SRM#	Limits
Trifluorotoluene (FID)	100	59-135
Bromofluorobenzene (FID)	91	60-140

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Gasoline by GC/FID CA LUFT

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B (M)
Matrix:	Water	Sampled:	09/26/01
Units:	ug/L	Received:	09/26/01
Batch#:	66733		

Field ID: MW-4 Diln Fac: 20.00  
Type: SAMPLE Analyzed: 09/28/01  
Lab ID: 154410-004

Analyte	Result	RL
Gasoline C7-C12	17,000	1,000

Surrogate	SPEC	Limits
Trifluorotoluene (FID)	95	59-135
Bromofluorobenzene (FID)	90	60-140

Field ID: MW-5 Diln Fac: 20.00  
Type: SAMPLE Analyzed: 09/28/01  
Lab ID: 154410-005

Analyte	Result	RL
Gasoline C7-C12	5,100	1,000

Surrogate	SPEC	Limits
Trifluorotoluene (FID)	92	59-135
Bromofluorobenzene (FID)	93	60-140

Type: BLANK Diln Fac: 1.000  
Lab ID: QC157316 Analyzed: 09/28/01

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	SPEC	Limits
Trifluorotoluene (FID)	91	59-135
Bromofluorobenzene (FID)	89	60-140

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	09/26/01
Units:	ug/L	Received:	09/26/01

Field ID: MW-1 Diln Fac: 20.00  
Type: SAMPLE Batch#: 66803  
Lab ID: 154410-001 Analyzed: 10/03/01

Analyst	Result	RL
Benzene	1,100	10
Toluene	130	10
Ethylbenzene	ND	10
m,p-Xylenes	160	10
o-Xylene	160	10

Surrogate	REC	Limits
Trifluorotoluene (PID)	107	56-142
Bromofluorobenzene (PID)	105	55-149

Field ID: MW-2 Diln Fac: 100.0  
Type: SAMPLE Batch#: 66803  
Lab ID: 154410-002 Analyzed: 10/03/01

Analyst	Result	RL
Benzene	12,000	50
Toluene	3,900	50
Ethylbenzene	590	50
m,p-Xylenes	1,600	50
o-Xylene	360	50

Surrogate	REC	Limits
Trifluorotoluene (PID)	106	56-142
Bromofluorobenzene (PID)	107	55-149

Field ID: MW-3 Diln Fac: 100.0  
Type: SAMPLE Batch#: 66733  
Lab ID: 154410-003 Analyzed: 09/28/01

Analyst	Result	RL
Benzene	12,000	50
Toluene	13,000	50
Ethylbenzene	780	50
m,p-Xylenes	2,700	50
o-Xylene	980	50

Surrogate	REC	Limits
Trifluorotoluene (PID)	79	56-142
Bromofluorobenzene (PID)	77	55-149

D= Not Detected

L= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	09/26/01
Units:	ug/L	Received:	09/26/01

Field ID: MW-4 Diln Fac: 100.0  
Type: SAMPLE Batch#: 66803  
Lab ID: 154410-004 Analyzed: 10/03/01

Analyst	Result	RL
Benzene	7,900	50
Toluene	ND	50
Ethylbenzene	440	50
m,p-Xylenes	510	50
o-Xylene	71	50

Surrogate	REC	Lim/RL
Trifluorotoluene (PID)	105	56-142
Bromofluorobenzene (PID)	104	55-149

Field ID: MW-5 Diln Fac: 20.00  
Type: SAMPLE Batch#: 66733  
Lab ID: 154410-005 Analyzed: 09/28/01

Analyst	Result	RL
Benzene	2,400	10
Toluene	1,200	10
Ethylbenzene	ND	10
m,p-Xylenes	210	10
o-Xylene	250	10

Surrogate	REC	Lim/RL
Trifluorotoluene (PID)	78	56-142
Bromofluorobenzene (PID)	77	55-149

Type: BLANK Batch#: 66733  
Lab ID: QC157316 Analyzed: 09/28/01  
Diln Fac: 1.000

Analyst	Result	RL
Benzene	ND	0.50
Toluene	0.64	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	0.77	0.50
o-Xylene	ND	0.50

Surrogate	REC	Lim/RL
Trifluorotoluene (PID)	75	56-142
Bromofluorobenzene (PID)	75	55-149

