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January 21, 2004

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Clayton Project No.70-97066.00.001

Subject: Forth Quarter 2003 Groundwater Monitoring Results for the property at  
630 29<sup>th</sup> Avenue in Oakland, California

Dear Mr. Gholami:

Clayton is pleased to present the results for the Forth Quarter 2003 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 the undersigned at (925) 426-2600.

Sincerely,

Handwritten signature of Mathew Reimer in black ink.

Mathew Reimer  
Staff Environmental Consultant  
Environmental Services

Handwritten signature of Jon A. Rosso in black ink.

Jon A. Rosso, P.E.  
Director  
Environmental Services

WBC/mr

cc: Donna Profitt                      Bank of America  
Rita Repko                              Clayton

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**Forth Quarter 2003  
Groundwater Monitoring Results  
for the  
Former Lemoine Sausage Facility  
630 29<sup>th</sup> Avenue  
Oakland, California**

**Clayton Project No. 70-97066.00.001**

**January 21, 2004**

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## 1. INTRODUCTION

Clayton Group Services, Inc., (Clayton) has prepared this quarterly groundwater monitoring report to document the results of the Forth Quarter, 2003 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 Forth Quarter 2003 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 December 16, 2003. Groundwater samples were collected from nine monitoring wells (MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12 and MW-13). One of the monitoring wells, MW-1, was inaccessible.

#### **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, 2003, 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 ¾-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 ¾-inch diameter wells were purged using a peristaltic pump and ¼-inch polytubing, and the 2-inch diameter wells were purged by a submersible pump, or by hand bailing with a 1-liter Teflon bailer attached to nylon bailer twine. Water quality parameters (pH, specific conductivity, and temperature) were measured and recorded onto field sampling data sheets. Water quality parameter measurements were taken 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 and well purging and sampling for the Forth Quarter 2003 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 8015B for Total Petroleum Hydrocarbons as Gasoline (TPH-g)
- USEPA Method 8021B for Aromatic Hydrocarbons (Benzene, Toluene, Ethylbenzene, and total Xylenes [BTEX]), and
- USEPA Method 8260B for Halogenated Volatile Organic Compounds (VOCs).

Certified analytical data sheets and chain-of-custody documentation for the Forth Quarter 2003 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-12. The direction of groundwater flow is inferred to be perpendicular to the piezometric equipotential contours. For the Forth Quarter 2003 monitoring event, the groundwater gradient was determined to be 0.006 feet per foot (ft/ft) towards the southwest.

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The Forth Quarter 2003 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 6 of 9 samples tested, and ranged in concentration from 91 micrograms per liter ( $\mu\text{g/L}$ ) to 34,000  $\mu\text{g/L}$ .
- Benzene was detected in 5 of 9 samples tested, and ranged in concentration from 4.7  $\mu\text{g/L}$  to 14,000  $\mu\text{g/L}$ .
- Toluene was detected in 3 of 9 samples tested, and ranged in concentration from 36  $\mu\text{g/L}$  to 4,900  $\mu\text{g/L}$ .
- Ethylbenzene was detected in 4 of 9 samples tested, and ranged in concentration from 14  $\mu\text{g/L}$  to 1,200  $\mu\text{g/L}$ .
- Total Xylenes was detected in 7 of 9 samples tested, and ranged in concentration from 0.51  $\mu\text{g/L}$  to 4,700  $\mu\text{g/L}$ .

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 Forth Quarter 2003 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 1 of 9 samples tested, at a concentration of 4.3  $\mu\text{g/L}$ .
- Trichloroethene (TCE) was detected in 7 of 9 samples tested, and ranged in concentration from 0.6  $\mu\text{g/L}$  to 140  $\mu\text{g/L}$ .
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 6 of 9 samples tested, and ranged in concentration from 0.6  $\mu\text{g/L}$  to 1200  $\mu\text{g/L}$ .
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 4 of 9 samples tested, and ranged in concentration from 0.6  $\mu\text{g/L}$  to 53  $\mu\text{g/L}$ .
- Vinyl Chloride (VC) was detected in 2 of 9 samples tested, and ranged in concentration from 10  $\mu\text{g/L}$  to 110  $\mu\text{g/L}$ .

The concentrations of TCE (contoured) and 1,2-DCE detected in groundwater samples collected from monitoring wells for the Forth Quarter 2003 monitoring event are presented in Figure 4.

#### 5. CONCLUSION

The groundwater gradient determined for the Forth Quarter 2003 monitoring event was found to be 0.006 ft/ft to the southwest, 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-2 and MW-9. The locations of monitoring wells MW-6, MW-7 and MW-10 define the northern, western, and

northeastern 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 concentrations of TPH-g have either decreased or remained the same in groundwater across the site from the concentrations detected in the previous sampling event, with the exception of wells MW-2, MW-11 and MW-13, which showed a slight increase in concentrations. Additionally, the highest concentrations of BTEX compounds (found in wells MW-2, MW-8, and MW-9) either maintained or slightly increased from those detected in the previous sampling event. Concentrations of these compounds in the down gradient wells (MW-7, MW-11, MW-12, and MW-13) have either maintained or slightly decreased from the concentrations detected in the previous sampling event.

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-6, MW-7, MW-8, MW-10, MW-11, MW-12, and MW-13. The source of TCE and 1,2-DCE are unknown and appear to be originating off-site.

Report prepared by:



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San Francisco Regional Office

January 21, 2004



**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	12/16/2003	16.69	NM	
	9/26/2003		6.88	9.81
	6/24/2003		5.29	11.40
	3/28/2003		4.44	12.25
	12/16/2002		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	12/16/2003	20.79	11.50	9.29
	9/26/2003		11.20	9.59
	6/24/2003		10.24	10.55
	3/28/2003		10.27	10.52
	12/16/2002		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			
		17.78	7.40	10.38
	9/25/2001		6.78	11.00
	6/20/2001		5.77	12.01
	3/21/2001		6.40	11.38
	12/19/2000		6.90	10.88
	9/22/2000		6.30	11.48
	6/15/2000		4.13	13.65
2/8/1999				
MW-5	Removed from monitoring program in October 2001			
		21.12	10.34	10.78
	9/25/2001		9.90	11.22
	6/20/2001		8.68	12.44
	3/21/2001		9.99	11.13
	12/19/2000		9.99	11.13
	9/22/2000		10.36	10.76
	6/15/2000		7.62	13.50
2/8/1999				
MW-6	12/16/2003	16.60	4.99	11.61
	9/26/2003		6.70	9.90
	6/24/2003		5.52	11.08
	3/28/2003		NM	
	12/16/2002		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	12/16/2003	15.47	5.68	9.79
	9/26/2003		7.22	8.25
	6/24/2003		6.13	9.34
	3/28/2003		5.68	9.79
	12/16/2002		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	12/16/2003	17.58	6.69	10.89
	9/26/2003		8.71	8.87
	6/24/2003		7.44	10.14
	3/28/2003		6.62	10.96
	12/16/2002		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
6/15/2000	7.14	10.44		
MW-9	12/16/2003	17.61	6.76	10.85
	9/26/2003		8.14	9.47
	6/24/2003		6.42	11.19
	3/28/2003		6.08	11.53
	12/16/2002		6.58	11.03
	9/11/2002		6.91	10.70
	6/28/2002		7.71	9.90
	3/25/2002		4.98	12.63
	12/3/2001		5.79	11.82
	MW-10		12/16/2003	16.92
9/26/2003		6.98	9.94	
6/24/2003		5.40	11.52	
3/28/2003		4.54	12.38	
12/16/2002		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	
12/3/2001		4.22	12.70	

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-11	12/16/2003	14.87	5.61	9.26
	9/26/2003		7.16	7.71
	6/24/2003		5.86	9.01
	3/28/2003		5.17	9.70
	12/16/2002		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
	12/3/2001		5.67	9.20
MW-12	12/16/2003	14.05	4.99	9.06
	9/26/2003		6.94	7.11
	6/24/2003		5.73	8.32
	3/28/2003		5.08	8.97
	12/16/2002		4.94	9.11
	9/11/2002		6.82	7.23
	6/28/2002		6.13	7.92
MW-13	12/16/2003	13.39	5.01	8.58
	9/26/2003		6.99	6.40
	6/24/2003		5.99	7.40
	3/28/2003		5.34	8.05
	12/16/2002		3.90	9.49
	9/11/2002		6.66	6.73
	6/28/2002		6.21	7.18

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 7<sup>th</sup> Street.
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	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
<b>MW-1</b>	NS											
	9/26/2003	11,000	NA	1,200	960	370	1,600	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2003	14,000	NA	2,400	1,400	500	2,100	<4.2	<4.2	<4.2	<4.2	<4.2
	3/28/2003	20,000	NA	2,700	1,500	650	2,300	<3.6	<3.6	<3.6	<3.6	<3.6
	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	
<b>MW-2</b>	12/16/2003	22,000	NA	10,000	2,700	1,200	2,920	<25	<25	<25	<25	<25
	9/26/2003	20,000	NA	10,000	2,100	960	2,520	<17	<17	<17	<17	<17
	6/24/2003	19,000	NA	10,000	1,700	1,100	2,530	<13	<13	<13	<13	<13
	3/28/2003	30,000	NA	9,300	920	930	2,000	14	<13	<13	<13	<13
	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
<b>MW-3</b>	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
<b>MW-4</b>	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
<b>MW-5</b>	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* <sup>3</sup>	<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	12/16/2003	<50	NA	<0.5	<0.5	<0.5	0.88	<0.5	1.7	0.6	<0.5	<0.5
	9/26/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	0.7**	<0.5	<0.5	<0.5	<0.5
	6/24/2003	130	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/16/2002	62	NA	<0.5	0.54	3.0	8.39	1.0**	0.7	<0.5	<0.5	<0.5
	9/11/2002	120	NA	<0.5	<0.5	<0.5	<0.5	<0.5**	<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**	<0.5	<0.5	<0.5	<0.5
	9/25/2001	760	NA	<0.5	<0.5	<0.5	2.9	<0.5**	<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**	<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	2.2	2.1	4.8	0.78	<0.5	<0.5	<0.5	<0.5
	MW-7	12/16/2003	<50	NA	<0.5	<0.5	<0.5	0.75	<0.5	1.8	0.6	<0.5
9/26/2003		<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
6/24/2003		<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/28/2003		<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<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	NA	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	12/16/2003	1,100	NA	310	<2.5	14	<2.5	4.3	12	1,200	53	110
	9/26/2003	1,300	NA	280	3.9	38	0.85	<3.6	20	890	49	47
	6/24/2003	3,300	NA	520	<0.5	58	0.63	3.7	6.4	1,000	49	61
	3/28/2003	1,500	NA	400	<0.5	50	0.62	<2.5	3.5	700	39	41
	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
6/15/2000	5,400	NA	150	<5	8.9	8.7	<13	210	1,100	73	25	
MW-9	12/16/2003	34,000	NA	14,000	4,900	940	4,700	<42	<42	<42	<42	<42
	9/26/2003	34,000	NA	12,000	5,600	880	4,700	<17	<17	<17	<17	<17
	6/24/2003	45,000	NA	15,000	9,600	1,100	5,200	10	<5	<5	<5	<5
	3/28/2003	61,000	NA	13,000	8,600	860	4,800	<20	<20	<20	<20	<20
	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
	12/3/2001	90,000	NA	15,000	15,000	2,200	9,100	<10	<10	<10	<10	<10
MW-10	12/16/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
	9/26/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	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



