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November 18, 2003

RO 334

Mr. Amir Gholami  
Hazardous Materials Specialists  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
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Alameda County

NOV 25 2003

Environmental Health

Clayton Project No.70-97066.00.001

Subject: Third 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 Third 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,

A handwritten signature in cursive script, appearing to read "Michael P. Krzeminski".

Mike Krzeminski  
Environmental Consultant  
Environmental Services

A handwritten signature in cursive script, appearing to read "Jon A. Rosso".

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

WBC/mk

cc: Donna Profitt                      Bank of America  
Rita Repko                              Clayton

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*Alameda County*  
*NOV 25 2003*  
*Environmental Health*

**Third 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**

**November 18, 2003**

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## 1. INTRODUCTION

Clayton Group Services, Inc., (Clayton) has prepared this quarterly groundwater monitoring report to document the results of the Third 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 Third 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 September 26, 2003. Groundwater samples were collected from ten monitoring wells (MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12 and MW-13).

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

Depth to water was measured in each monitoring well to determine the groundwater elevation, gradient and flow direction. The depth to water in each monitoring well was measured on September 26, 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 Third 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 Third 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-13. The direction of groundwater flow is inferred to be perpendicular to the piezometric equipotential contours. For the Third Quarter 2003 monitoring event, the groundwater gradient was determined to be 0.013 feet per foot (ft/ft) towards the southwest.

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The Third 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 10 samples tested, and ranged in concentration from 230 micrograms per liter ( $\mu\text{g/L}$ ) to 34,000  $\mu\text{g/L}$ .
- Benzene was detected in 7 of 10 samples tested, and ranged in concentration from 1.2  $\mu\text{g/L}$  to 12,000  $\mu\text{g/L}$ .
- Toluene was detected in 6 of 10 samples tested, and ranged in concentration from 0.69  $\mu\text{g/L}$  to 5,600  $\mu\text{g/L}$ .
- Ethylbenzene was detected in 6 of 10 samples tested, and ranged in concentration from 3.8  $\mu\text{g/L}$  to 960  $\mu\text{g/L}$ .
- Total Xylenes was detected in 6 of 10 samples tested, and ranged in concentration from 0.85  $\mu\text{g/L}$  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 Third 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 10 samples tested, at a concentration of 0.7  $\mu\text{g/L}$ .
- Trichloroethene (TCE) was detected in 3 of 10 samples tested, and ranged in concentration from 20  $\mu\text{g/L}$  to 210  $\mu\text{g/L}$ .
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 3 of 10 samples tested, and ranged in concentration from 60  $\mu\text{g/L}$  to 890  $\mu\text{g/L}$ .
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 3 of 10 samples tested, and ranged in concentration from 23  $\mu\text{g/L}$  to 63  $\mu\text{g/L}$ .
- Vinyl Chloride (VC) was detected in 2 of 10 samples tested, and ranged in concentration from 5.1  $\mu\text{g/L}$  to 47  $\mu\text{g/L}$ .

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

#### 5. CONCLUSION

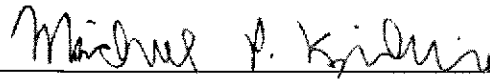
The groundwater gradient determined for the Third Quarter 2003 monitoring event was found to be 0.013 ft/ft to the southwest, and is consistent with past determinations. The highest concentrations of TPH-g and benzene occur beneath the central portion of the subject building in the area of monitoring wells MW-1, 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 decreased in groundwater across the site from the concentrations detected in the previous sampling event, with the exception of wells MW-2 and MW-12, which showed a slight increase in concentrations. Additionally, the highest concentrations of BTEX compounds (found in wells MW-1, MW-2, MW-8, and MW-9) either maintained or slightly decreased 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 increased from the concentrations detected in the previous sampling event.

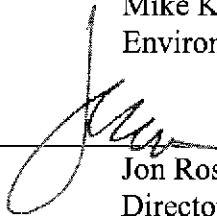
Non gasoline related chlorinated volatile organic compounds TCE, cis-1,2-DCE, trans-1,2-DCE and VC were detected in groundwater samples collected from monitoring wells MW-8, MW-12, and MW-13. The concentrations in these wells are consistent with those detected in the previous sampling event. The source of TCE and 1,2-DCE are unknown and appear to be originating off-site.

Report prepared by:



Mike Krzeminski  
Environmental Consultant

Report reviewed by:



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

November 18, 2003



Table 1

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

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-1	9/26/2003	16.69	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	9/26/2003	20.79	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

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

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-4	Removed from monitoring program in October 2001			
	9/25/2001	17.78	7.40	10.38
	6/20/2001		6.78	11.00
	3/21/2001		5.77	12.01
	12/19/2000		6.40	11.38
	9/22/2000		6.90	10.88
	6/15/2000		6.30	11.48
	2/8/1999		4.13	13.65
MW-5	Removed from monitoring program in October 2001			
	9/25/2001	21.12	10.34	10.78
	6/20/2001		9.90	11.22
	3/21/2001		8.68	12.44
	12/19/2000		9.99	11.13
	9/22/2000		9.99	11.13
	6/15/2000		10.36	10.76
	2/8/1999		7.62	13.50
MW-6	9/26/2003	16.60	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	9/26/2003	15.47	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)
<b>MW-8</b>	9/26/2003	17.58	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		
<b>MW-9</b>	9/26/2003	17.61	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
<b>MW-10</b>	9/26/2003	16.92	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	9/26/2003	14.87	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	9/26/2003	14.05	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	9/26/2003	13.39	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>	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>	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	9/26/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	0.7* <sup>4</sup>	<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* <sup>4</sup>	0.7	<0.5	<0.5	<0.5
	9/11/2002	120	NA	<0.5	<0.5	<0.5	<0.5	<0.5* <sup>4</sup>	<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* <sup>5</sup>	<0.5	<0.5	<0.5	<0.5
	9/25/2001	760	NA	<0.5	<0.5	<0.5	2.9	<0.5* <sup>4</sup>	<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* <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	2.2	2.1	4.8	0.78	<0.5	<0.5	<0.5	<0.5
	MW-7	9/26/2003	<50	NA	<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	<0.5	NA	NA	NA	NA
6/15/2000		1,000	NA	250	<10	<10	16	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2

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

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2 DCE	trans-1,2-DCE	VC
MW-8	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	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	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**

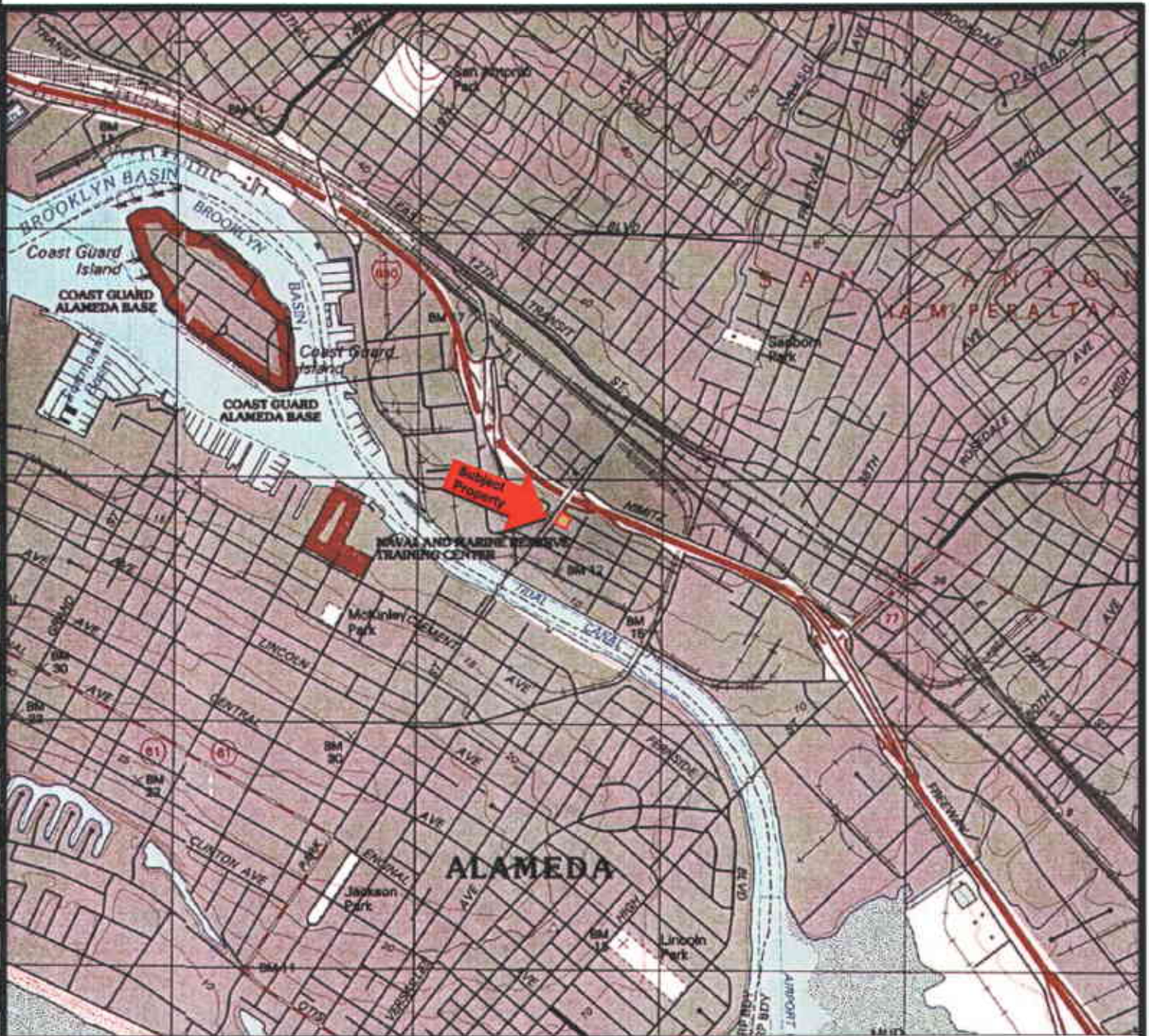
Sample Location	Date Sampled	TPHG	MTBE	Benzene	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-11	9/26/2003	<50	NA	1.2	0.69	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	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	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>*9</sup>	430	14	4.4