ND= Not Detected

RL= Reporting Limit

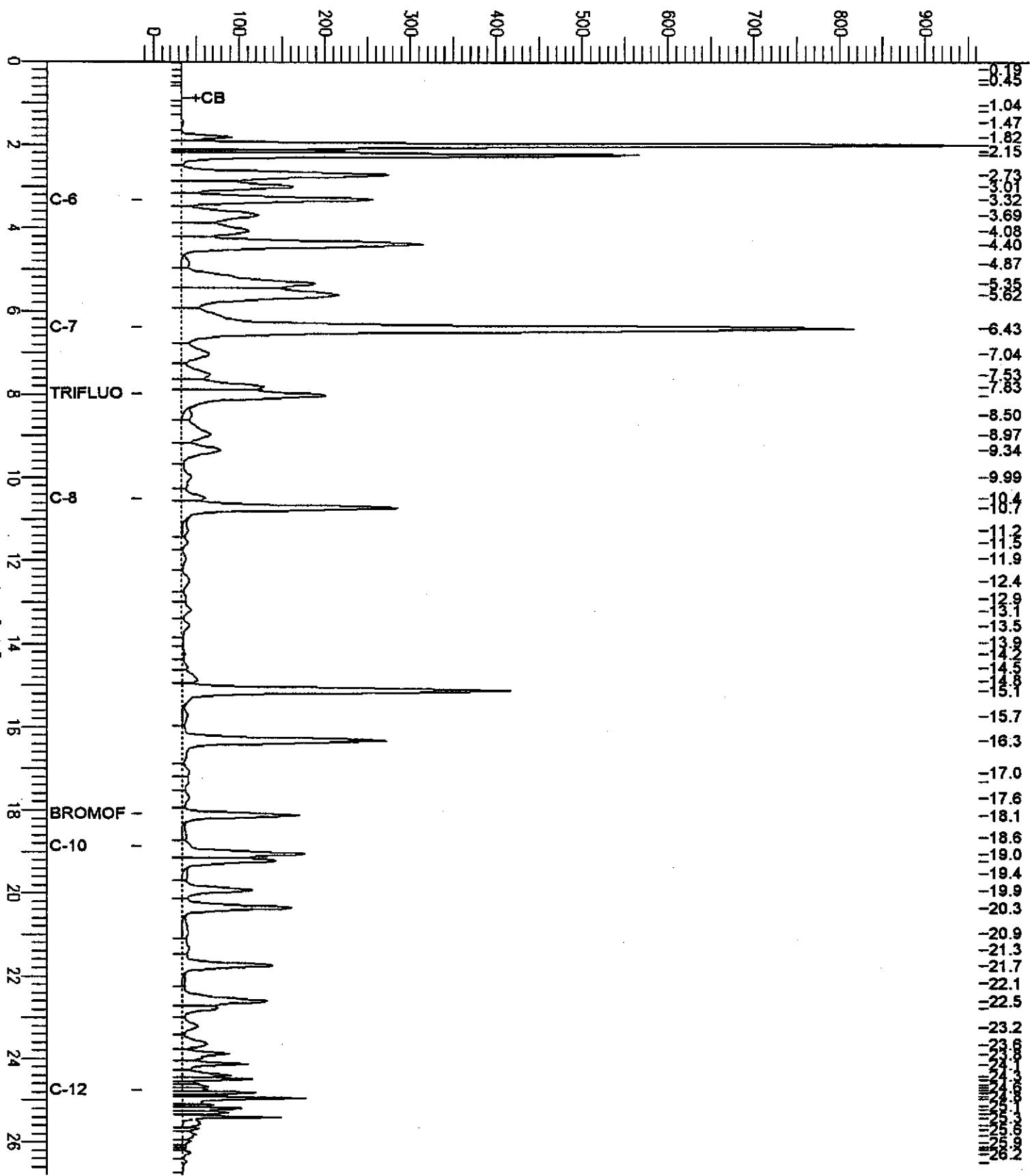
Page 2 of 3

# GC19 TVH 'X' Data File (FID)

Sample Name : 154410-001,66733  
 fileName : G:\GC19\DATA\271X020.raw  
 method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: -14 mV

Sample #: C7 Page 1 of 1  
 Date : 9/29/01 01:09 AM  
 Time of Injection: 9/29/01 12:42 AM  
 Low Point : -13.77 mV High Point : 963.47 mV  
 Plot Scale: 977.2 mV

Response [mV]