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-11	12/16/2003	91	NA	4.7	<0.5	<0.5	0.51	<0.5	2.9	0.9	0.6	<0.5
	9/26/2003	<50	NA	1.2	0.69	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	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
MW-12	12/16/2003	120	NA	<0.5	<0.5	<0.5	0.65	<0.5	140	44	44	<0.5
	9/26/2003	230	NA	2.9	1.1	3.8	6.71	<0.7	210	60	63	<0.7
	6/24/2003	140	NA	<0.5	<0.5	<0.5	<0.5	<1.0	220	58	66	<1.0
	3/28/2003	110	NA	<0.5	<0.5	<0.5	<0.5	<0.7	190	53	53	0.9
	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	12/16/2003	8,100	NA	120	36	72	26.6	<0.7	66 <sup>*10</sup>	240	23	10
	9/26/2003	7,200	NA	150	<1.0	89	57	<1.0	51 <sup>*8</sup>	270	23	5.1
	6/24/2003	8,300	NA	100	<0.5	94	12	<1.0	68 <sup>*9</sup>	250	19	4.2
	3/28/2003	4,400	NA	55	<0.5	51	14.3	<0.5	85 <sup>*8</sup>	150	13	1.8
	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 <sup>*7</sup>	410	13	<1.3
	6/28/2002	5,600	NA	120	55	130	9.5	<0.5	61 <sup>*6</sup>	430	14	4.4

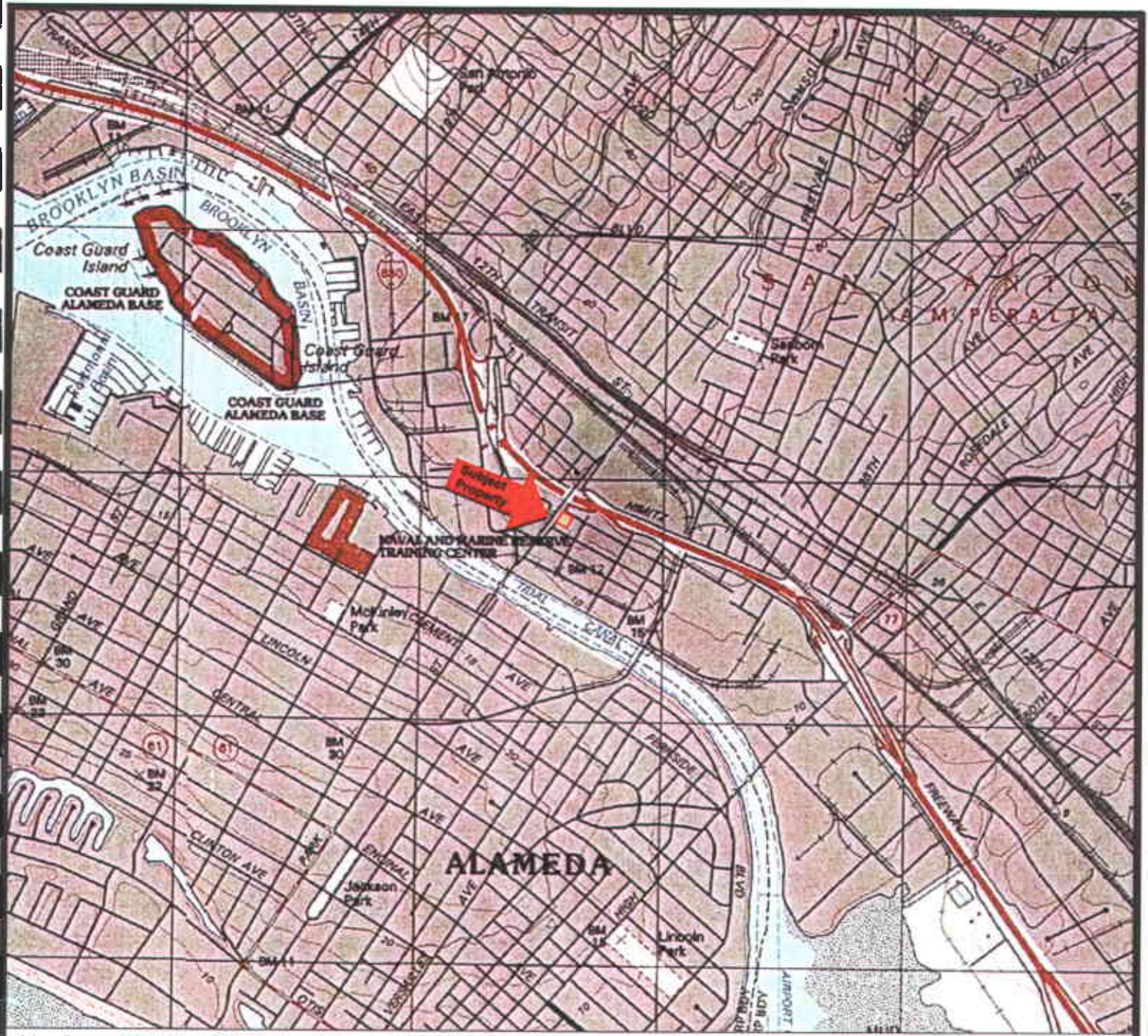
**Notes:**

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

- MTBE = methyl tert-butyl ether.
- TCE = Trichloroethene.
- DCE = Dichloroethene.
- VC = Vinyl Chloride.

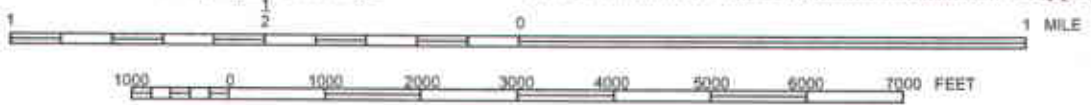
- \*<sup>1</sup> 1,1-DCA detected at 1.1  $\mu\text{g/L}$ .
- \*<sup>2</sup> 1,1-DCA detected at 0.9  $\mu\text{g/L}$ .
- \*<sup>3</sup> Freon -11 detected at 0.6  $\mu\text{g/L}$ .
- \*<sup>4</sup> 1,1-DCA detected at 0.9  $\mu\text{g/L}$ .
- \*<sup>5</sup> 1,1-DCA detected at 0.7  $\mu\text{g/L}$ .
- \*<sup>6</sup> 1,1-DCE detected at 4.7  $\mu\text{g/L}$ .
- \*<sup>7</sup> 1,1-DCE detected at 5.2  $\mu\text{g/L}$ .
- \*<sup>8</sup> 1,1-DCE detected at 1.9  $\mu\text{g/L}$ .
- \*<sup>9</sup> 1,1-DCE detected at 2.8  $\mu\text{g/L}$ .





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



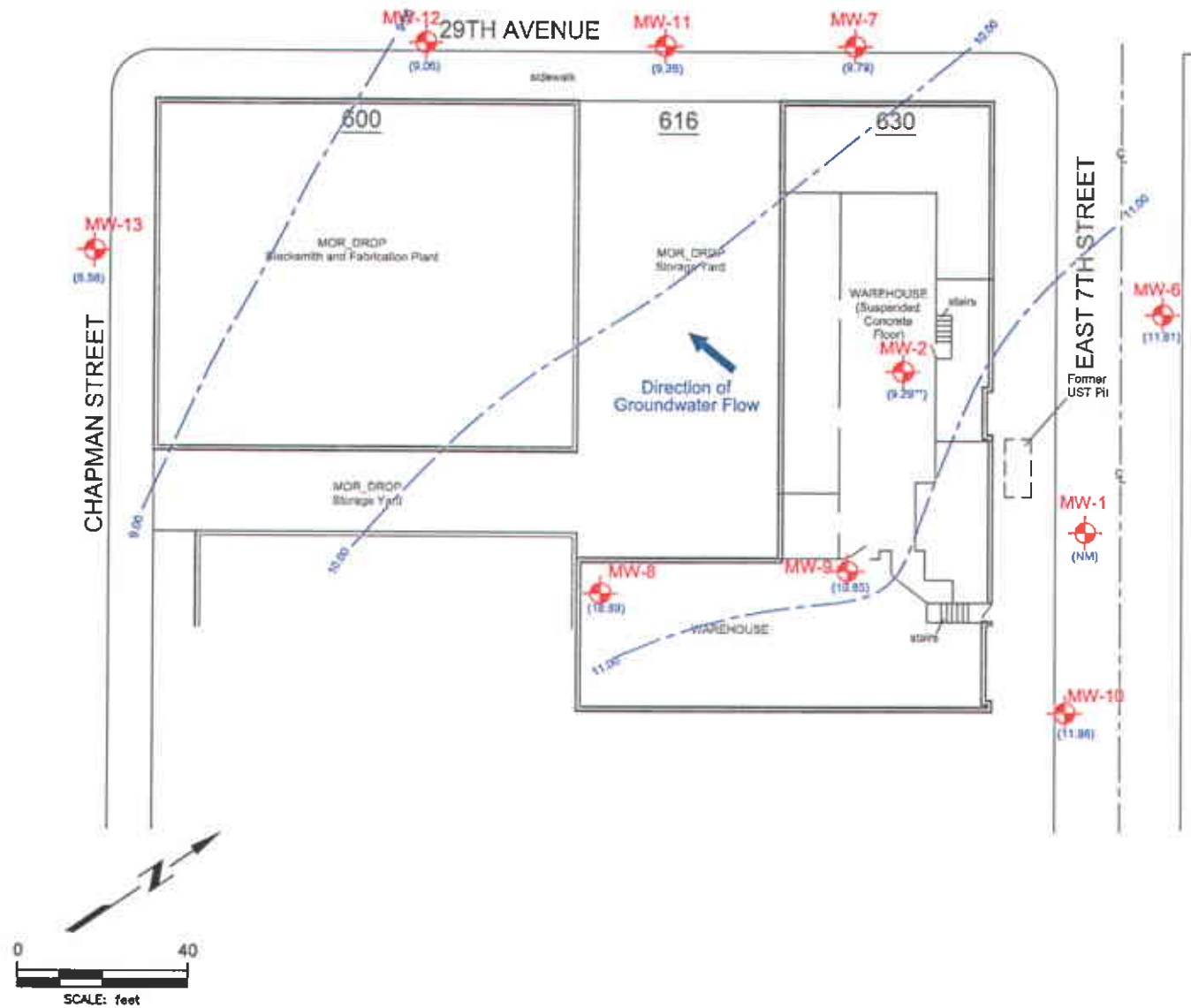
PROPERTY LOCATION MAP  
 Former Lemoine Sausage Factory  
 630 29th Avenue  
 Oakland, California  
 Clayton Project No. 70-97066.00