Notes:

- All results in micrograms per liter (µg/L).
- NA = Not Analyzed.
- NS = Not Sampled
- 1,2-DCA = 1,2-dichloroethane.
- TPHG = Total Petroleum Hydrocarbons as Gasoline.

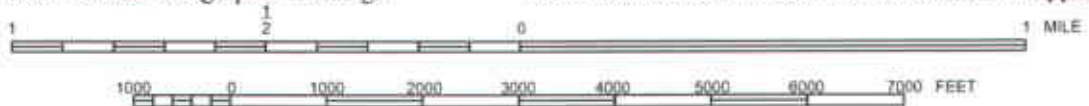
- MTBE = methyl tert-butyl ether.
- TCE = Trichloroethene.
- DCE = Dichloroethene.
- VC = Vinyl Chloride.

- \*1 1,1-DCA detected at 1.1 µg/L.
- \*2 1,1-DCA detected at 0.9 µg/L.
- \*3 Freon -11 detected at 0.6 µg/L.
- \*4 1,1-DCA detected at 0.9 µg/L
- \*5 1,1-DCA detected at 0.7 µg/L
- \*6 1,1-DCE detected at 4.7 µg/L
- \*7 1,1-DCE detected at 5.2 µg/L
- \*8 1,1-DCE detected at 1.9 µg/L
- \*9 1,1-DCE detected at 2.8 µg/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

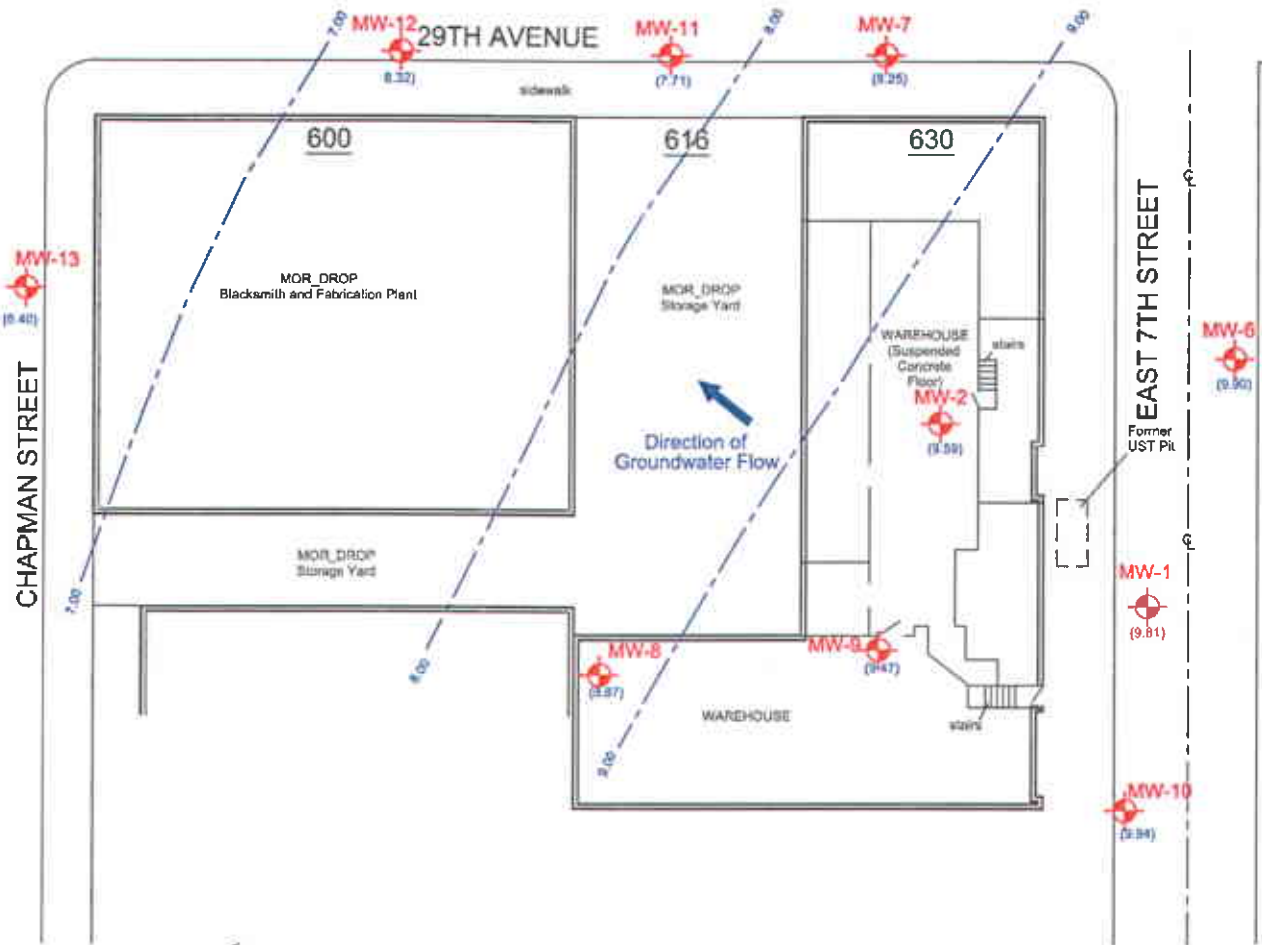


PROPERTY LOCATION MAP  
 Former Lemoine Sausage Factory  
 630 29th Avenue  
 Oakland, California  
 Clayton Project No. 70-97066.00