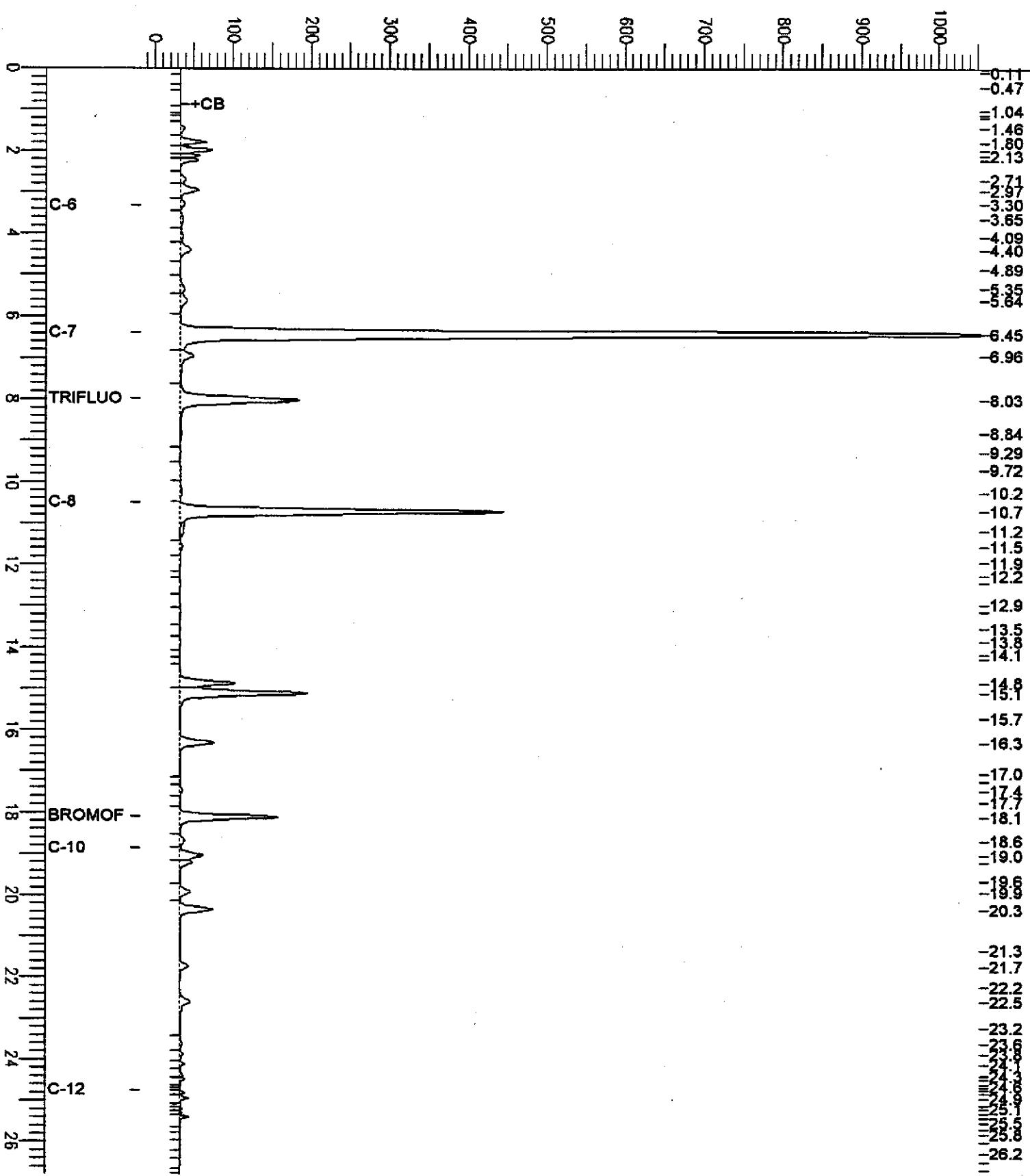


# GC19 TVH 'X' Data File (FID)

Sample Name : 154410-002, 66733  
 FileName : G:\GC19\DATA\271X019.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: -18 mV

Sample #: C7 Page 1 of 1  
 Date : 9/29/01 12:33 AM  
 Time of Injection: 9/29/01 12:06 AM  
 Low Point : -18.36 mV High Point : 1052.77 mV  
 Plot Scale: 1071.1 mV

Response [mV]