Figure

1

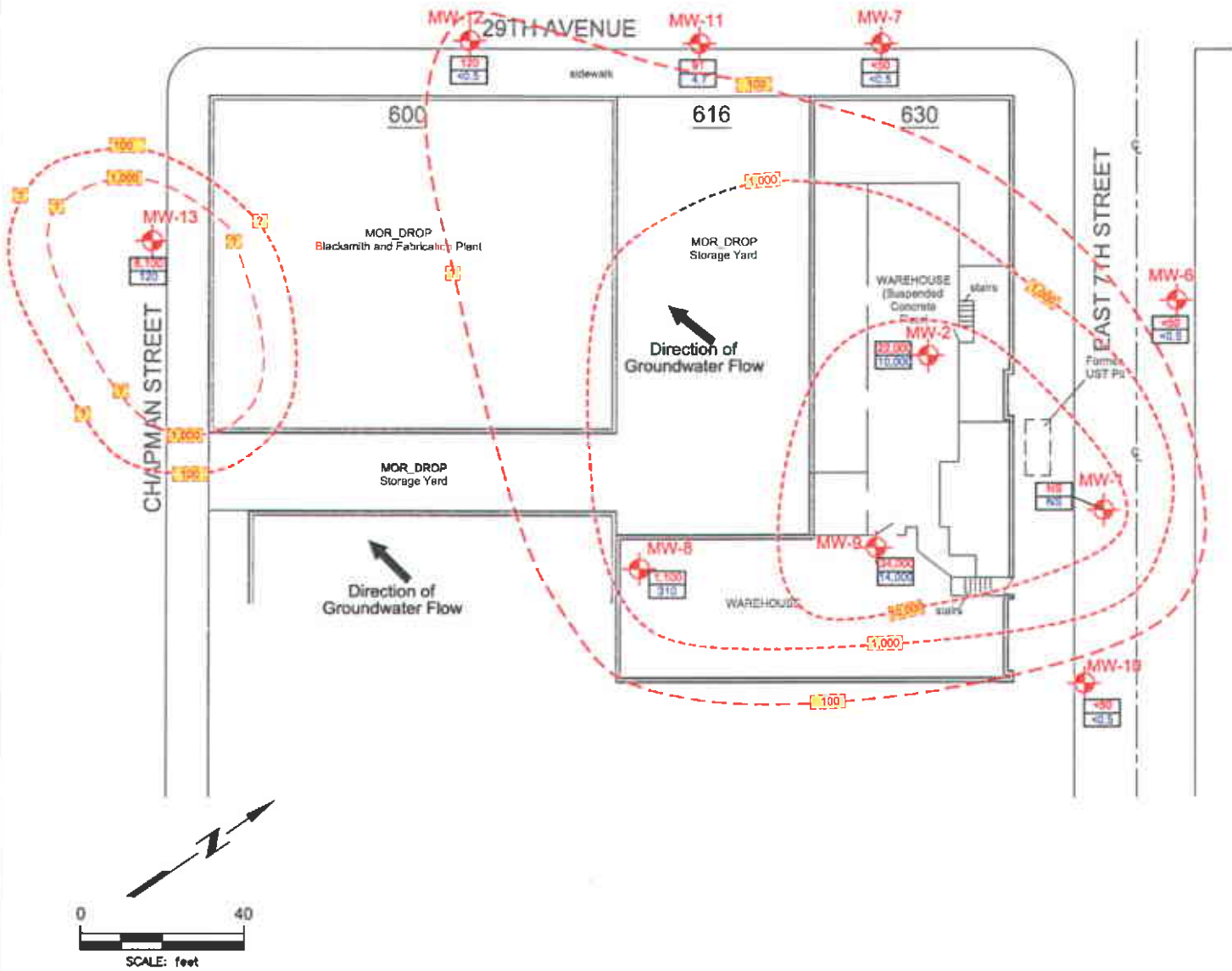






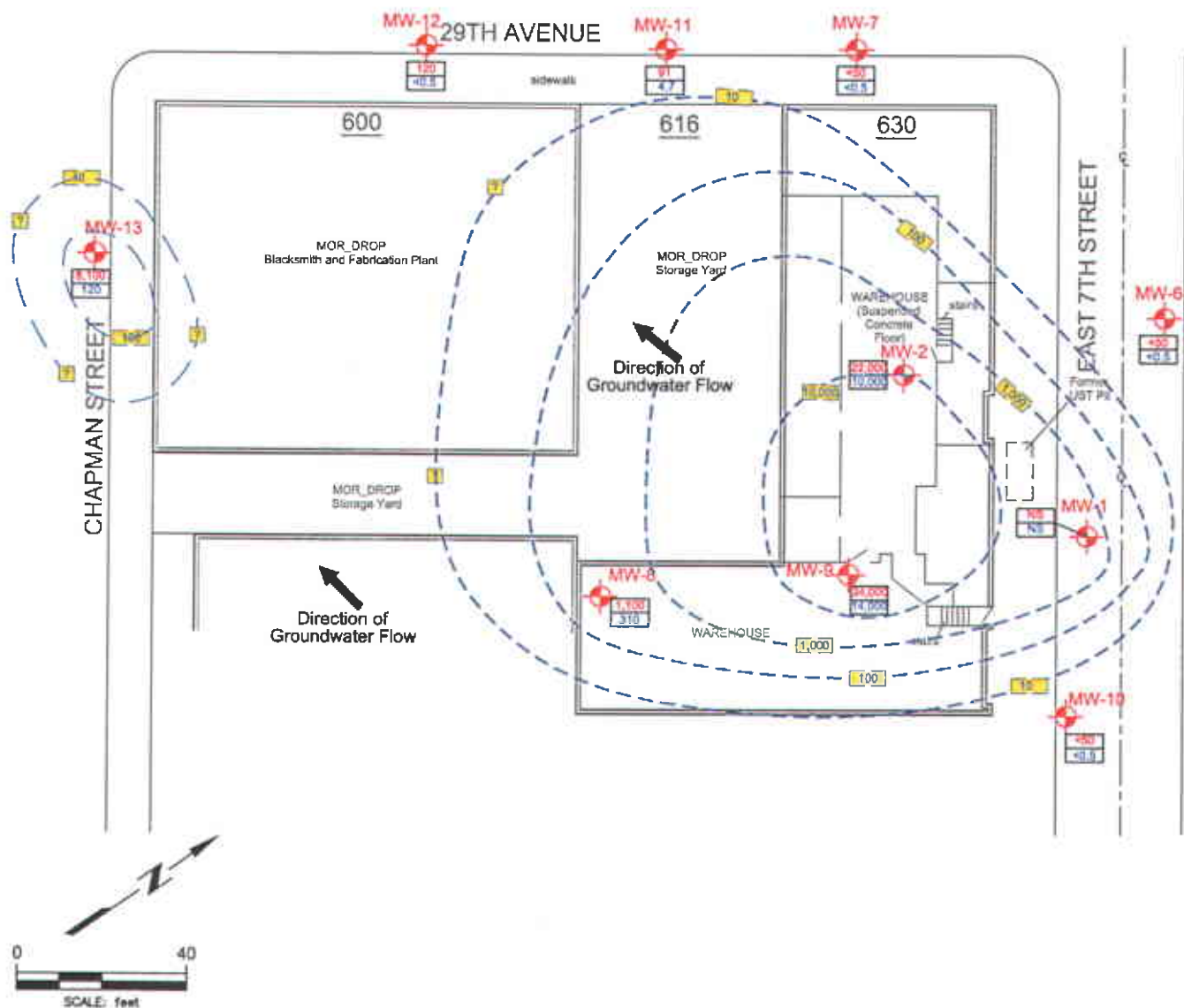
Note:  
 Water table elevation contours are approximate.  
 \*\* Data value not used in contouring

<p><b>LEGEND</b></p> <p>MW-5  Existing Monitoring Well Location        (11.61) Groundwater Elevation in Feet above Mean Sea Level</p> <p>10.00  Groundwater Surface Contour and Elevation</p>	<p><b>GROUNDWATER ELEVATION CONTOUR MAP</b>        (December 16, 2003)</p> <p><b>FORMER LEMOINE SAUSAGE FACTORY</b>        830 29TH AVENUE        OAKLAND, CALIFORNIA        Clayton Project No. 70-97066.00</p>	<p><b>Figure</b></p> <p><b>2</b></p> <p>1/8/04        Q4TH_03.dwg</p>	
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Note:  
Isoconcentration contours are approximate.

LEGEND		TPH as Gasoline CONCENTRATIONS IN GROUNDWATER December, 2003 FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	Figure <b>3a</b> 1/8/04 Q4TH_03.dwg	
MW-1	Existing Monitoring Well Location			
11,000	TPH-G Concentration (micrograms per liter)			
1,200	Benzene Concentration (micrograms per liter)			
1,000	Isoconcentration Contour (micrograms per liter)			



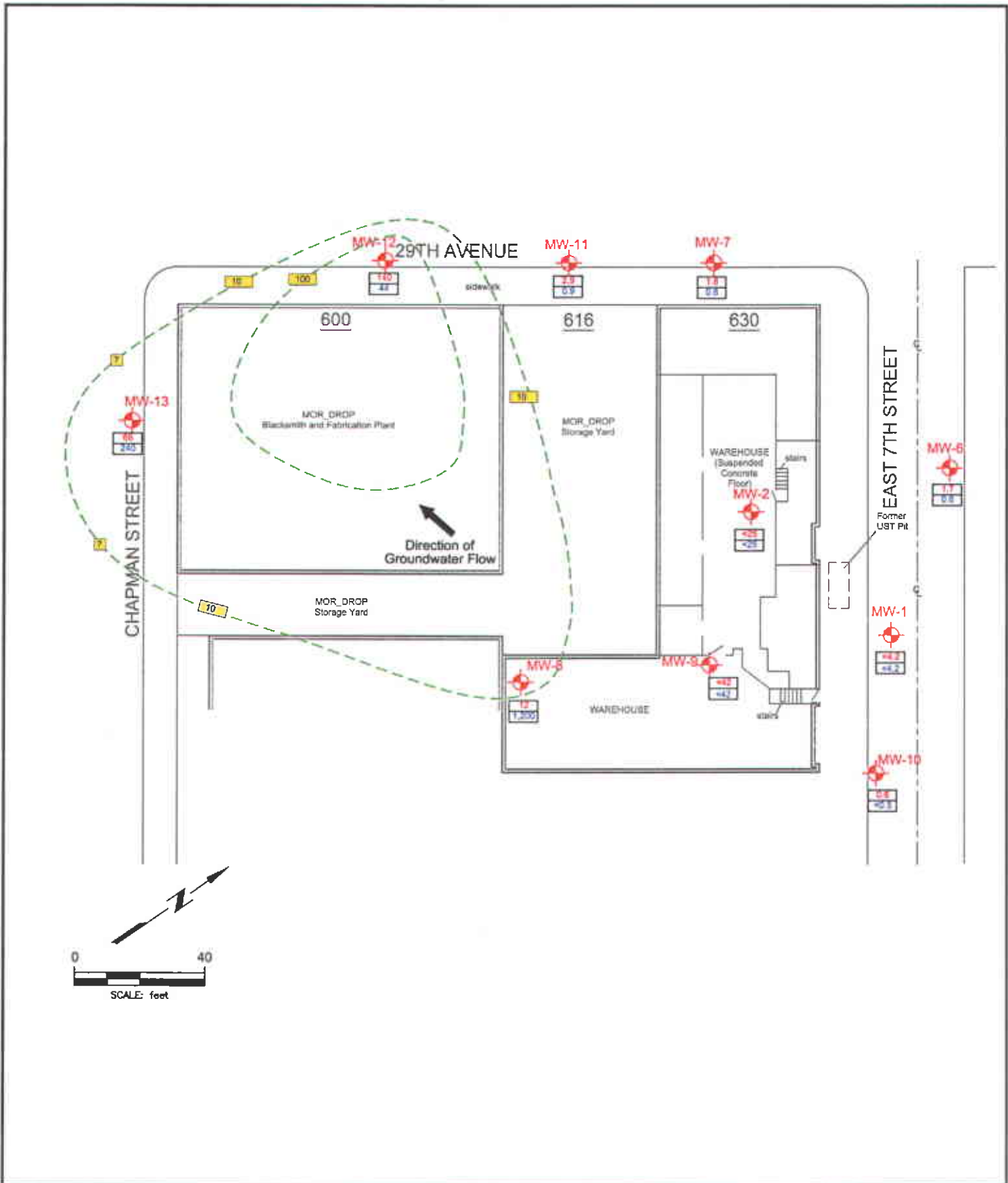
Note:  
Isoconcentration contours are approximate.