Figure

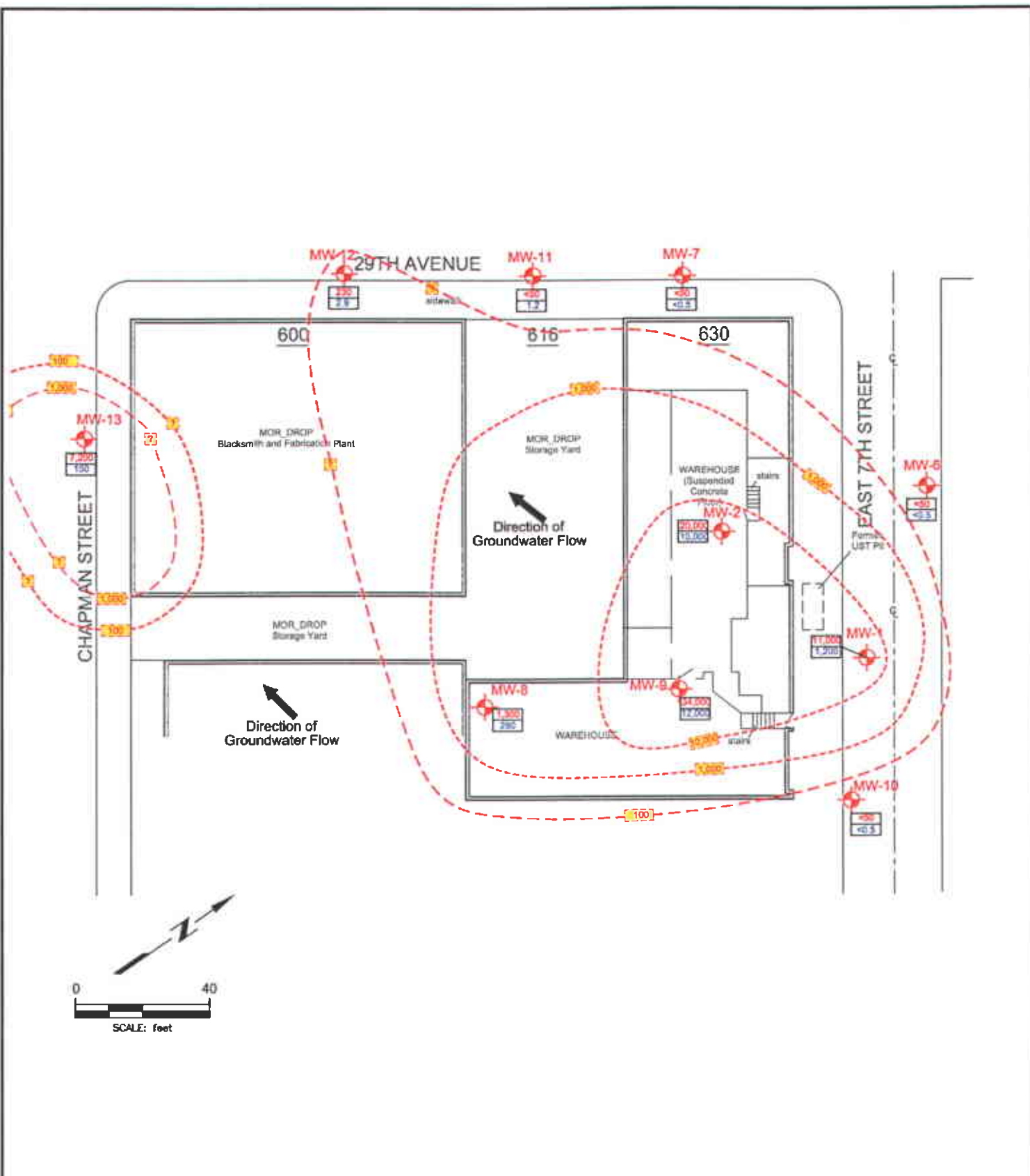
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



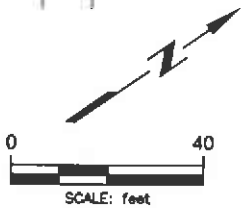
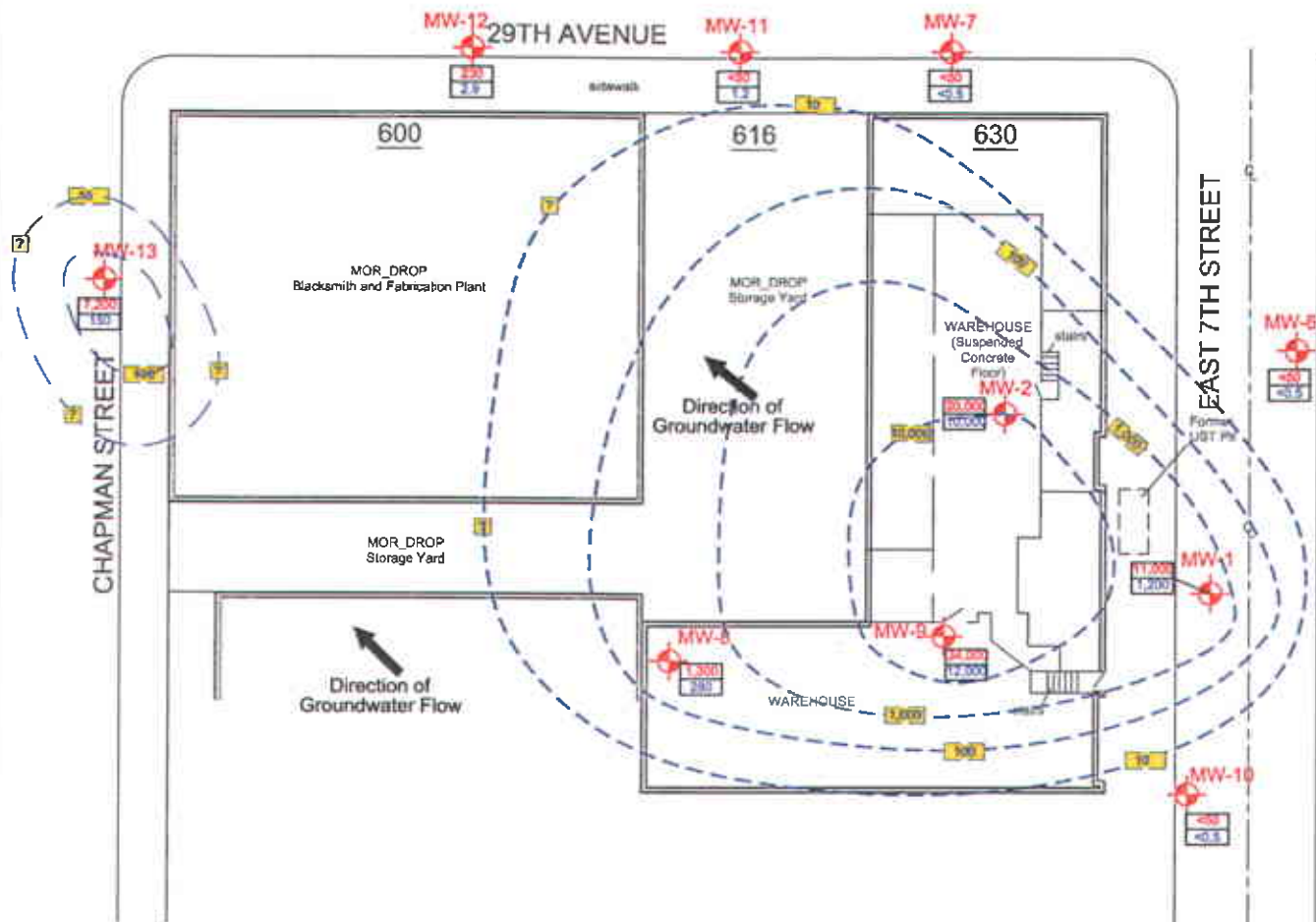
Note:  
Water table elevation contours are approximate.

<p><b>LEGEND</b></p>	<p><b>GROUNDWATER ELEVATION CONTOUR MAP</b> (September 26, 2003)</p>	<p>Figure</p>	
<p>MW-1  Existing Monitoring Well Location (9.81) Groundwater Elevation in Feet above Mean Sea Level</p> <p>10.00  Groundwater Surface Contour and Elevation</p>	<p><b>FORMER LEMOINE SAUSAGE FACTORY</b> 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00</p>	<p><b>2</b></p> <p>11/19/03 Q2RD_03.dwg</p>	



Note:  
Isoconcentration contours are approximate.

<b>LEGEND</b>		<b>TPH as Gasoline</b> <b>CONCENTRATIONS IN GROUNDWATER</b> September, 2003 FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	Figure <h1 style="font-size: 2em; margin: 0;">3a</h1> 11/19/03 Q2RD_03.dwg	
MW-1  Existing Monitoring Well Location  TPH-G Concentration (micrograms per liter)  Benzene Concentration (micrograms per liter)  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)