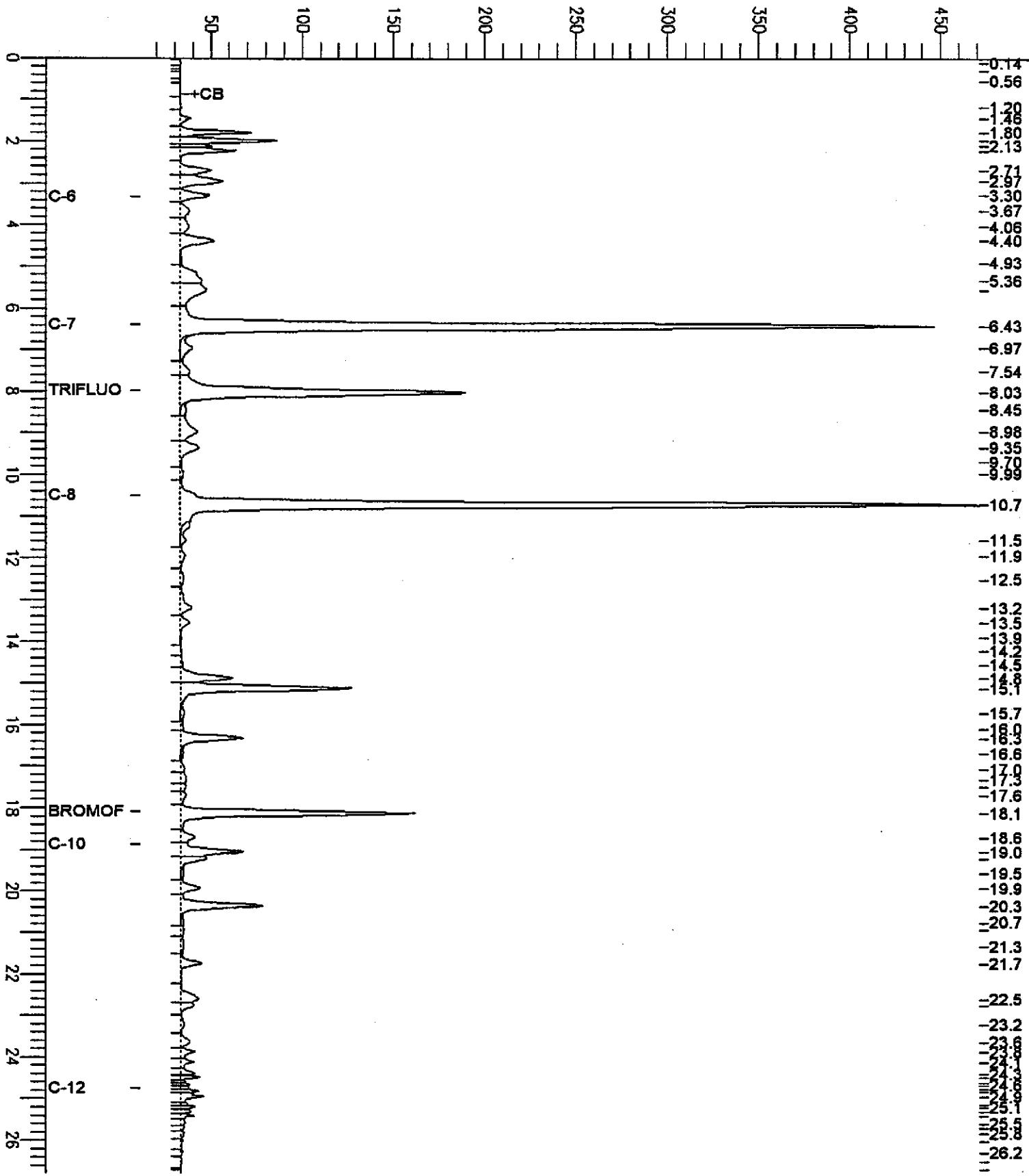


# GC19 TVH 'X' Data File (FID)

Sample Name : 154410-003, 66733  
 fileName : G:\GC19\DATA\271X018.raw  
 method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: 11 mV

Sample #: C7 Page 1 of 1  
 Date : 9/28/01 11:57 PM  
 Time of Injection: 9/28/01 11:30 PM  
 Low Point : 10.89 mV High Point : 471.37 mV  
 Plot Scale: 460.5 mV

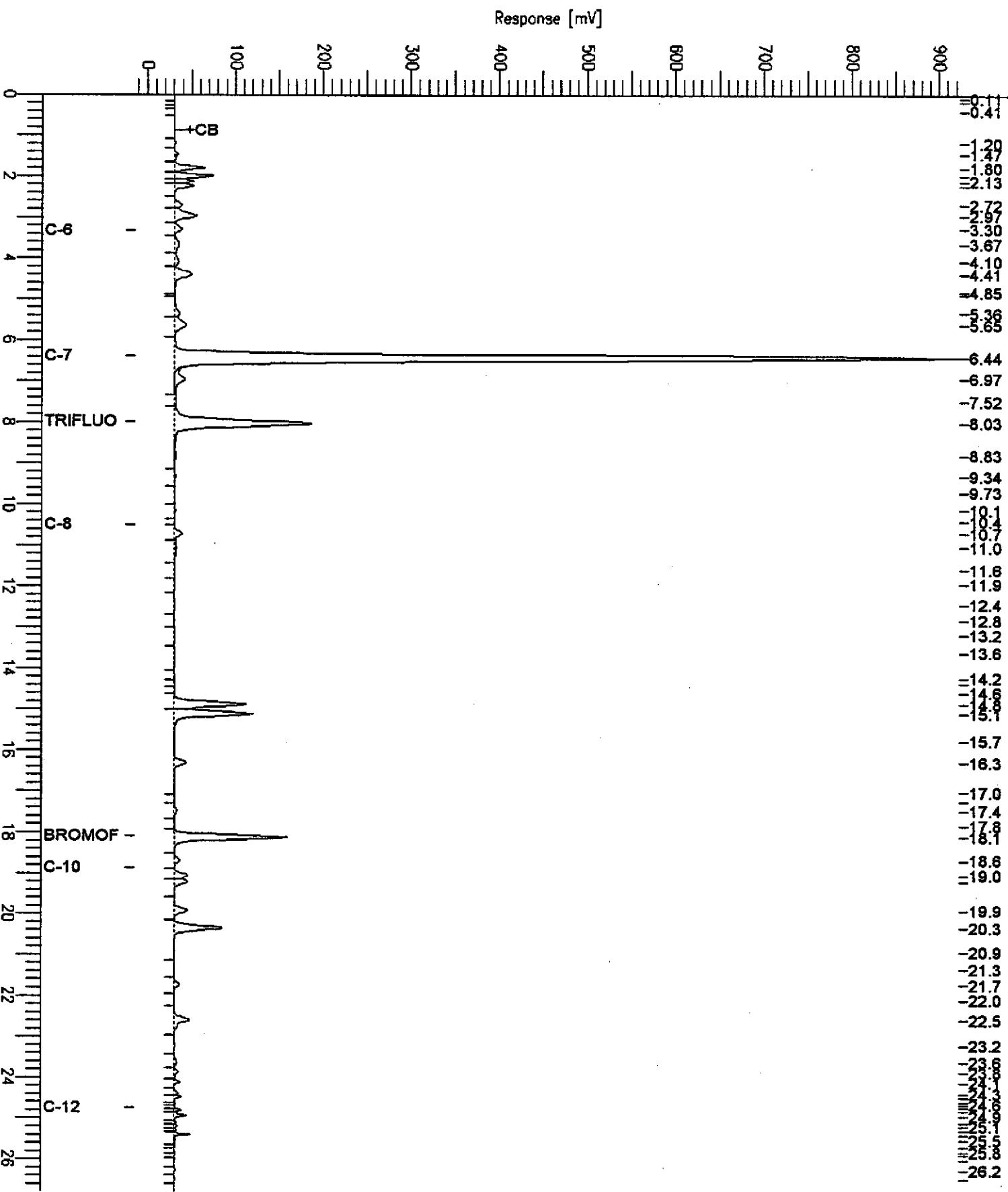
Response [mV]