LEGEND	
	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, 2003  
 FORMER LEMOINE SAUSAGE FACTORY  
 630 29TH AVENUE  
 OAKLAND, CALIFORNIA  
 Clayton Project No. 70-97066.00

Figure  
**3b**  
 1/8/04  
 Q4TH\_03.dwg





<p><b>LEGEND</b></p> <p>MW-12  Existing Monitoring Well Location</p> <p> 210 TCE Concentration (micrograms per liter)</p> <p> 60 cis 1,2-DCE Concentration (micrograms per liter)</p> <p> 100 TCE Isoconcentration Contour (micrograms per liter)</p>	<p><b>TCE and cis-1,2 DCE CONCENTRATIONS IN GROUNDWATER December 2003</b></p> <p>FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00</p>	<p>Figure <b>4</b> 1/8/04 Q4TH_03.dwg</p>	
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**APPENDIX A**  
**FORTH QUARTER (DECEMBER) 2003**  
**GROUNDWATER SAMPLING LOGS**

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	
	Oakland, California	Purge Method:	
Sampling Location:	<b>MW-1</b>	Date & Time Sampled:	
Top of Casing:	16.69 (ft, msl)	Sampling Method:	
Depth to Water:		Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation		Preservatives:	
Well Bottom	7.69	# of Containers:	
Water Column:		Field Tech:	
Well Casing Volume:	(WC* 0.01)	Weather Conditions:	
Casing Volumes Purged:			
Purge Rate:			3/4" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						

**Field Notes:**  
 12/16/03 CAR PARKED OVER MONITORING WELL





**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	12/16
	Oakland, California	Purge Method:	sub pump
Sampling Location:	<b>MW-6</b>	Date & Time Sampled:	12/16 10:50
Top of Casing:	16.6 (ft. msl)	Sampling Method:	sub pump
Depth to Water:	4.99	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	11.61	Preservatives:	HCl
Well Bottom	-3.40	# of Containers:	6
Water Column:	15.01	Field Tech:	MR
Well Casing Volume:	2.40 (WC* 0.16)	Weather Conditions:	suny
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
10:30	0	7.09	0.25	16	19.2	brown
10:33	2.40	6.96	1.408	14	20.4	clear
10:36	2.40	6.94	1.313	8	20.3	"
10:39	2.40	6.90	1.258	5	19.9	"
10:42	2.40	6.82	1.257	2	20.2	"
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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: sub pump
Sampling Location: MW-7	Date & Time Sampled: 12/16 10:20
Top of Casing: 15.47 (ft, msl)	Sampling Method: sub pump
Depth to Water: 5.68	Sample Type: TPHG/BTEX/8021B
Groundwater Elevation: 9.79	Preservatives: HCL
Well Bottom: -4.53	# of Containers: 6
Water Column: 14.32	Field Tech: MR
Well Casing Volume: 2.29 (WC* 0.16)	Weather Conditions: sunny
Casing Volumes Purged: 4	
Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
10:00	0	7.38	1.167	34	16.6	brown
10:04	2.40	7.30	1.113	30	18.5	clear
10:07	2.40	7.23	1.180	25	18.6	"
10:10	2.40	7.03	1.219	14	18.8	"
10:13	2.40	6.99	1.214	11	18.7	"
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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:	sub pump
Sampling Location:	<b>MW-8</b>	Date & Time Sampled:	12/16 11:55
Top of Casing:	17.58 (ft, msl)	Sampling Method:	sub pump
Depth to Water:	6.69	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	10.89	Preservatives:	HCL
Well Bottom	-2.42	# of Containers:	6
Water Column:	13.31	Field Tech:	MR
Well Casing Volume:	2.13 (WC* 0.16)	Weather Conditions:	Sunny
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
11 :35	0	6.71	1.684	6	15.9	clear
11 :38	2.25	6.69	0.190	8	16.3	clear
11 :41	2.25	6.64	1.604	9	16.6	"
11 :44	2.25	6.69	1.608	6	16.9	"
11 :48	2.25	6.67	1.623	7	17.2	"
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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:	Sub pump
Sampling Location:	<b>MW-9</b>	Date & Time Sampled:	12/16 12:40
Top of Casing:	17.61 (ft, msl)	Sampling Method:	Sub pump
Depth to Water:	6.76	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	10.85	Preservatives:	HCL
Well Bottom	2.61	# of Containers:	6
Water Column:	13.46	Field Tech:	MR
Well Casing Volume:	2.15 (WC* 0.16)	Weather Conditions:	Sunny
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
12 : 15	0	6.05	9.81	41	15.9	Clear
12 : 19	2.25	6.19	12.57	34	17.5	"
12 : 24	2.25	6.26	211	32	17.3	"
12 : 29	2.25	6.27	1,437	31	17.1	"
12 : 35	2.25	6.25	1,328	31	17.2	"
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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: sub pump
Sampling Location: <b>MW-10</b>	Date & Time Sampled: 12/16 11:25
Top of Casing: 16.92 (ft. msl)	Sampling Method: sub pump
Depth to Water: 4.94	Sample Type: TPHG/BTEX /8021B
Groundwater Elevation 11.98	Preservatives: HCL
Well Bottom 7.92	# of Containers: 6
Water Column: 19.90	Field Tech: MR
Well Casing Volume: 3.18 (WC* 0.16)	Weather Conditions: sunny
Casing Volumes Purged: 4	
Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
11 : 00	0	7.44	30.7	36	17.0	clear
11 : 04	3.25	7.30	34.2	26	17.7	"
11 : 08	3.25	7.02	137.7	12	18.0	"
11 : 13	3.25	6.94	139.8	9	17.5	"
11 : 17	3.25	6.89	125.4	5	17.3	"
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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:	Sub pump
Sampling Location:	<b>MW-11</b>	Date & Time Sampled:	12/16 9:50
Top of Casing:	14.87 (ft, msl)	Sampling Method:	Sub pump
Depth to Water:	5.61	Sample Type:	TPHG/BTEX/8021B
Groundwater Elevation	9.26	Preservatives:	HC
Well Bottom	-0.13	# of Containers:	6
Water Column:	9.39	Field Tech:	MR
Well Casing Volume:	1.50 (WC* 0.16)	Weather Conditions:	cloudy
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
9:34	0	6.99	2.13	11	16.0	clear
9:37	1.50	6.98	2.11	10	18.1	"
9:40	1.50	6.93	2.14	7	18.2	"
9:43	1.50	6.94	2.12	6	18.7	"
9:46	1.50	6.87	2.08	5	18.8	"
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Field Notes:

### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	12/16/03
	Oakland, California	Purge Method:	Sub pump
Sampling Location:	<b>MW-12</b>	Date & Time Sampled:	12/16/03 9:25
Top of Casing:	14.05 (ft, msl)	Sampling Method:	Sub pump
Depth to Water:	4.99	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	9.06	Preservatives:	HCL
Well Bottom	-0.95	# of Containers:	6
Water Column:	10.01	Field Tech:	MR
Well Casing Volume:	1.60 (WC* 0.16)	Weather Conditions:	cloudy
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
9:10	0	6.93	2.35	9	10.3	clear
9:13	1.65	6.83	2.50	4	17.9	clear
9:15	1.65	6.86	2.55	3	17.6	"
9:18	1.65	6.82	2.55	1	17.6	"
9:21	1.65	6.84	2.57	2	18.2	"
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Field Notes:



**FIELD SAMPLING DATA SHEET**

Job Location: Former Lemoine Sausage Factory	Job #: 70-97066
630 29th Avenue	Date Purged: 12/16/02
Oakland, California	Purge Method: sub pump
Sampling Location: <b>MW-13</b>	Date & Time Sampled: 2/16/03 9:45
Top of Casing: 13.39 (ft. msl)	Sampling Method: sub pump
Depth to Water: 5.01	Sample Type: TPHG/BTEX /8021B
Groundwater Elevation 8.58	Preservatives: HCL
Well Bottom -1.61	# of Containers: 0
Water Column: 10.19	Field Tech: MR
Well Casing Volume: 1.63 (WC* 0.16)	Weather Conditions: cloudy
Casing Volumes Purged: 4	
Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
8:17	0	8.17	.352	55	19.1	clear/cloudy
8:26	1.75	7.16	175.3	18	19.1	clear
8:30	1.75	7.01	.199	15	20.2	"
8:34	1.75	7.00	9.61	12	20.0	"
8:37	1.75	6.87	8.32	3	19.7	"
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Field Notes:



# CHAIN OF CUSTODY

Lab: Curtis&Tompkins

TAT: 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 29<sup>th</sup> Avenue, Oakland  
 Global Id T0600102114  
 Log code CGSP

Special instructions and/or specific regulatory requirements:

Special instructions and/or specific regulatory requirements:						Analyses Requested										Sample Condition/Comments	Preservative
Sample Identification	Sample Date	Sample Time	Matrix Media	Qty Conts	TPH as Gasoline/BTEX												
<del>MW-01 -04Q3-03Q4</del>	<del>12/16/03</del>		L	6													
MW-02 <del>04Q3-03Q4</del>	12/16/03	13:25	L	6	X	X											HCI
MW-06 <del>04Q3</del>		10:50	L	6													HCI
MW-07 <del>04Q3</del>		10:20	L	6													HCI
MW-08 <del>04Q3</del>		11:55	L	6													HCI
MW-09 <del>04Q3</del>		12:40	L	6													HCI
MW-10 <del>04Q3</del>		11:25	L	6													HCI
MW-11 <del>04Q3</del>		9:50	L	6													HCI
MW-12 <del>04Q3</del>		9:25	L	6													HCI
MW-13 <del>04Q3</del>		8:45	L	6													HCI

Received  On ice  
 Cold  Ambient  Intact

Collected by: Mat Rein 2:15 Date/Time 12/16/03  
 Relinquished by: Mat Rein 2:15 Date/Time 12/16/03  
 Relinquished by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_

Collector's Signature: Mat Rein 2:15 Date/Time 12/16/03  
 Received by: \_\_\_\_\_ Date/Time 12-16-03  
 Received by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Sample Condition on Rcpt: \_\_\_\_\_

**APPENDIX B**

**FORTH QUARTER (DECEMBER) 2003**

**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: 06-JAN-04  
Lab Job Number: 169482  
Project ID: 70-97066.00  
Location: Sausage Factory

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

Reviewed by:

  
Project Manager

Reviewed by:

  
Operations Manager

This package may be reproduced only in its entirety.

Laboratory Number: **169482**  
Client: **Clayton Group Services**  
Project Name: **Sausage Factory**

Order Date: **12/16/03**

### **CASE NARRATIVE**

This hardcopy data package contains sample results and batch QC results for nine water samples received from the above referenced project. The samples were received cold and intact.

**Total Volatile Hydrocarbons (TVH)/BTXE:** The TVH surrogate recoveries for sample MW-13 03Q4 (169482-009) were above acceptance limits due to coelution of the surrogate peaks with hydrocarbon peaks. No other analytical problems were encountered.

**Volatile Organic Compounds:** No analytical problems were encountered.



# CHAIN OF CUSTODY

Lab: Curtis&Tompkins

TAT: 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 29<sup>th</sup> Avenue, Oakland  
 Global\_Id: T0600102114  
 Log code: CGSP

Special instructions and/or specific regulatory requirements:

Analyses Requested					
Sample Identification	Sample Date	Sample Time	Matrix Media	No. of Cons.	TPH as Gasoline/BTEX
MW-01 <del>04Q3 03Q4</del>	12/16/03		L	6	
MW-02 <del>04Q3 03Q4</del>	12/16/03	13:25	L	6	X X
MW-06 <del>04Q3</del>		10:50	L	6	
MW-07 <del>04Q3</del>		10:20	L	6	
MW-08 <del>04Q3</del>		11:55	L	6	
MW-09 <del>04Q3</del>		12:40	L	6	
MW-10 <del>04Q3</del>		11:25	L	6	
MW-11 <del>04Q3</del>		9:50	L	6	
MW-12 <del>04Q3</del>		9:25	L	6	
MW-13 <del>04Q3</del>		8:45	L	6	

Sample Condition/Comments	Preservative
	HCI
	HCI
	HCI
	HCI
	HCI
	HCI
	HCI
	HCI
	HCI
	HCI
	HCI

Received  On ice  
 Cold  Ambient  Intact

1  
2  
3  
4  
5  
6  
7  
8  
9

Collected by: Mat Rein 2:15 Date/Time 12/16/03  
 Relinquished by: Mat Rein 2:15 Date/Time 12/16/03  
 Relinquished by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_

Collector's Signature: Mat Rein 2:15 Date/Time 12/16/03  
 Received by: \_\_\_\_\_ Date/Time 12-16-03  
 Received by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Sample Condition on Rcpt: \_\_\_\_\_

## AB2886 Electronic Delivery

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 [Check EDD](#)