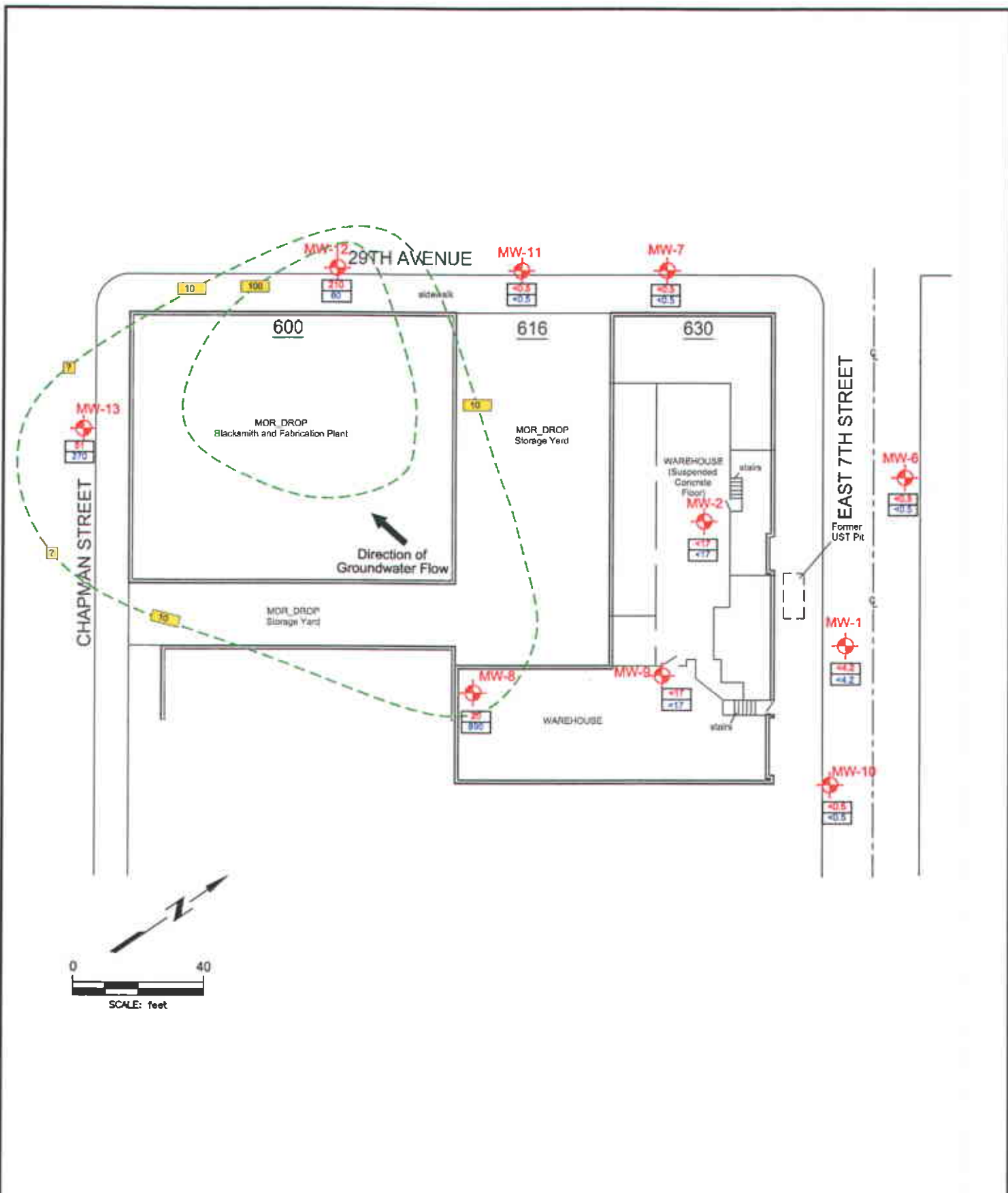
**BENZENE**  
**CONCENTRATIONS IN GROUNDWATER**  
 September, 2003  
 FORMER LEMOINE SAUSAGE FACTORY  
 630 29TH AVENUE  
 OAKLAND, CALIFORNIA  
 Clayton Project No. 70-97066.00

Figure

**3b**

11/19/03  
Q2RD\_03.dwg





LEGEND	
	Existing Monitoring Well Location
	TCE Concentration (micrograms per liter)
	cis 1,2-DCE Concentration (micrograms per liter)
	TCE Isoconcentration Contour (micrograms per liter)

TCE and cis-1,2 DCE  
 CONCENTRATIONS IN GROUNDWATER  
 September 2003  
 FORMER LEMOINE SAUSAGE FACTORY  
 630 29TH AVENUE  
 OAKLAND, CALIFORNIA  
 Clayton Project No. 70-97066 00

Figure  
**4**  
 11/19/03  
 Q2RD\_03.dwg



**APPENDIX A**

**THIRD QUARTER (SEPTEMBER) 2003**

**GROUNDWATER SAMPLING LOGS**

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9-26-03
	Oakland, California	Purge Method:	peristaltic pump
Sampling Location:	MW-1	Date & Time Sampled:	9-26 11:05
Top of Casing:	16.69 (ft, msl)	Sampling Method:	peristaltic pump
Depth to Water:	6.86	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	9.81	Preservatives:	140
Well Bottom	7.69	# of Containers:	6 VOA's
Water Column:	2.12	Field Tech:	ML + MR
Well Casing Volume:	0.02 (WC* 0.01)	Weather Conditions:	overcast
Casing Volumes Purged:	<del>0.02</del>		
Purge Rate:			3/4" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
10:58	0	7.66	1.005	-7	22.8	Clear
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						

Field Notes: only 1 set of parameters taken due to small amount of water in well.



### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9-26-03
	Oakland, California	Purge Method:	<del>sump pump</del> per: pump
Sampling Location:	MW-2	Date & Time Sampled:	9-26 12:40
Top of Casing:	20.79 (ft, msl)	Sampling Method:	<del>Direct</del> per: pump
Depth to Water:	11.20	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	9.59	Preservatives:	HCL
Well Bottom	0.79	# of Containers:	6 VOA's
Water Column:	8.80	Field Tech:	mk + mq
Well Casing Volume:	0.85 (WC* 0.01)	Weather Conditions:	overcast
Casing Volumes Purged:	1		
Purge Rate:			3/4" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
12:30	0	7.70	10.81	-2	19.0	clear
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						
:						

Field Notes: only 1 set of parameters taken due to small amount of water present

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9-26-03
	Oakland, California	Purge Method:	Sub pump
Sampling Location:	<b>MW-6</b>	Date & Time Sampled:	9-26 10:20
Top of Casing:	16.6 (ft. msl)	Sampling Method:	Sub pump
Depth to Water:	6.70	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	9.90	Preservatives:	HCL
Well Bottom	-3.40	# of Containers:	6 VOA's
Water Column:	13.3	Field Tech:	mk + mh
Well Casing Volume:	2.12 (WC* 0.16)	Weather Conditions:	overcast
Casing Volumes Purged:			
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity $\mu\text{mhos/cm}$	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
10:06	0	7.60	1.62	-8	14.7	clear
10:10	2.1	7.56	1.39	-7	21.2	4
10:14	2.1	7.59	1.32	-9	22.6	4
10:16	2.1	7.55	1.37	-5	22.6	4
10:18	2.1	7.45	1.61	-2	21.6	4
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Field Notes:

### FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Factory	Job #: 70-97066
630 29th Avenue	Date Purged: 9-26-03
Oakland, California	Purge Method: sub. pump
Sampling Location: MW-7	Date & Time Sampled: 9-26 9:50
Top of Casing: 15.47 (ft, msl)	Sampling Method: sub. pump
Depth to Water: 7.22	Sample Type: TPHG/BTEX/8021B
Groundwater Elevation: 8.25	Preservatives: HCL
Well Bottom: -4.53	# of Containers: 6 VOA's
Water Column: 12.76	Field Tech: MK + MR
Well Casing Volume: 2044 (WC* 0.16)	Weather Conditions: overcast
Casing Volumes Purged: 4	
Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity $\mu$ (Amhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
9:36	0	7.68	1.26	-15	25.0	clear
9:38	2.0	7.54	1.20	-8	"	"
9:40	2.0	7.59	1.20	-8	"	"
9:42	2.0	7.58	1.20	-9	"	"
9:44	2.0	7.60	1.14	-9	"	"
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Field Notes: Temp. Probe Not working properly

### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9-26-03
	Oakland, California	Purge Method:	Sub. pump
Sampling Location:	<b>MW-8</b>	Date & Time Sampled:	9-26 10:55
Top of Casing:	17.58 (ft, msl)	Sampling Method:	sub. pump
Depth to Water:	8.71	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	8.87	Preservatives:	HCL
Well Bottom	-2.42	# of Containers:	6 VOA's
Water Column:	16.29	Field Tech:	MLK + MA
Well Casing Volume:	1.90 (WC* 0.16)	Weather Conditions:	overcast
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity $\mu$ mhos/cm	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
10:45	0	8.05	1.64	-30	17.8	clear
11:47	1.0	8.01	1.64	-29	17.7	h
11:49	1.8	7.99	1.63	-27	17.8	h
11:51	1.8	7.86	1.65	-22	17.5	h
11:53	1.8	7.79	1.69	-18	17.3	h
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**Field Notes:**

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9-26-03
	Oakland, California	Purge Method:	Sub. pump
Sampling Location:	<b>MW-9</b>	Date & Time Sampled:	9-26 14:20
Top of Casing:	17.61 (ft, msl)	Sampling Method:	Sub. pump
Depth to Water:	8.14	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	9.47	Preservatives:	HCL
Well Bottom	2.61	# of Containers:	6 VOA's
Water Column:	6.86	Field Tech:	mk + ma
Well Casing Volume:	1.09 (WC* 0.16)	Weather Conditions:	overcast
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)
12:05	0	6.85	14.54	27	17.8	clear
12:07	1.09	7.16	12.64	12	18.3	11
12:09	1.09	7.17	15.44	14	18.2	11
12:11	1.09	7.26	14.20	8	18.2	11
:	Pumped dry @ 12:11					
12:15	1.09	7.31	14.15	8	18.2	11
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**Field Notes:**

### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	9-26-03
	Oakland, California	Purge Method:	Sub. Pump
Sampling Location:	<b>MW-10</b>	Date & Time Sampled:	9-26 10:10
Top of Casing:	16.92 (ft. msl)	Sampling Method:	Sub. Pump
Depth to Water:	6.98	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	9.94	Preservatives:	HCL
Well Bottom	7.92	# of Containers:	6 VOA's
Water Column:	2.02	Field Tech:	ML + MR
Well Casing Volume:	0.32 (WC* 0.16)	Weather Conditions:	overcast
Casing Volumes Purged:			
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
10:27	0	7.54	0.811	-8	23.2	clear
10:29	0.3	7.48	0.798	-3	24.3	ll
10:31	0.3	7.44	0.776	-2	25.2	ll
10:33	0.3	7.42	0.773	-1	25.2	ll
10:35	0.3	7.40	0.771	0	24.6	ll
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**Field Notes:**

**FIELD SAMPLING DATA SHEET**

Job Location: Former Lemoine Sausage Factory	Job #: 70-97066
630 29th Avenue	Date Purged: 9-26-03
Oakland, California	Purge Method: sub. pump
Sampling Location: MW-11	Date & Time Sampled: 9-26 9:25
Top of Casing: 14.87 (ft, msl)	Sampling Method: sub. pump
Depth to Water: <del>14.87</del> 7.16	Sample Type: TPHG/BTEX/8021B
Groundwater Elevation: 7.71	Preservatives: HCL
Well Bottom: -0.13	# of Containers: 6 VOA's
Water Column: 7.84	Field Tech: MLK + MR
Well Casing Volume: 1.25 (WC* 0.16)	Weather Conditions: overcast
Casing Volumes Purged: 4	
Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity $\mu$ ( $\mu$ mhos/cm)	Redox Potential (mVolts)	Temperature ( $^{\circ}$ F or $^{\circ}$ C)	Turbidity (Visual)
9:12	0	7.52	2.14	-5	<del>25.0</del> 25.0	clear
9:15	1.25	7.55	2.22	-8	11	u
9:17	1.25	7.58	2.16	-9	11	u
9:19	1.25	7.54	2.31	-7	11	u
9:21	1.25	7.57	2.28	-8	11	u
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Field Notes: Temp not working properly

### FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Factory	Job #: 70-97066
630 29th Avenue	Date Purged: 9-26-03
Oakland, California	Purge Method: sub. pump
Sampling Location: MW-12	Date & Time Sampled: 9-26 9:00
Top of Casing: 14.05 (ft, msl)	Sampling Method: sub. pump
Depth to Water: 6.94	Sample Type: TPHG/BTEX /8021B
Groundwater Elevation: 7.11	Preservatives: HCL
Well Bottom: -0.95	# of Containers: 6 VOA's
Water Column: 8.06	Field Tech: MK + MR
Well Casing Volume: 1.28 (WC* 0.16)	Weather Conditions: overcast
Casing Volumes Purged:	
Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
8:50	0	7.22	2.76	10	25.0	clear
8:52	1.28	7.24	2.48	8	"	"
8:53	1.28	7.34	2.49	4	"	"
8:55	1.28	7.35	2.50	3	"	"
8:57	1.28	7.34	2.73	3	"	"
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Field Notes: Temp meter not working



### FIELD SAMPLING DATA SHEET

Job Location: Former Lemoine Sausage Factory	Job #: 70-97066
630 29th Avenue	Date Purged: 9-26-03
Oakland, California	Purge Method: sub. pump
Sampling Location: MW-13	Date & Time Sampled: 9-26 8:40
Top of Casing: 13.39 (ft. msl)	Sampling Method: sub. pump
Depth to Water: 6.99	Sample Type: TPHG/BTEX /8021B
Groundwater Elevation 6.40	Preservatives: HCL
Well Bottom -1.61	# of Containers: 6 VOA
Water Column: 8.01	Field Tech: MK + MR
Well Casing Volume: 1.28 gal (WC* 0.16)	Weather Conditions: overcast
Casing Volumes Purged: 4	
Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity $\mu$ (S/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
8:25	0	8.52	1.226	-47	25.0	Clear
8:31	1.25	8.30	1.031	-46	"	"
8:33	1.25	8.22	1.051	-47	"	"
8:35	1.25	8.17	1.052	-39	"	"
8:37	1.25	8.11	1.030	-35	"	"
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Field Notes: Temp Not working properly

**APPENDIX B**

**THIRD QUARTER (SEPTEMBER) 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: 10-OCT-03

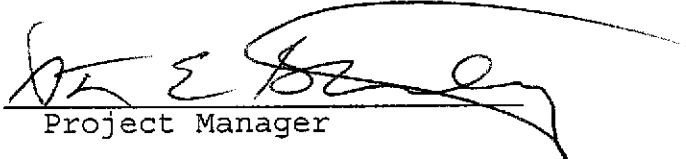
Lab Job Number: 167821

Project ID: 70-97066.00

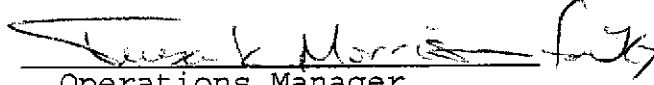
Location: Sausage Factory

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: 167821  
Client: **Clayton Group Services**  
Project Name: **Sausage Factory**

Order Date: 09/26/03

### CASE NARRATIVE

This hardcopy data package contains sample results and batch QC results for ten 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 03Q3 (167821-010) were above acceptance limits due to coelution of the surrogate peaks with hydrocarbon peaks. The TVH bromofluorobenzene surrogate recoveries were also outside acceptance limits for the matrix spikes from batch number 84890.

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



# CHAIN OF CUSTODY

Lab: Curtis&Tompkins

TAT: Standard

167821

**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									
TPH as Gasoline/BTEX									
8021B									

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

-1  
-2  
-3  
-4  
-5  
-6  
-7  
-8  
-9  
-10

Sample Identification	Sample Date	Sample Time	Matrix	Vol	TPH as Gasoline/BTEX
MW-01 03Q3	9-26	11:05	L	6	X X
MW-02 03Q3		12:10	L	6	X X
MW-06 03Q3		10:20	L	6	X X
MW-07 03Q3		9:50	L	6	X X
MW-08 03Q3		11:55	L	6	X X
MW-09 03Q3		12:20	L	6	X X
MW-10 03Q3		12:40	L	6	X X
MW-11 03Q3		9:25	L	6	X X
MW-12 03Q3		9:06	L	6	X X
MW-13 03Q3		8:40	L	6	X X

Received  On Ice  
 Gold  Ambient  Intact

Preservation Correct?  
 Yes  No  N/A

Collected by: MK + MA Date/Time: 9-26  
 Relinquished by: [Signature] Date/Time: 9-26  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_

Collector's Signature: [Signature] Date/Time: 9-26  
 Received by: [Signature] Date/Time: 9/26/03 1310  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Sample Condition on Rcpt: \_\_\_\_\_



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	09/26/03
Units:	ug/L	Received:	09/26/03

Field ID:	MW-01 03Q3	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	84884
Lab ID:	167821-001	Analyzed:	09/28/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	11,000	500	8015B
Benzene	1,200	5.0	EPA 8021B
Toluene	960	5.0	EPA 8021B
Ethylbenzene	370	5.0	EPA 8021B
m,p-Xylenes	810	5.0	EPA 8021B
o-Xylene	790	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	114	57-150	8015B
Bromofluorobenzene (FID)	133	65-144	8015B
Trifluorotoluene (PID)	93	54-149	EPA 8021B
Bromofluorobenzene (PID)	98	58-143	EPA 8021B

Field ID:	MW-02 03Q3	Lab ID:	167821-002
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	20,000	2,000	40.00	84890	09/29/03	8015B
Benzene	10,000	20	40.00	84890	09/29/03	EPA 8021B
Toluene	2,100	5.0	10.00	84884	09/28/03	EPA 8021B
Ethylbenzene	960	5.0	10.00	84884	09/28/03	EPA 8021B
m,p-Xylenes	2,200	5.0	10.00	84884	09/28/03	EPA 8021B
o-Xylene	320	5.0	10.00	84884	09/28/03	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	112	57-150	40.00	84890	09/29/03	8015B
Bromofluorobenzene (FID)	135	65-144	40.00	84890	09/29/03	8015B
Trifluorotoluene (PID)	96	54-149	10.00	84884	09/28/03	EPA 8021B
Bromofluorobenzene (PID)	94	58-143	10.00	84884	09/28/03	EPA 8021B