# GC19 TVH 'X' Data File (FID)

Sample Name : 154410-004,66733  
 fileName : G:\GC19\DATA\271X011.raw  
 method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: -14 mV

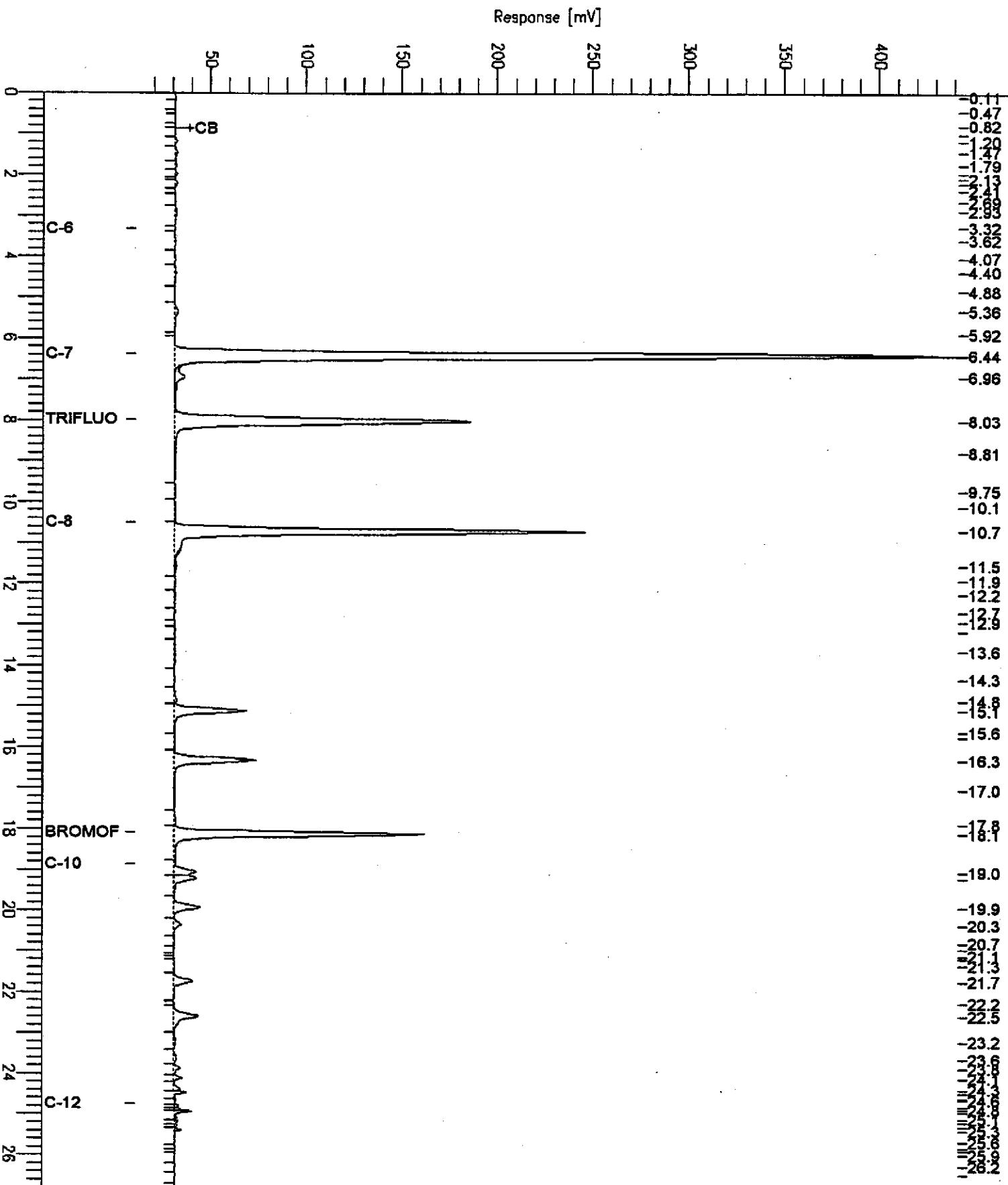
Sample #: B7 Page 1 of 1  
 Date : 9/28/01 07:46 PM  
 Time of Injection: 9/28/01 07:19 PM  
 Low Point : -14.22 mV High Point : 923.88 mV  
 Plot Scale: 938.1 mV



# GC19 TVH 'X' Data File (FID)

Sample Name : 154410-005,66733  
fileName : G:\GC19\DATA\271X012.raw  
method : TVHBTXE  
Start Time : 0.00 min End Time : 26.80 min  
Scale Factor: 1.0

Sample #: A7,HS Page 1 of 1  
Date : 9/28/01 08:22 PM  
Time of Injection: 9/28/01 07:55 PM  
Low Point : 10.31 mV High Point : 441.97 mV  
Plot Offset: 10 mV Plot Scale: 431.7 mV





Curtis &amp; Tompkins, Ltd.

## Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Sampled:	09/26/01
Units:	ug/L	Received:	09/26/01

Type:	BLANK	Batch#:	66803
Lab ID:	QC157576	Analyzed:	10/02/01
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
c-Xylene	ND	0.50

Stimulant	REC	Comments
Trifluorotoluene (PID)	76	56-142
Bromofluorobenzene (PID)	71	55-149



Curtis &amp; Tompkins, Ltd.

**Gasoline by GC/FID CA LUFT**

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC157317	Batch#:	66733
Matrix:	Water	Analyzed:	09/28/01
Units:	ug/L		

Analyte	Spiked	Result	RHC	Limits
Gasoline C7-C12	2,000	1,824	91	73-121

Surrogate	SMC	Limits
Trifluorotoluene (FID)	118	59-135
Bromofluorobenzene (FID)	96	60-140



Curtis &amp; Tompkins, Ltd.

**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	66733
Units:	ug/L	Analyzed:	09/28/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157320

Analyte	Spiked	Result	SRM	Limits
Benzene	20.00	15.94	80	67-117
Toluene	20.00	17.01	85	69-117
Ethylbenzene	20.00	16.09	80	68-124
m,p-Xylenes	40.00	33.88	85	70-125
o-Xylene	20.00	16.98	85	65-129

Surrogate	SRM	Limits
Trifluorotoluene (PID)	76	56-142
Bromofluorobenzene (PID)	75	55-149

Type: BSD Lab ID: QC157321

Analyte	Spiked	Result	SRM	Limits	RPD	Units
Benzene	20.00	16.15	81	67-117	1	20
Toluene	20.00	16.85	84	69-117	1	20
Ethylbenzene	20.00	15.53	78	68-124	4	20
m,p-Xylenes	40.00	33.03	83	70-125	3	20
o-Xylene	20.00	17.00	85	65-129	0	20

Surrogate	SRM	Limits
Trifluorotoluene (PID)	75	56-142
Bromofluorobenzene (PID)	75	55-149

RPD= Relative Percent Difference

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Curtis &amp; Tompkins, Ltd.

**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	66803
Units:	ug/L	Analyzed:	10/02/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157578

Analyte	Spiked	Result	GRPC	Limits	PPD	Line
Benzene	20.00	17.67	88	67-117		
Toluene	20.00	17.52	88	69-117		
Ethylbenzene	20.00	17.68	88	68-124		
m,p-Xylenes	40.00	35.52	89	70-125		
o-Xylene	20.00	18.35	92	65-129		

Surrogate	GRPC	Limits
Trifluorotoluene (PID)	83	56-142
Bromofluorobenzene (PID)	84	55-149

Type: BSD Lab ID: QC157579

Analyte	Spiked	Result	GRPC	Limits	PPD	Line
Benzene	20.00	17.55	88	67-117	1	20
Toluene	20.00	17.33	87	69-117	1	20
Ethylbenzene	20.00	17.63	88	68-124	0	20
m,p-Xylenes	40.00	35.07	88	70-125	1	20
o-Xylene	20.00	18.06	90	65-129	2	20

Surrogate	GRPC	Limits
Trifluorotoluene (PID)	98	56-142
Bromofluorobenzene (PID)	97	55-149



Curtis &amp; Tompkins, Ltd.

## Gasoline by GC/FID CA LUFT

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B (M)
Field ID:	ZZZZZZZZZZ	Batch#:	66733
MSS Lab ID:	154425-001	Sampled:	09/26/01
Matrix:	Water	Received:	09/26/01
Units:	ug/L	Analyzed:	09/29/01
Diln Fac:	1.000		

Type: MS Lab ID: QC157318

Analyte	MSD Result	Spiked	Result	RPLC	limits
Gasoline C7-C12	<33.00	2,000	1,769	88	65-131
<hr/>					
Styrene	119	59-135			
Trifluorotoluene (FID)	97	60-140			
Bromofluorobenzene (FID)					

Type: MSD Lab ID: QC157319

Analyte	Spiked	Result	RPLC	limits	RPD	test
Gasoline C7-C12	2,000	1,769	88	65-131	0	20
<hr/>						
Styrene	121	59-135				
Trifluorotoluene (FID)	97	60-140				
Bromofluorobenzene (FID)						



Curtis &amp; Tompkins, Ltd.

**Gasoline by GC/FID CA LUFT**

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Batch#:	66733
MSS Lab ID:	154444-001	Sampled:	09/27/01
Matrix:	Water	Received:	09/27/01
Units:	ug/L	Analyzed:	09/29/01
Diln Fac:	1.000		

Type: MS Lab ID: QC157394

Analyte	MSS Result	Spiked	Result	SRPC	Limits
Gasoline C7-C12	<33.00	2,000	1,779	89	65-131

Surrogate	SRPC	Limits
Trifluorotoluene (FID)	120	59-135
Bromofluorobenzene (FID)	97	60-140

Type: MSD Lab ID: QC157395

Analyte	Spiked	Result	SRPC	Limits	RPD	Pct
Gasoline C7-C12	2,000	1,771	89	65-131	0	20

Surrogate	SRPC	Limits
Trifluorotoluene (FID)	119	59-135
Bromofluorobenzene (FID)	96	60-140