**SUCCESSFUL EDF CHECK - NO ERRORS**

<u>ORGANIZATION NAME:</u>	Curtis & Tompkins, Ltd.
<u>USER NAME:</u>	CTBERK
<u>DATE CHECKED:</u>	1/7/2004 3:16:57 PM
<u>GLOBAL ID:</u>	NOT SELECTED
<u>FILE UPLOADED:</u>	169482_edf.zip

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 &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/03
Units:	ug/L	Received:	12/16/03

Field ID:	MW-02 03Q4	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	87006
Lab ID:	169482-001	Analyzed:	12/17/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	22,000	1,300	8015B
Benzene	10,000	13	EPA 8021B
Toluene	2,700	13	EPA 8021B
Ethylbenzene	1,200	13	EPA 8021B
m,p-Xylenes	2,600	13	EPA 8021B
o-Xylene	320	13	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	117	57-150	8015B
Bromofluorobenzene (FID)	101	65-144	8015B
Trifluorotoluene (PID)	81	54-149	EPA 8021B
Bromofluorobenzene (PID)	77	58-143	EPA 8021B

Field ID:	MW-06 03Q4	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	86978
Lab ID:	169482-002	Analyzed:	12/16/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	0.88	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	106	57-150	8015B
Bromofluorobenzene (FID)	103	65-144	8015B
Trifluorotoluene (PID)	75	54-149	EPA 8021B
Bromofluorobenzene (PID)	74	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit



# GC07 TVH 'A' Data File RTX 502

Sample Name : 169482-001,87006

Sample #: b1.3

Page 1 of 1

File Name : g:\gc07\data\351a017.raw

Date : 12/18/03 10:32 AM

Method : TVHBTXE

Time of Injection: 12/17/03 08:43 PM

Start Time : 0.00 min

End Time : 26.00 min

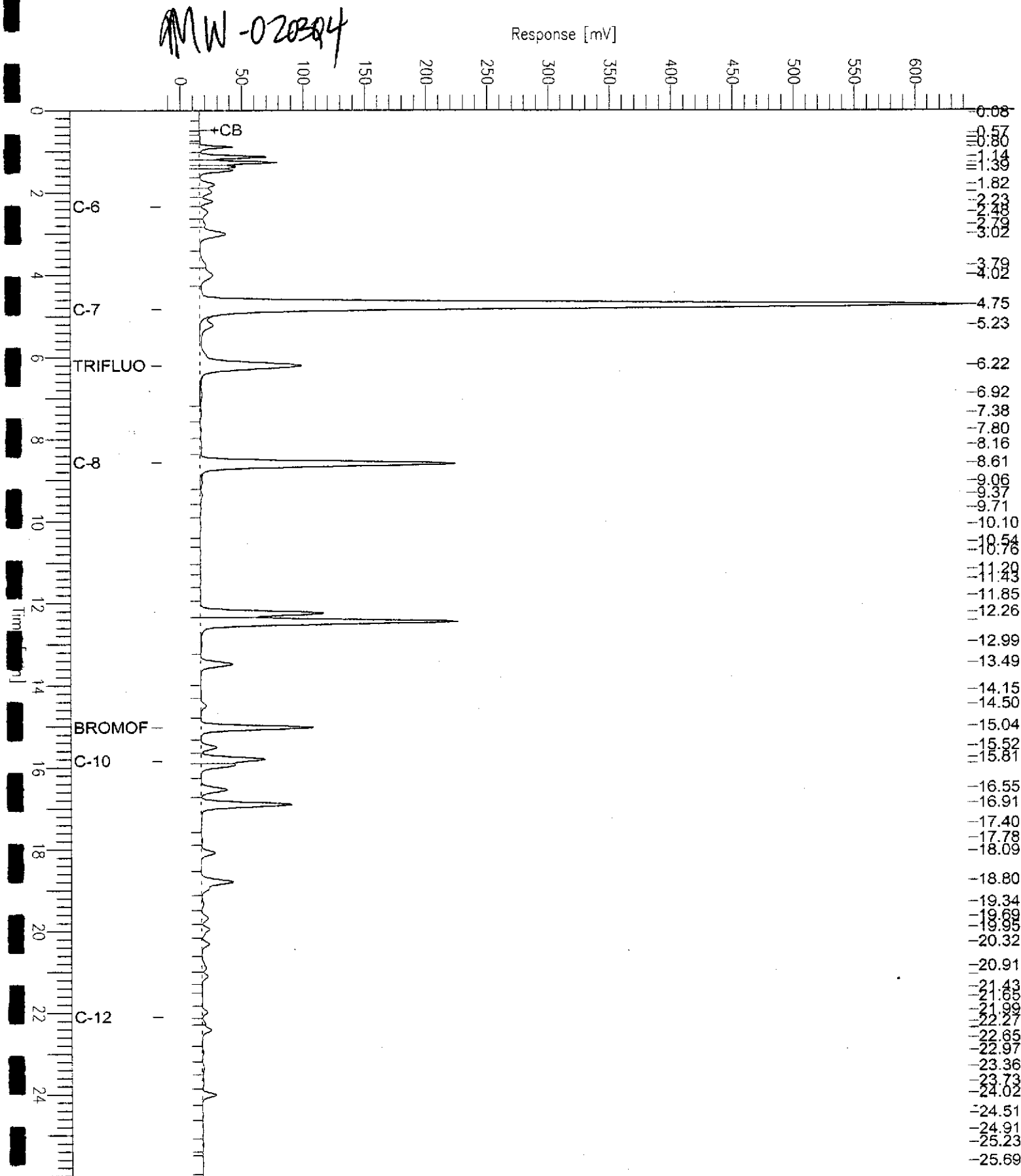
Low Point : -15.73 mV

High Point : 642.25 mV

Scale Factor: 1.0

Plot Offset: -16 mV

Plot Scale: 658.0 mV



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/03
Units:	ug/L	Received:	12/16/03

Field ID:	MW-07 03Q4	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	86978
Lab ID:	169482-003	Analyzed:	12/17/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	0.75	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	98	57-150	8015B
Bromofluorobenzene (FID)	96	65-144	8015B
Trifluorotoluene (PID)	69	54-149	EPA 8021B
Bromofluorobenzene (PID)	70	58-143	EPA 8021B

Field ID:	MW-08 03Q4	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	87006
Lab ID:	169482-004	Analyzed:	12/17/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,100	250	8015B
Benzene	310	2.5	EPA 8021B
Toluene	ND	2.5	EPA 8021B
Ethylbenzene	14	2.5	EPA 8021B
m,p-Xylenes	ND	2.5	EPA 8021B
o-Xylene	ND	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	125	57-150	8015B
Bromofluorobenzene (FID)	110	65-144	8015B
Trifluorotoluene (PID)	88	54-149	EPA 8021B
Bromofluorobenzene (PID)	80	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit

# GC07 TVH 'A' Data File RTX 502

Sample Name : 169482-004.87006

Sample #: b1.3

Page 1 of 1

File Name : G:\GC07\DATA\351A019.raw

Date : 12/17/03 10:18 PM

Method : TVHBTXE

Time of Injection: 12/17/03 09:52 PM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 5.10 mV

High Point : 234.77 mV

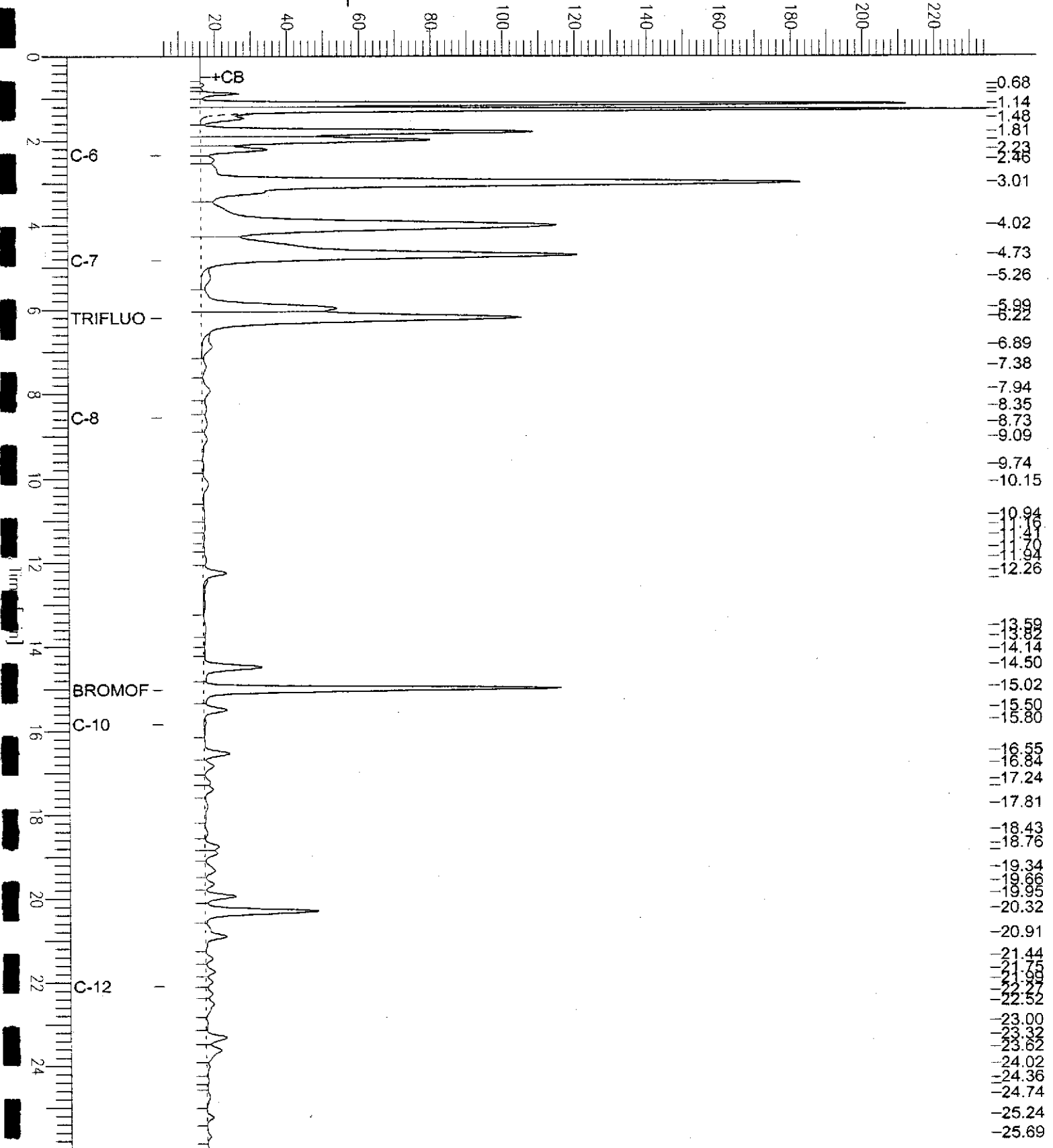
Scale Factor: 1.0

Plot Offset: 5 mV

Plot Scale: 229.7 mV

*MW-08 0324*

Response [mV]



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/03
Units:	ug/L	Received:	12/16/03

Field ID: MW-09 03Q4      Lab ID: 169482-005  
 Type: SAMPLE              Analyzed: 12/17/03

Analyte	Result	RL	Diln Fac	Batch#	Analysis
Gasoline C7-C12	34,000	1,000	20.00	86978	8015B
Benzene	14,000	25	50.00	87006	EPA 8021B
Toluene	4,900	10	20.00	86978	EPA 8021B
Ethylbenzene	940	10	20.00	86978	EPA 8021B
m,p-Xylenes	3,700	10	20.00	86978	EPA 8021B
o-Xylene	1,000	10	20.00	86978	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analysis
Trifluorotoluene (FID)	114	57-150	20.00	86978	8015B
Bromofluorobenzene (FID)	101	65-144	20.00	86978	8015B
Trifluorotoluene (PID)	83	54-149	20.00	86978	EPA 8021B
Bromofluorobenzene (PID)	75	58-143	20.00	86978	EPA 8021B