\*= Value outside of QC limits; see narrative

C= Presence confirmed, but RPD between columns exceeds 40%

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Page 1 of 6

# Chromatogram

Sample Name : 167821-001,84884

Sample #: b7

Page 1 of 1

File Name : G:\GC05\DATA\270G023.raw

Date : 9/29/03 09:40 AM

Method : TVHBTXE

Time of Injection: 9/28/03 06:48 AM

Start Time : 0.00 min

End Time : 25.00 min

Low Point : -26.24 mV

High Point : 825.29 mV

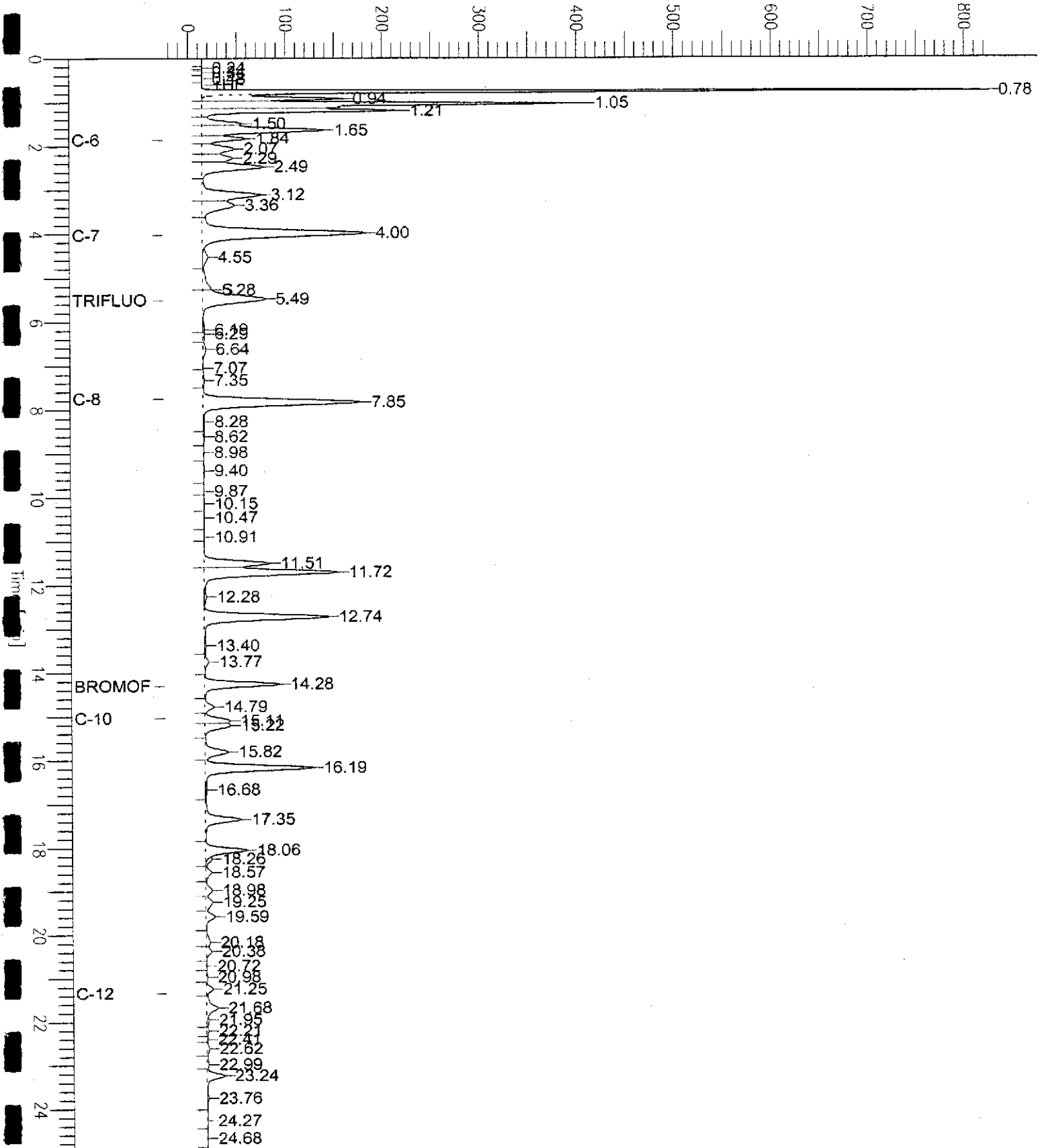
Scale Factor: 1.0

Plot Offset: -26 mV

Plot Scale: 851.5 mV

MW-01 03Q3

Response [mV]



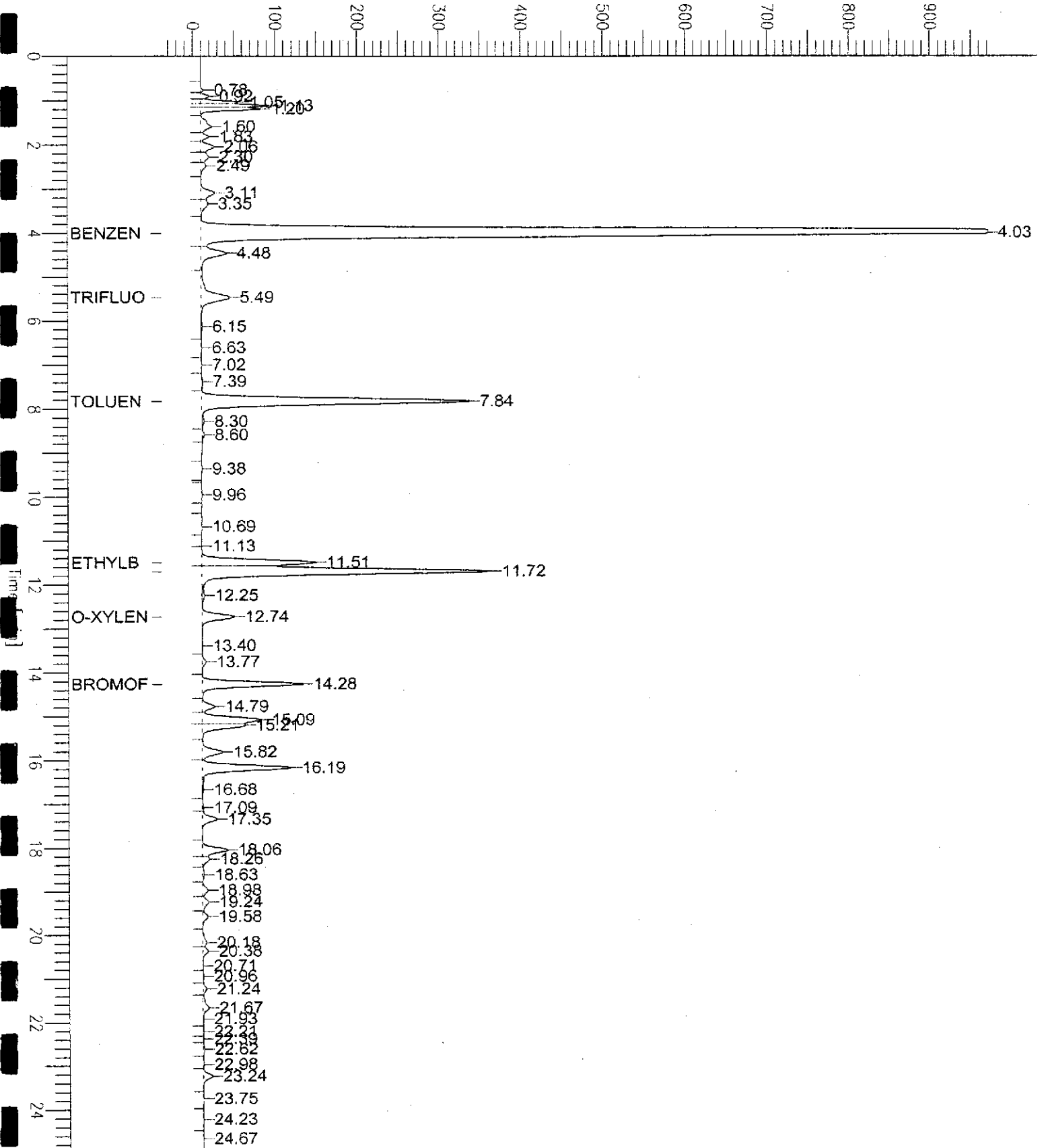
GC05 'H' File PID BTXE Quant

Sample Name : 167821-002,84884  
File Name : G:\GC05\DATA\270H024.raw  
Method : TVHBTXE  
Start Time : 0.00 min End Time : 25.00 min  
Scale Factor: 1.0 Plot Offset: -38 mV

Sample #: b7 Page 1 of 1  
Date : 9/29/03 07:47 AM  
Time of Injection: 9/28/03 07:22 AM  
Low Point : -38.23 mV High Point : 971.27 mV  
Plot Scale: 1009.5 mV

MW-02 0303

Response [mV]







Curtis & Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	09/26/03
Units:	ug/L	Received:	09/26/03

Field ID:	MW-06 03Q3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	84884
Lab ID:	167821-003	Analyzed:	09/28/03

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)	105	57-150	8015B
Bromofluorobenzene (FID)	120	65-144	8015B
Trifluorotoluene (PID)	77	54-149	EPA 8021B
Bromofluorobenzene (PID)	93	58-143	EPA 8021B