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	66801
Lab ID:	154410-001	Sampled:	09/26/01
Matrix:	Water	Received:	09/26/01
Units:	ug/L	Analyzed:	10/03/01
Diln Fac:	5.000		

Analyte	Result	RI
Chloromethane	ND	5.0
Vinyl Chloride	ND	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	ND	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	ND	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	ND	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	NEEC	Rimits
1,2-Dichloroethane-d4	100	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	105	80-115

D= Not Detected

L= Reporting Limit



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	66701
Lab ID:	154410-002	Sampled:	09/26/01
Matrix:	Water	Received:	09/26/01
Units:	ug/L	Analyzed:	09/27/01
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	11	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	SPFC	Limits
1,2-Dichloroethane-d4	88	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	99	80-115

D= Not Detected

L= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	66780
Lab ID:	154410-003	Sampled:	09/26/01
Matrix:	Water	Received:	09/26/01
Units:	ug/L	Analyzed:	10/02/01
Diln Fac:	16.67		

Analyte	Result	RL
Chloromethane	ND	17
Vinyl Chloride	ND	8.3
Bromomethane	ND	17
Chloroethane	ND	17
Trichlorofluoromethane	ND	8.3
Freon 113	ND	17
1,1-Dichloroethene	ND	8.3
Methylene Chloride	ND	330
trans-1,2-Dichloroethene	ND	8.3
1,1-Dichloroethane	ND	8.3
cis-1,2-Dichloroethene	ND	8.3
Chloroform	ND	17
1,1,1-Trichloroethane	ND	8.3
Carbon Tetrachloride	ND	8.3
1,2-Dichloroethane	990	8.3
Trichloroethene	ND	8.3
1,2-Dichloropropane	ND	8.3
Bromodichloromethane	ND	8.3
cis-1,3-Dichloropropene	ND	8.3
trans-1,3-Dichloropropene	ND	8.3
1,1,2-Trichloroethane	ND	8.3
Tetrachloroethene	ND	8.3
Dibromochloromethane	ND	8.3
Chlorobenzene	ND	8.3
Bromoform	ND	8.3
1,1,2,2-Tetrachloroethane	ND	8.3
1,3-Dichlorobenzene	ND	8.3
1,4-Dichlorobenzene	ND	8.3
1,2-Dichlorobenzene	ND	8.3

Surrogate	REC	Limit
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	100	80-115

D= Not Detected

L= Reporting Limit



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-4	Diln Fac:	1.000
Lab ID:	154410-004	Sampled:	09/26/01
Matrix:	Water	Received:	09/26/01
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Chloromethane	ND	1.0	66701	09/27/01
Vinyl Chloride	ND	0.5	66701	09/27/01
Bromomethane	ND	1.0	66701	09/27/01
Chloroethane	ND	1.0	66701	09/27/01
Trichlorofluoromethane	ND	0.5	66701	09/27/01
Freon 113	ND	1.0	66701	09/27/01
1,1-Dichloroethene	ND	0.5	66701	09/27/01
Methylene Chloride	ND	20	66701	09/27/01
trans-1,2-Dichloroethene	ND	0.5	66701	09/27/01
1,1-Dichloroethane	ND	0.5	66701	09/27/01
cis-1,2-Dichloroethene	8.1	0.5	66701	09/27/01
Chloroform	ND	1.0	66701	09/27/01
1,1,1-Trichloroethane	ND	0.5	66701	09/27/01
Carbon Tetrachloride	ND	0.5	66701	09/27/01
1,2-Dichloroethane	1.9	0.5	66701	09/27/01
Trichloroethene	ND	0.5	66801	10/03/01
1,2-Dichloropropane	ND	0.5	66701	09/27/01
Bromodichloromethane	ND	0.5	66701	09/27/01
cis-1,3-Dichloropropene	ND	0.5	66701	09/27/01
trans-1,3-Dichloropropene	ND	0.5	66701	09/27/01
1,1,2-Trichloroethane	ND	0.5	66701	09/27/01
Tetrachloroethene	ND	0.5	66701	09/27/01
Dibromochloromethane	ND	0.5	66701	09/27/01
Chlorobenzene	ND	0.5	66701	09/27/01
Bromoform	ND	0.5	66701	09/27/01
1,1,2,2-Tetrachloroethane	ND	0.5	66701	09/27/01
1,3-Dichlorobenzene	ND	0.5	66701	09/27/01
1,4-Dichlorobenzene	ND	0.5	66701	09/27/01
1,2-Dichlorobenzene	ND	0.5	66701	09/27/01

Surrogate	SRM#	Limit#	Batch#	Analyzed
1,2-Dichloroethane-d4	95	78-123	66701	09/27/01
Toluene-d8	95	80-110	66701	09/27/01
Bromofluorobenzene	101	80-115	66701	09/27/01

D= Not Detected

L= Reporting Limit

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	66741
Lab ID:	154410-005	Sampled:	09/26/01
Matrix:	Water	Received:	09/26/01
Units:	ug/L	Analyzed:	09/28/01
Diln Fac:	7.143		