Field ID: MW-10 03Q4      Diln Fac: 1.000  
 Type: SAMPLE              Batch#: 86978  
 Lab ID: 169482-006      Analyzed: 12/17/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
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)	106	57-150	8015B
Bromofluorobenzene (FID)	103	65-144	8015B
Trifluorotoluene (PID)	75	54-149	EPA 8021B
Bromofluorobenzene (PID)	74	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit  
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# GC07 TVH 'A' Data File RTX 502

Sample Name : 169482-005,86978

Sample #: b1.3

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File Name : G:\GC07\DATA\350A024.raw

Date : 12/17/03 08:18 AM

Method : TVHBTXE

Time of Injection: 12/17/03 03:14 AM

Start Time : 0.00 min End Time : 26.00 min

Low Point : -36.86 mV

High Point : 1067.37 mV

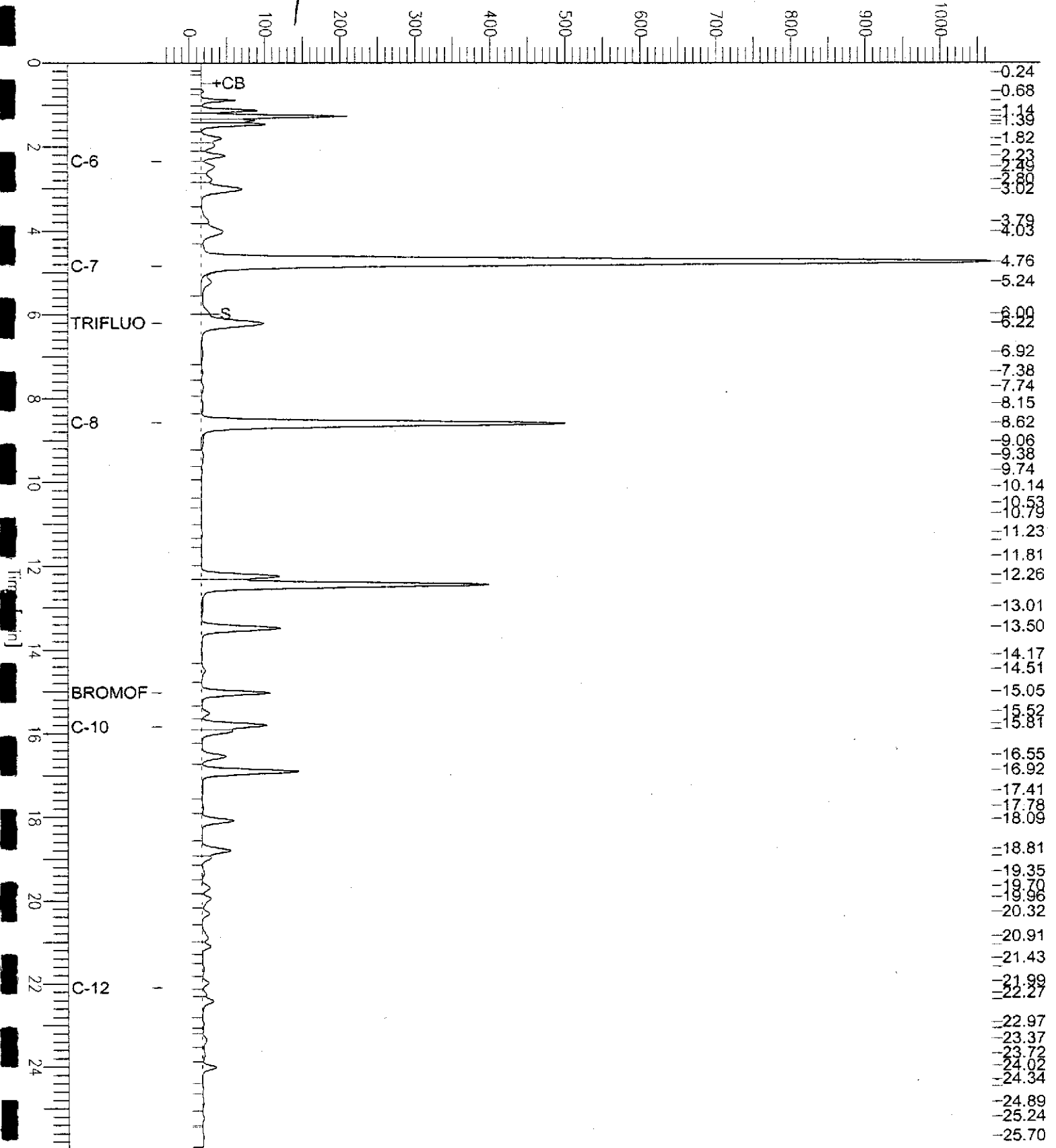
Scale Factor: 1.0

Plot Offset: -37 mV

Plot Scale: 1104.2 mV

*MW-09 0394*

Response [mV]



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/03
Units:	ug/L	Received:	12/16/03

Field ID:	MW-11 03Q4	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	86978
Lab ID:	169482-007	Analyzed:	12/17/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	91	50	8015B
Benzene	4.7	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	0.51	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	110	57-150	8015B
Bromofluorobenzene (FID)	100	65-144	8015B
Trifluorotoluene (PID)	75	54-149	EPA 8021B
Bromofluorobenzene (PID)	73	58-143	EPA 8021B

Field ID:	MW-12 03Q4	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	86978
Lab ID:	169482-008	Analyzed:	12/17/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	120 Y Z	50	8015B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	0.65	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	57-150	8015B
Bromofluorobenzene (FID)	98	65-144	8015B
Trifluorotoluene (PID)	78	54-149	EPA 8021B
Bromofluorobenzene (PID)	72	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit

# GC07 TVH 'A' Data File RTX 502

Sample Name : 169482-007,86978

Sample #: b7

Page 1 of 1

FileName : G:\GC07\DATA\350A020.raw

Date : 12/17/03 08:18 AM

Method : TVHBTXE

Time of Injection: 12/17/03 12:55 AM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 9.64 mV

High Point : 130.32 mV

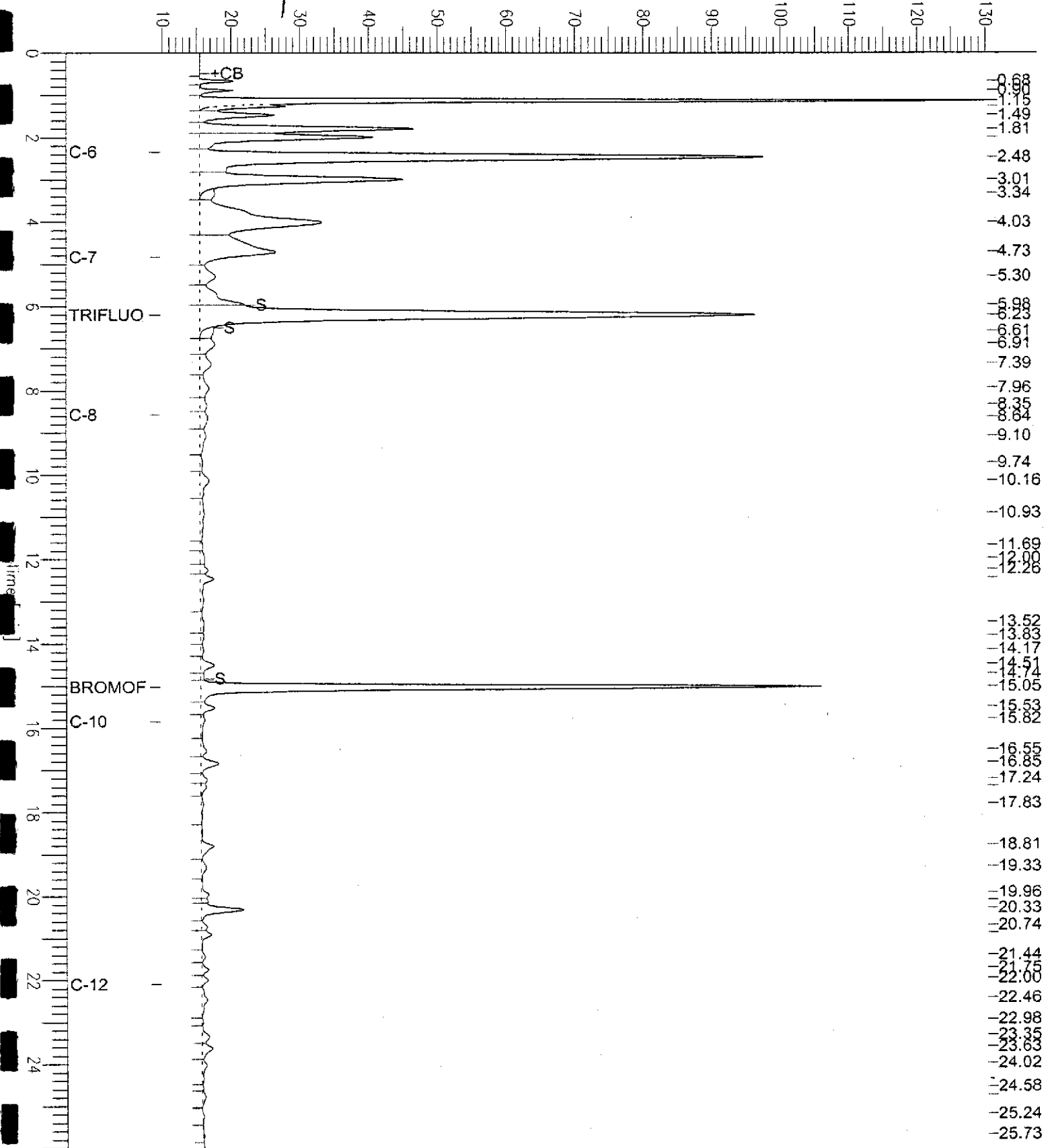
Scale Factor: 1.0

Plot Offset: 10 mV

Plot Scale: 120.7 mV

*MW-11 0304*

Response [mV]



# GC07 TVH 'A' Data File RTX 502

Sample Name : 169482-008,86978

Sample #: b7

Page 1 of 1

FileName : G:\GC07\DATA\350A021.raw

Date : 12/17/03 01:56 AM

Method : TVHBTXE

Time of Injection: 12/17/03 01:30 AM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 11.12 mV