Field ID:	MW-07 03Q3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	84884
Lab ID:	167821-004	Analyzed:	09/27/03

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)	100	57-150	8015B
Bromofluorobenzene (FID)	113	65-144	8015B
Trifluorotoluene (PID)	71	54-149	EPA 8021B
Bromofluorobenzene (PID)	88	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	09/26/03
Units:	ug/L	Received:	09/26/03

Field ID:	MW-08 03Q3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	84884
Lab ID:	167821-005	Analyzed:	09/28/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	1,300 L Y	50	8015B
Benzene	280	0.50	EPA 8021B
Toluene	3.9 C	0.50	EPA 8021B
Ethylbenzene	38	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	0.85 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	138	57-150	8015B
Bromofluorobenzene (FID)	130	65-144	8015B
Trifluorotoluene (PID)	80	54-149	EPA 8021B
Bromofluorobenzene (PID)	90	58-143	EPA 8021B

Field ID:	MW-09 03Q3	Batch#:	84890
Type:	SAMPLE	Analyzed:	09/29/03
Lab ID:	167821-006		

Analyte	Result	RL	Diln Fac	Analysis
Gasoline C7-C12	34,000	1,300	25.00	8015B
Benzene	12,000	25	50.00	EPA 8021B
Toluene	5,600	13	25.00	EPA 8021B
Ethylbenzene	880	13	25.00	EPA 8021B
m,p-Xylenes	3,600	13	25.00	EPA 8021B
o-Xylene	1,100	13	25.00	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Analysis
Trifluorotoluene (FID)	120	57-150	25.00	8015B
Bromofluorobenzene (FID)	126	65-144	25.00	8015B
Trifluorotoluene (PID)	85	54-149	25.00	EPA 8021B
Bromofluorobenzene (PID)	95	58-143	25.00	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

# Chromatogram

Sample Name : 167821-005,84884

Sample #: b7

Page 1 of 1

FileName : G:\GC05\DATA\270G018.raw

Date : 9/29/03 09:40 AM

Method : TVHBTXE

Time of Injection: 9/28/03 04:01 AM

Start Time : 0.00 min End Time : 25.00 min

Low Point : -33.30 mV

High Point : 969.57 mV

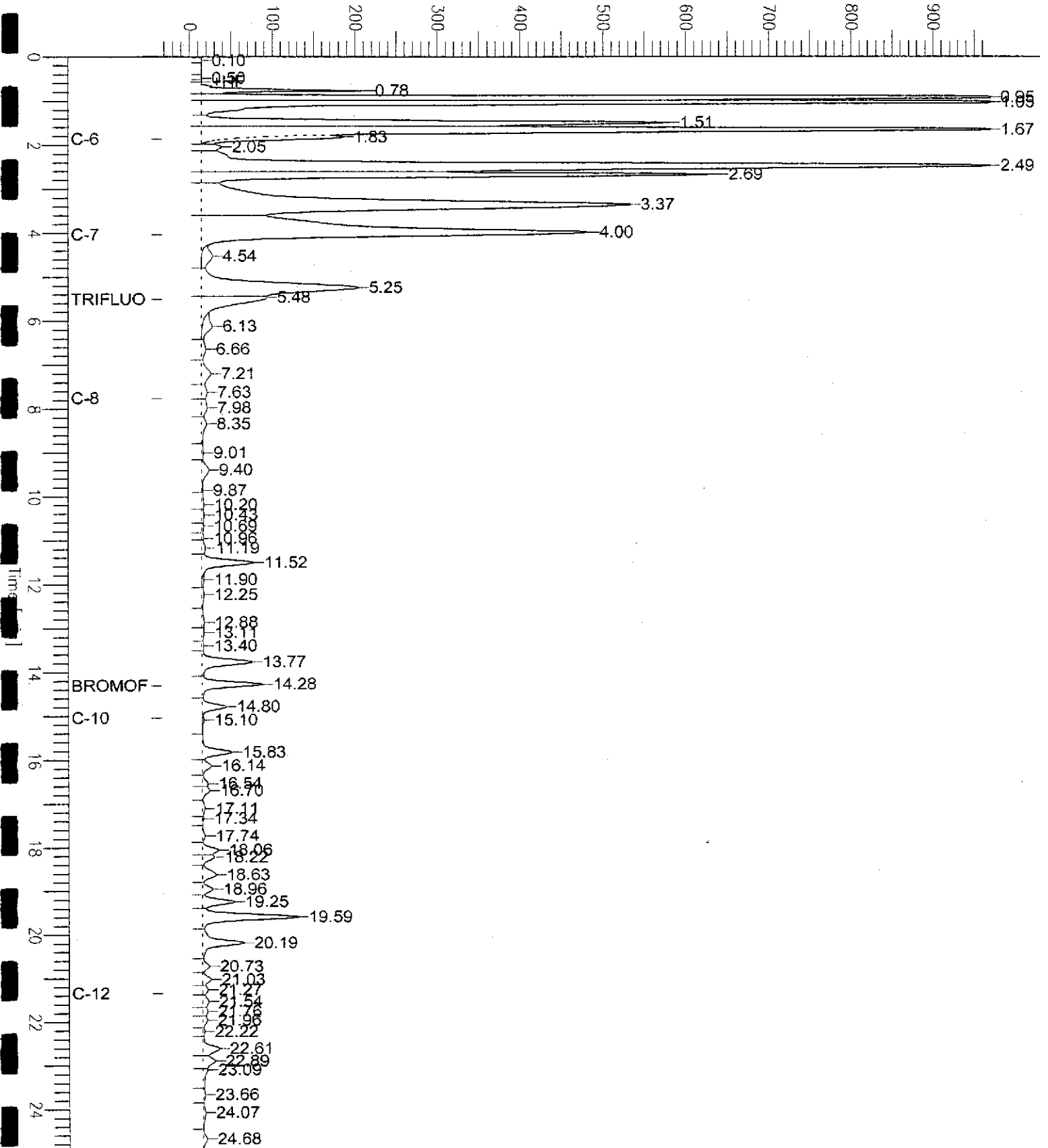
Scale Factor: 1.0

Plot Offset: -33 mV

Plot Scale: 1002.9 mV

MW-08 03Q3

Response [mV]