Analyte	Result	RI
Chloromethane	ND	7.1
Vinyl Chloride	ND	3.6
Bromomethane	ND	7.1
Chloroethane	ND	7.1
Trichlorofluoromethane	ND	3.6
Freon 113	ND	7.1
1,1-Dichloroethene	ND	3.6
Methylene Chloride	ND	140
trans-1,2-Dichloroethene	ND	3.6
1,1-Dichloroethane	ND	3.6
cis-1,2-Dichloroethene	ND	3.6
Chloroform	ND	7.1
1,1,1-Trichloroethane	ND	3.6
Carbon Tetrachloride	ND	3.6
1,2-Dichloroethane	22	3.6
Trichloroethene	ND	3.6
1,2-Dichloropropane	ND	3.6
Bromodichloromethane	ND	3.6
cis-1,3-Dichloropropene	ND	3.6
trans-1,3-Dichloropropene	ND	3.6
1,1,2-Trichloroethane	ND	3.6
Tetrachloroethene	ND	3.6
Dibromochloromethane	ND	3.6
Chlorobenzene	ND	3.6
Bromoform	ND	3.6
1,1,2,2-Tetrachloroethane	ND	3.6
1,3-Dichlorobenzene	ND	3.6
1,4-Dichlorobenzene	ND	3.6
1,2-Dichlorobenzene	ND	3.6

Surrogate	*REC	Minutes
1,2-Dichloroethane-d4	97	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	102	80-115

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC157203	Batch#:	66701
Matrix:	Water	Analyzed:	09/27/01
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	111	78-123
Toluene-d8	97	80-110
Bromofluorobenzene	106	80-115

ND = Not Detected

RL = Reporting Limit



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC157347	Batch#:	66741
Matrix:	Water	Analyzed:	09/28/01
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	SRM	Limits
1,2-Dichloroethane-d4	105	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	112	80-115

D= Not Detected

L= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC157487	Batch#:	66780
Matrix:	Water	Analyzed:	10/01/01
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	SPRC	Limits
1,2-Dichloroethane-d4	93	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	101	80-115

D= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC157569	Batch#:	66801
Matrix:	Water	Analyzed:	10/02/01
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	SRPC	limits
1,2-Dichloroethane-d4	102	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	104	80-115

D= Not Detected

L= Reporting Limit



Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	66701
Units:	ug/L	Analyzed:	09/27/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157200

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	49.71	99	74-132
Trichloroethene	50.00	47.93	96	80-119
Chlorobenzene	50.00	47.37	95	80-117

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	78-123
Toluene-d8	98	80-110
Bromofluorobenzene	100	80-115

Type: BSD Lab ID: QC157201

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	47.99	96	74-132	4	20
Trichloroethene	50.00	47.68	95	80-119	1	20
Chlorobenzene	50.00	47.18	94	80-117	0	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	101	80-115

RPD= Relative Percent Difference

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**Purgeable Halocarbons by GC/MS**

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	66741
Units:	ug/L	Analyzed:	09/28/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157344

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	46.78	94	74-132
Trichloroethene	50.00	48.63	97	80-119
Chlorobenzene	50.00	43.54	87	80-117

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	78-123
Toluene-d8	107	80-110
Bromofluorobenzene	109	80-115

Type: BSD Lab ID: QC157345

Analyte	Spiked	Result	%REC	Limits	SPD	Rm
1,1-Dichloroethene	50.00	45.14	90	74-132	4	20
Trichloroethene	50.00	45.99	92	80-119	6	20
Chlorobenzene	50.00	50.15	100	80-117	14	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	78-123
Toluene-d8	100	80-110
Bromofluorobenzene	94	80-115

PD= Relative Percent Difference

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**Purgeable Halocarbons by GC/MS**

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	66780
Units:	ug/L	Analyzed:	10/01/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157485

Analyte	Spiked	Result	RREC	Limits
1,1-Dichloroethene	50.00	49.59	99	74-132
Trichloroethene	50.00	48.27	97	80-119
Chlorobenzene	50.00	48.54	97	80-117

Surrogate	RREC	Limits
1,2-Dichloroethane-d4	93	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	101	80-115

Type: BSD Lab ID: QC157486

Analyte	Spiked	Result	RREC	Limits	RPD	Min
1,1-Dichloroethene	50.00	47.53	95	74-132	4	20
Trichloroethene	50.00	47.64	95	80-119	1	20
Chlorobenzene	50.00	47.95	96	80-117	1	20

Surrogate	RREC	Limits
1,2-Dichloroethane-d4	94	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	99	80-115

## Purgeable Halocarbons by GC/MS

Lab #:	154410	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	66801
Units:	ug/L	Analyzed:	10/02/01
Diln Fac:	1.000		

Type: BS Lab ID: QC157566

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	51.15	102	74-132
Trichloroethene	50.00	50.70	101	80-119
Chlorobenzene	50.00	48.07	96	80-117

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	113	78-123
Toluene-d8	99	80-110
Bromofluorobenzene	101	80-115

Type: BSD Lab ID: QC157567

Analyte	Spiked	Result	%REC	Limits	RPD	Lim.
1,1-Dichloroethene	50.00	48.41	97	74-132	6	20
Trichloroethene	50.00	48.11	96	80-119	5	20
Chlorobenzene	50.00	47.87	96	80-117	0	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	111	78-123
Toluene-d8	101	80-110
Bromofluorobenzene	100	80-115

PD= Relative Percent Difference

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