High Point : 104.36 mV

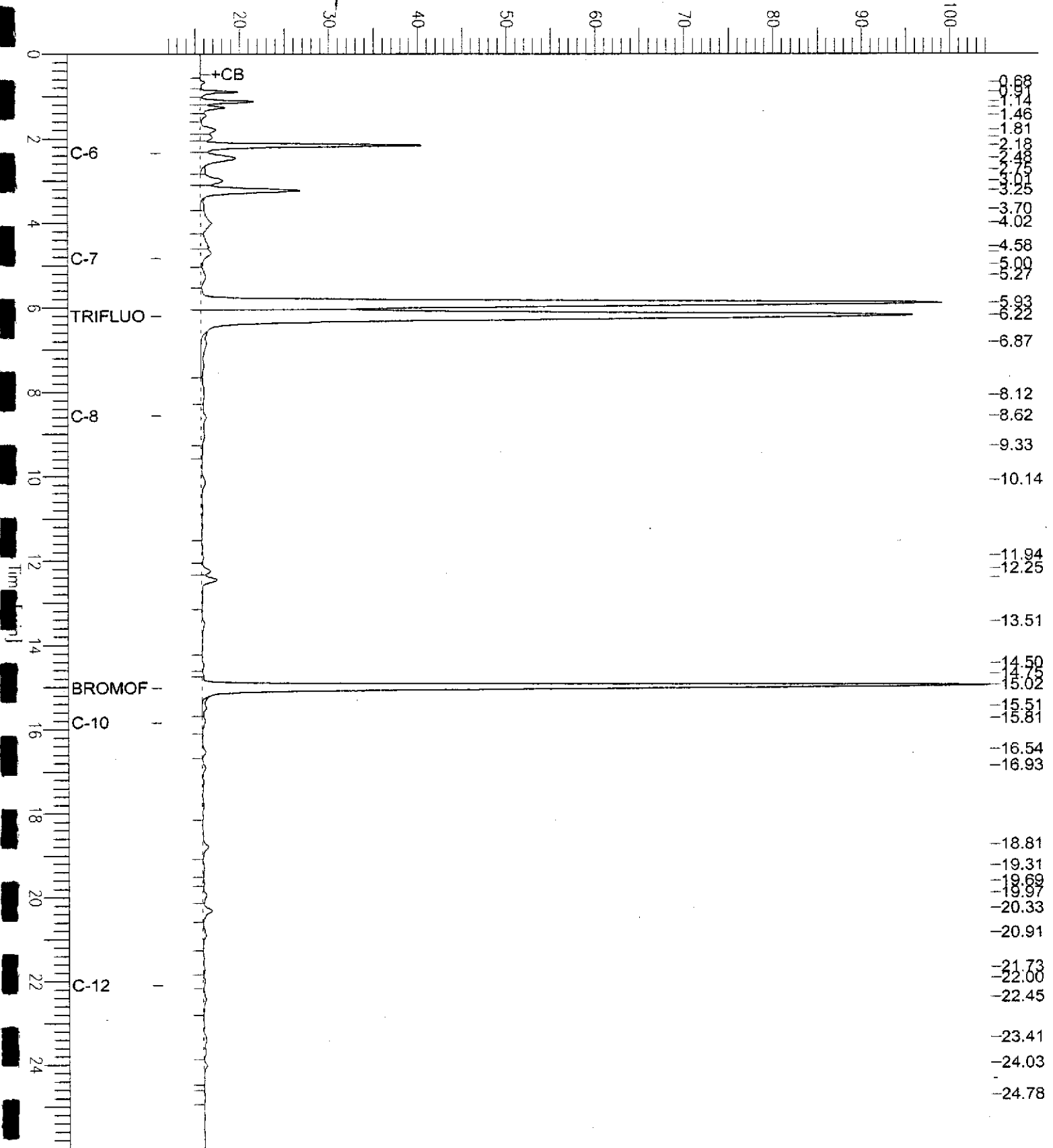
Scale Factor: 1.0

Plot Offset: 11 mV

Plot Scale: 93.2 mV

*MW-12 0394*

Response [mV]





## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/03
Units:	ug/L	Received:	12/16/03

Field ID:	MW-13 03Q4	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	87090
Lab ID:	169482-009	Analyzed:	12/19/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	8,100 Y	100	8015B
Benzene	120 C	1.0	EPA 8021B
Toluene	36 C	1.0	EPA 8021B
Ethylbenzene	72	1.0	EPA 8021B
m,p-Xylenes	5.6 C	1.0	EPA 8021B
o-Xylene	21 C	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	149	57-150	8015B
Bromofluorobenzene (FID)	183 *	65-144	8015B
Trifluorotoluene (PID)	138	54-149	EPA 8021B
Bromofluorobenzene (PID)	138	58-143	EPA 8021B

Type:	BLANK	Batch#:	86978
Lab ID:	QC235316	Analyzed:	12/16/03
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
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)	102	57-150	8015B
Bromofluorobenzene (FID)	98	65-144	8015B
Trifluorotoluene (PID)	73	54-149	EPA 8021B
Bromofluorobenzene (PID)	72	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit

# Chromatogram

Sample Name : 169482-009,87090

Sample #: c1.0

Page 1 of 1

FileName : G:\GC05\DATA\353G020.raw

Date : 12/20/03 10:46 AM

Method : TVHBTXE

Time of Injection: 12/19/03 09:57 PM

Start Time : 0.00 min

End Time : 25.00 min

Low Point : -19.15 mV

High Point : 696.84 mV

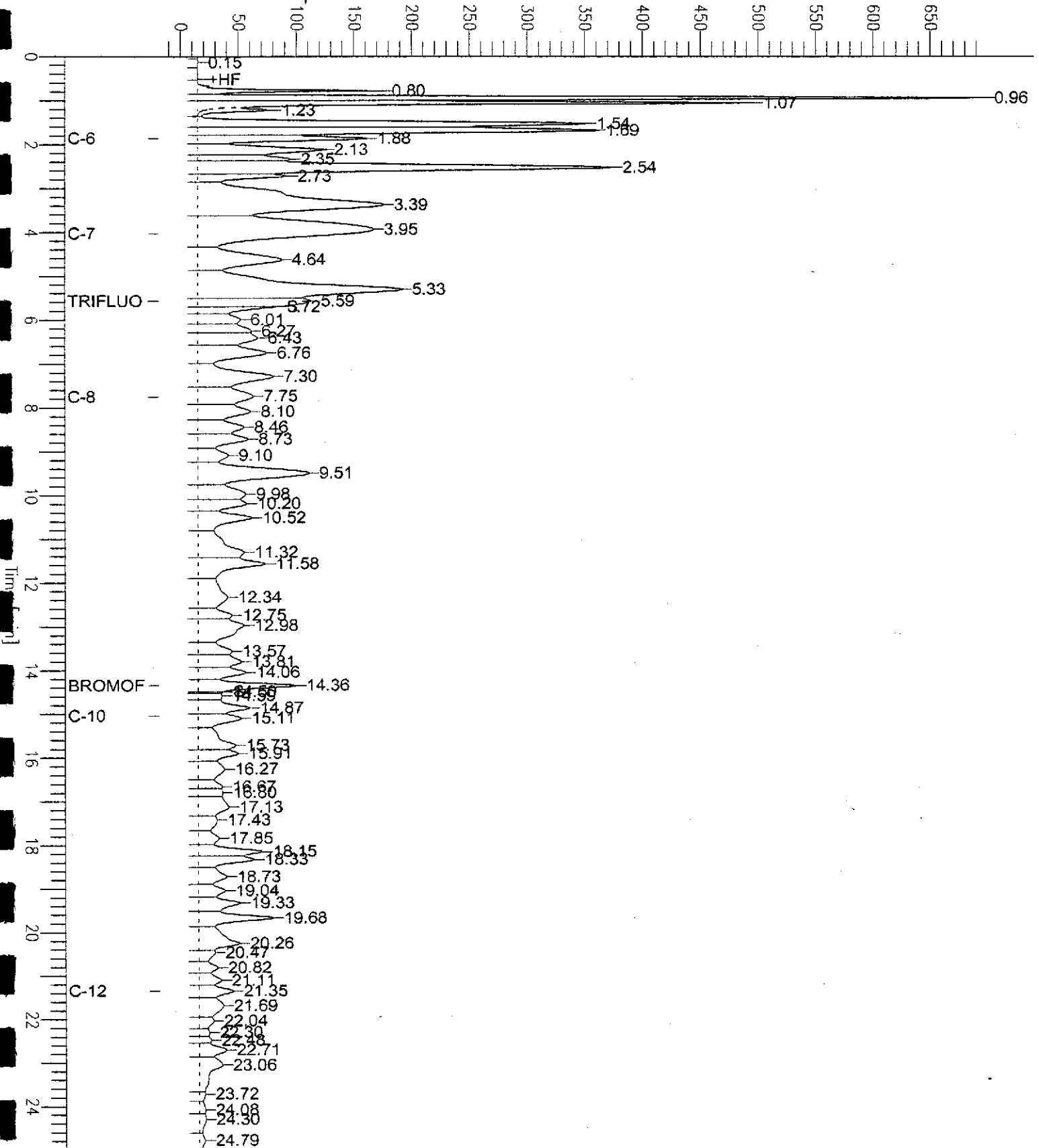
Scale Factor: 1.0

Plot Offset: -19 mV

Plot Scale: 716.0 mV

MW-13 0394

Response [mV]

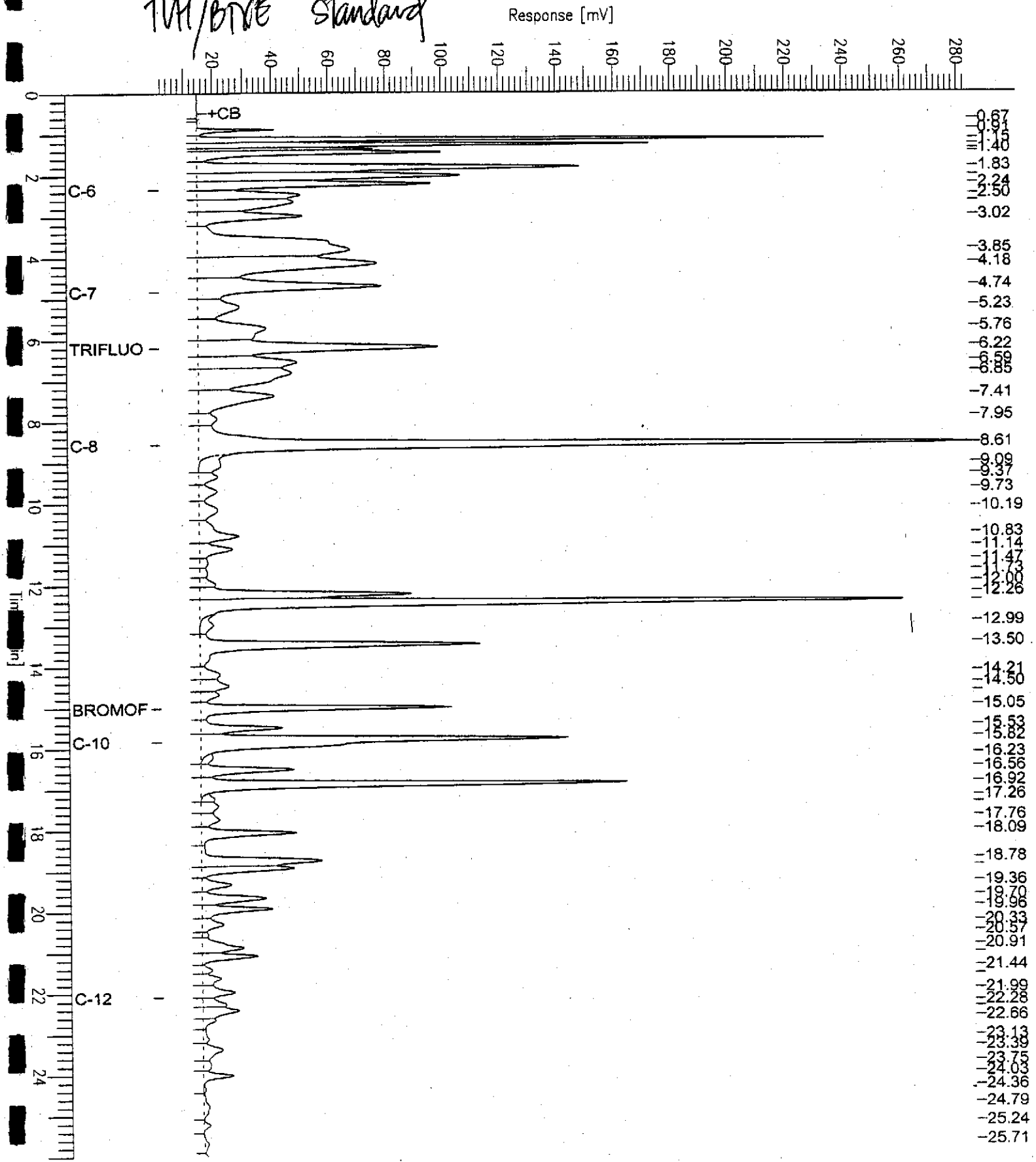


# GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc235317,86978,03wa2034,5/5000  
 File Name : G:\GC07\DATA\350A002.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : 1.0

Sample # :  
 Date : 12/16/03 02:53 PM  
 Time of Injection: 12/16/03 02:27 PM  
 Low Point : 1.38 mV  
 High Point : 283.71 mV  
 Plot Scale: 282.3 mV  
 End Time : 26.00 min  
 Plot Offset: 1 mV

*TVH/BTVE Standard*



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	12/16/03
Units:	ug/L	Received:	12/16/03

Type:	BLANK	Batch#:	87006
Lab ID:	QC235445	Analyzed:	12/17/03
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
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)	100	57-150	8015B
Bromofluorobenzene (FID)	96	65-144	8015B
Trifluorotoluene (PID)	73	54-149	EPA 8021B
Bromofluorobenzene (PID)	71	58-143	EPA 8021B

Type:	BLANK	Batch#:	87090
Lab ID:	QC235758	Analyzed:	12/19/03
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
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	57-150	8015B
Bromofluorobenzene (FID)	103	65-144	8015B
Trifluorotoluene (PID)	94	54-149	EPA 8021B
Bromofluorobenzene (PID)	105	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 ND= Not Detected  
 RL= Reporting Limit  
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## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC235317	Batch#:	86978
Matrix:	Water	Analyzed:	12/16/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,994	100	80-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		122	57-150
Bromofluorobenzene (FID)		103	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC235318	Batch#:	86978
Matrix:	Water	Analyzed:	12/16/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	20.00	18.18	91	78-123
Toluene	20.00	17.13	86	79-120
Ethylbenzene	20.00	17.73	89	80-120
m,p-Xylenes	40.00	37.33	93	76-120
o-Xylene	20.00	17.97	90	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		69	54-149
Bromofluorobenzene (PID)		68	58-143

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC235447	Batch#:	87006
Matrix:	Water	Analyzed:	12/17/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,032	102	80-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		119	57-150
Bromofluorobenzene (FID)		102	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		



Curtis & Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8021B
Field ID:	ZZZZZZZZZZ	Batch#:	87006
MSS Lab ID:	169480-002	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/17/03
Diln Fac:	1.000		

Type: MS Lab ID: QC235491

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12			NA		
Benzene	<0.09000	20.00	18.99	95	75-128
Toluene	<0.04600	20.00	17.47	87	79-127
Ethylbenzene	<0.05900	20.00	17.30	86	78-124
m,p-Xylenes	<0.06600	40.00	34.94	87	67-121
o-Xylene	<0.05300	20.00	16.39	82	77-131

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		76	54-149
Bromofluorobenzene (PID)		72	58-143

Type: MSD Lab ID: QC235492

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12		NA				
Benzene	20.00	19.53	98	75-128	3	20
Toluene	20.00	17.77	89	79-127	2	20
Ethylbenzene	20.00	17.02	85	78-124	2	20
m,p-Xylenes	40.00	33.42	84	67-121	4	20
o-Xylene	20.00	15.51	78	77-131	6	20

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		76	54-149
Bromofluorobenzene (PID)		72	58-143

NA= Not Analyzed  
RPD= Relative Percent Difference  
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## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	87090
MSS Lab ID:	169529-005	Sampled:	12/17/03
Matrix:	Water	Received:	12/18/03
Units:	ug/L	Analyzed:	12/19/03
Diln Fac:	1.000		

Type: MS Lab ID: QC235841

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.85	2,000	2,044	101	76-120
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		125	57-150
Bromofluorobenzene (FID)		134	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC235842

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,043	101	76-120	0	20
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		132	57-150
Bromofluorobenzene (FID)		144	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed  
 RPD= Relative Percent Difference  
 Page 1 of 1



## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-02 03Q4	Batch#:	87091
Lab ID:	169482-001	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/19/03
Diln Fac:	50.00		

Analyte	Result	RL
Chloromethane	ND	50
Vinyl Chloride	ND	25
Bromomethane	ND	50
Chloroethane	ND	50
Trichlorofluoromethane	ND	50
Freon 113	ND	50
1,1-Dichloroethene	ND	25
Methylene Chloride	ND	1,000
trans-1,2-Dichloroethene	ND	25
1,1-Dichloroethane	ND	25
cis-1,2-Dichloroethene	ND	25
Chloroform	ND	50
1,1,1-Trichloroethane	ND	25
Carbon Tetrachloride	ND	25
1,2-Dichloroethane	ND	25
Trichloroethene	ND	25
1,2-Dichloropropane	ND	25
Bromodichloromethane	ND	25
cis-1,3-Dichloropropene	ND	25
trans-1,3-Dichloropropene	ND	25
1,1,2-Trichloroethane	ND	25
Tetrachloroethene	ND	25
Dibromochloromethane	ND	25
Chlorobenzene	ND	25
Bromoform	ND	25
1,1,2,2-Tetrachloroethane	ND	25
1,3-Dichlorobenzene	ND	25
1,4-Dichlorobenzene	ND	25
1,2-Dichlorobenzene	ND	25

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-123

**Purgeable Halocarbons by GC/MS**

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-06 03Q4	Batch#:	87148
Lab ID:	169482-002	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/22/03
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	0.6	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	1.7	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	98	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	109	80-123

ND= Not Detected  
 RL= Reporting Limit  
 Page 1 of 1



## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-07 03Q4	Batch#:	87148
Lab ID:	169482-003	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/22/03
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	0.6	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	1.8	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	101	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	110	80-123

ND= Not Detected

NL= Reporting Limit

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**Purgeable Halocarbons by GC/MS**

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-08 03Q4	Batch#:	87148
Lab ID:	169482-004	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/23/03
Diln Fac:	7.143		

Analyte	Result	RL
Chloromethane	ND	7.1
Vinyl Chloride	110	3.6
Bromomethane	ND	7.1
Chloroethane	ND	7.1
Trichlorofluoromethane	ND	7.1
Freon 113	ND	7.1
1,1-Dichloroethene	ND	3.6
Methylene Chloride	ND	140
trans-1,2-Dichloroethene	53	3.6
1,1-Dichloroethane	ND	3.6
cis-1,2-Dichloroethene	1,200	3.6
Chloroform	ND	7.1
1,1,1-Trichloroethane	ND	3.6
Carbon Tetrachloride	ND	3.6
1,2-Dichloroethane	4.3	3.6
Trichloroethene	12	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	Limits
1,2-Dichloroethane-d4	104	77-129
Toluene-d8	98	80-120
Bromofluorobenzene	119	80-123

D= Not Detected  
 RL= Reporting Limit  
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## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-09 03Q4	Batch#:	87091
Lab ID:	169482-005	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/20/03
Diln Fac:	83.33		

Analyte	Result	RL
Chloromethane	ND	83
Vinyl Chloride	ND	42
Bromomethane	ND	83
Chloroethane	ND	83
Trichlorofluoromethane	ND	83
Freon 113	ND	83
1,1-Dichloroethene	ND	42
Methylene Chloride	ND	1,700
trans-1,2-Dichloroethene	ND	42
1,1-Dichloroethane	ND	42
cis-1,2-Dichloroethene	ND	42
Chloroform	ND	83
1,1,1-Trichloroethane	ND	42
Carbon Tetrachloride	ND	42
1,2-Dichloroethane	ND	42
Trichloroethene	ND	42
1,2-Dichloropropane	ND	42
Bromodichloromethane	ND	42
cis-1,3-Dichloropropene	ND	42
trans-1,3-Dichloropropene	ND	42
1,1,2-Trichloroethane	ND	42
Tetrachloroethene	ND	42
Dibromochloromethane	ND	42
Chlorobenzene	ND	42
Bromoform	ND	42
1,1,2,2-Tetrachloroethane	ND	42
1,3-Dichlorobenzene	ND	42
1,4-Dichlorobenzene	ND	42
1,2-Dichlorobenzene	ND	42

Surrogate	*REC	Limits
1,2-Dichloroethane-d4	104	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-123

D= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-10 03Q4	Batch#:	87148
Lab ID:	169482-006	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/22/03
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	0.6	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	102	77-129
Toluene-d8	98	80-120
Bromofluorobenzene	117	80-123

### Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-11 03Q4	Batch#:	87148
Lab ID:	169482-007	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/22/03
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	0.6	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	0.9	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	2.9	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	113	80-123

ND= Not Detected  
 RL= Reporting Limit  
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## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-12 03Q4	Batch#:	87091
Lab ID:	169482-008	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/20/03
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	44	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	44	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	140	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-123

ND= Not Detected  
 RL= Reporting Limit  
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**Purgeable Halocarbons by GC/MS**

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-13 03Q4	Batch#:	87142
Lab ID:	169482-009	Sampled:	12/16/03
Matrix:	Water	Received:	12/16/03
Units:	ug/L	Analyzed:	12/22/03
Diln Fac:	1.429		

Analyte	Result	RL
Chloromethane	ND	1.4
Vinyl Chloride	10	0.7
Bromomethane	ND	1.4
Chloroethane	ND	1.4
Trichlorofluoromethane	ND	1.4
Freon 113	ND	1.4
1,1-Dichloroethene	1.8	0.7
Methylene Chloride	ND	29
trans-1,2-Dichloroethene	23	0.7
1,1-Dichloroethane	ND	0.7
cis-1,2-Dichloroethene	240	0.7
Chloroform	ND	1.4
1,1,1-Trichloroethane	ND	0.7
Carbon Tetrachloride	ND	0.7
1,2-Dichloroethane	ND	0.7
Trichloroethene	66	0.7
1,2-Dichloropropane	ND	0.7
Bromodichloromethane	ND	0.7
cis-1,3-Dichloropropene	ND	0.7
trans-1,3-Dichloropropene	ND	0.7
1,1,2-Trichloroethane	ND	0.7
Tetrachloroethene	ND	0.7
Dibromochloromethane	ND	0.7
Chlorobenzene	ND	0.7
Bromoform	ND	0.7
1,1,2,2-Tetrachloroethane	ND	0.7
1,3-Dichlorobenzene	ND	0.7
1,4-Dichlorobenzene	ND	0.7
1,2-Dichlorobenzene	ND	0.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-123

ND= Not Detected  
 RL= Reporting Limit  
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## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC235766	Batch#:	87091
Matrix:	Water	Analyzed:	12/19/03
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	104	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC235973	Batch#:	87142
Matrix:	Water	Analyzed:	12/22/03
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	102	77-129
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-123

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC235997	Batch#:	87148
Matrix:	Water	Analyzed:	12/22/03
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	101	77-129
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-123

**Purgeable Halocarbons by GC/MS**

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	87091
Units:	ug/L	Analyzed:	12/19/03
Diln Fac:	1.000		

Type: BS Lab ID: QC235763

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	46.34	93	73-126
Trichloroethene	50.00	49.12	98	79-125
Chlorobenzene	50.00	48.85	98	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-123

Type: BSD Lab ID: QC235764

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	49.61	99	73-126	7	20
Trichloroethene	50.00	50.42	101	79-125	3	20
Chlorobenzene	50.00	51.51	103	80-120	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-123

## Purgeable Halocarbons by GC/MS

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	87142
Units:	ug/L	Analyzed:	12/22/03
Diln Fac:	1.000		

Type: BS Lab ID: QC235971

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	49.82	100	73-126
Trichloroethene	50.00	52.33	105	79-125
Chlorobenzene	50.00	53.47	107	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-123

Type: BSD Lab ID: QC235972

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	51.12	102	73-126	3	20
Trichloroethene	50.00	53.97	108	79-125	3	20
Chlorobenzene	50.00	52.89	106	80-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-123

**Purgeable Halocarbons by GC/MS**

Lab #:	169482	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	87148
Units:	ug/L	Analyzed:	12/22/03
Diln Fac:	1.000		

Type: BS Lab ID: QC235994

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	48.56	97	73-126
Trichloroethene	50.00	52.18	104	79-125
Chlorobenzene	50.00	49.76	100	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	77-129
Toluene-d8	105	80-120
Bromofluorobenzene	101	80-123

Type: BSD Lab ID: QC235995

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	51.04	102	73-126	5	20
Trichloroethene	50.00	53.34	107	79-125	2	20
Chlorobenzene	50.00	51.17	102	80-120	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-123