# Chromatogram

Sample Name : 167821-006,84890

Sample #: f7

Page 1 of 1

FileName : G:\GC05\DATA\272G010.raw

Date : 9/29/03 05:04 PM

Method : TVHBTXE

Time of Injection: 9/29/03 04:39 PM

Start Time : 0.00 min

End Time : 25.00 min

Low Point : -20.55 mV

High Point : 703.64 mV

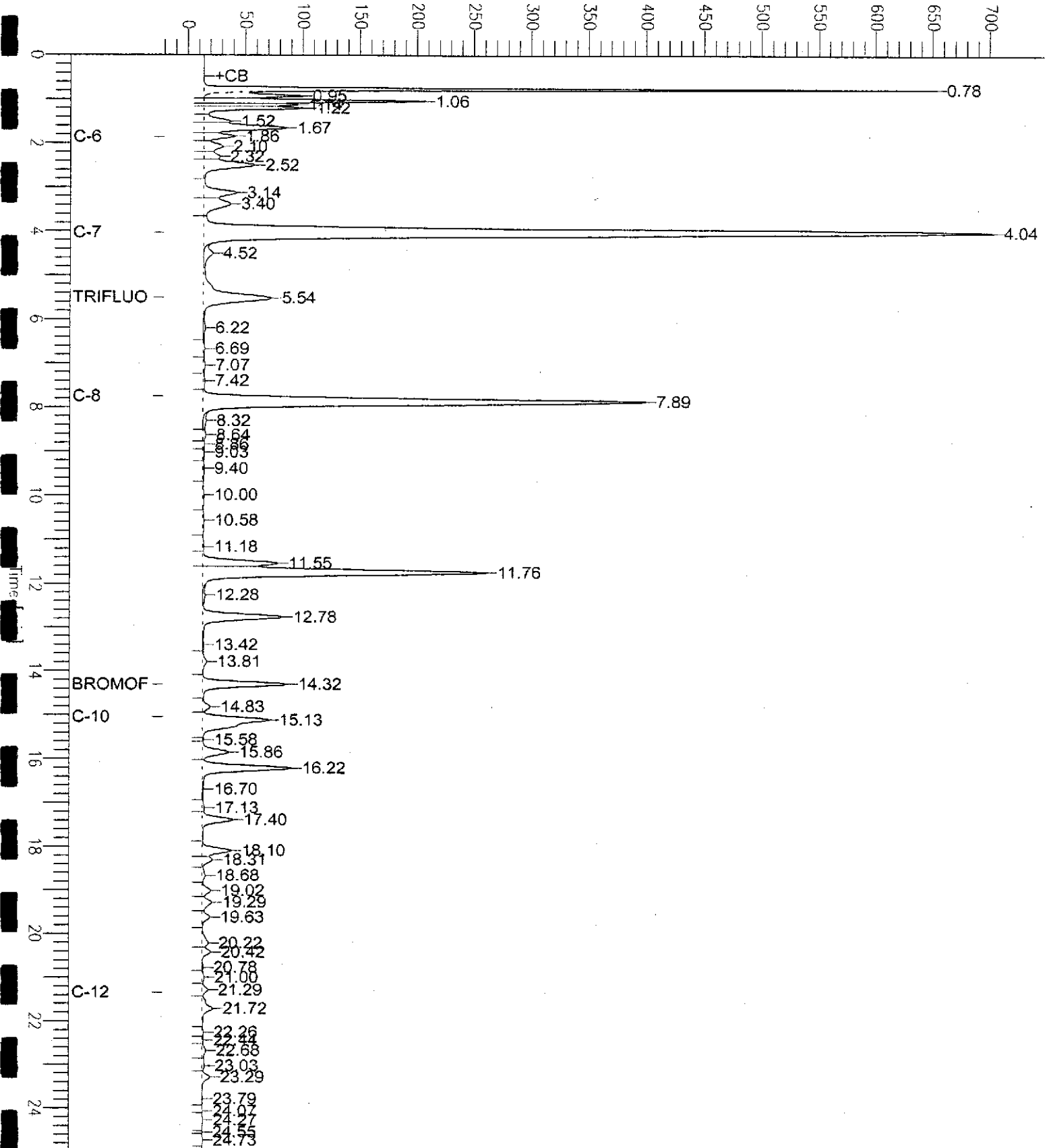
Scale Factor: 1.0

Plot Offset: -21 mV

Plot Scale: 724.2 mV

MW-09 03Q3

Response [mV]





## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	09/26/03
Units:	ug/L	Received:	09/26/03

Field ID:	MW-10 03Q3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	84890
Lab ID:	167821-007	Analyzed:	09/29/03

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)	97	57-150	8015B
Bromofluorobenzene (FID)	124	65-144	8015B
Trifluorotoluene (PID)	68	54-149	EPA 8021B
Bromofluorobenzene (PID)	92	58-143	EPA 8021B

Field ID:	MW-11 03Q3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	84884
Lab ID:	167821-008	Analyzed:	09/28/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B
Benzene	1.2	0.50	EPA 8021B
Toluene	0.69	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)	101	57-150	8015B
Bromofluorobenzene (FID)	115	65-144	8015B
Trifluorotoluene (PID)	71	54-149	EPA 8021B
Bromofluorobenzene (PID)	86	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative

C= Presence confirmed, but RPD between columns exceeds 40%

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	09/26/03
Units:	ug/L	Received:	09/26/03

Field ID:	MW-12 03Q3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	84884
Lab ID:	167821-009	Analyzed:	09/28/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	230	50	8015B
Benzene	2.9 C	0.50	EPA 8021B
Toluene	1.1	0.50	EPA 8021B
Ethylbenzene	3.8	0.50	EPA 8021B
m,p-Xylenes	6.0	0.50	EPA 8021B
o-Xylene	0.71 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	57-150	8015B
Bromofluorobenzene (FID)	117	65-144	8015B
Trifluorotoluene (PID)	72	54-149	EPA 8021B
Bromofluorobenzene (PID)	87	58-143	EPA 8021B

Field ID:	MW-13 03Q3	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	84890
Lab ID:	167821-010	Analyzed:	09/29/03

Analyte	Result	RL	Analysis
Gasoline C7-C12	7,200 Y	100	8015B
Benzene	150 C	1.0	EPA 8021B
Toluene	ND	1.0	EPA 8021B
Ethylbenzene	89	1.0	EPA 8021B
m,p-Xylenes	24	1.0	EPA 8021B
o-Xylene	33 C	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	194 *	57-150	8015B
Bromofluorobenzene (FID)	179 *	65-144	8015B
Trifluorotoluene (PID)	102	54-149	EPA 8021B
Bromofluorobenzene (PID)	116	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

# Chromatogram

Sample Name : 167821-009,84884

Sample #: b7

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File Name : G:\GC05\DATA\270G022.raw

Date : 9/28/03 06:40 AM

Method : TVHBTXE

Time of Injection: 9/28/03 06:15 AM

Start Time : 0.00 min End Time : 25.00 min

Low Point : 5.28 mV

High Point : 194.14 mV

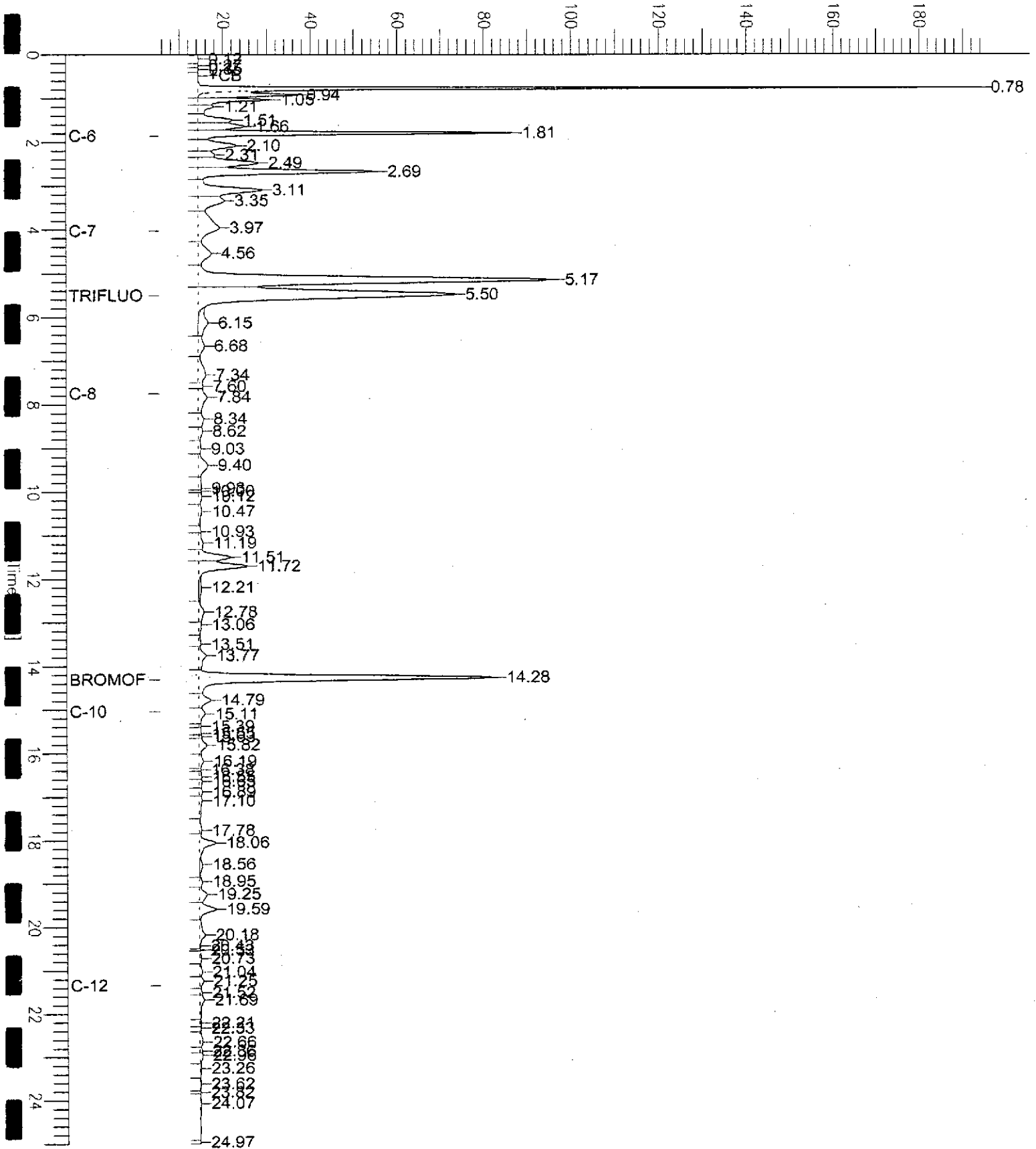
Scale Factor: 1.0

Plot Offset: 5 mV

Plot Scale: 188.9 mV

MW-12 03Q3

Response [mV]



# Chromatogram

Sample Name : 167821-010,84890

Sample #: f7

Page 1 of 1

FileName : G:\GC05\DATA\272G017.raw

Date : 9/30/03 08:50 AM

Method : TVHBTXE

Time of Injection: 9/29/03 08:46 PM

Start Time : 0.00 min End Time : 25.00 min

Low Point : -24.86 mV

High Point : 796.50 mV

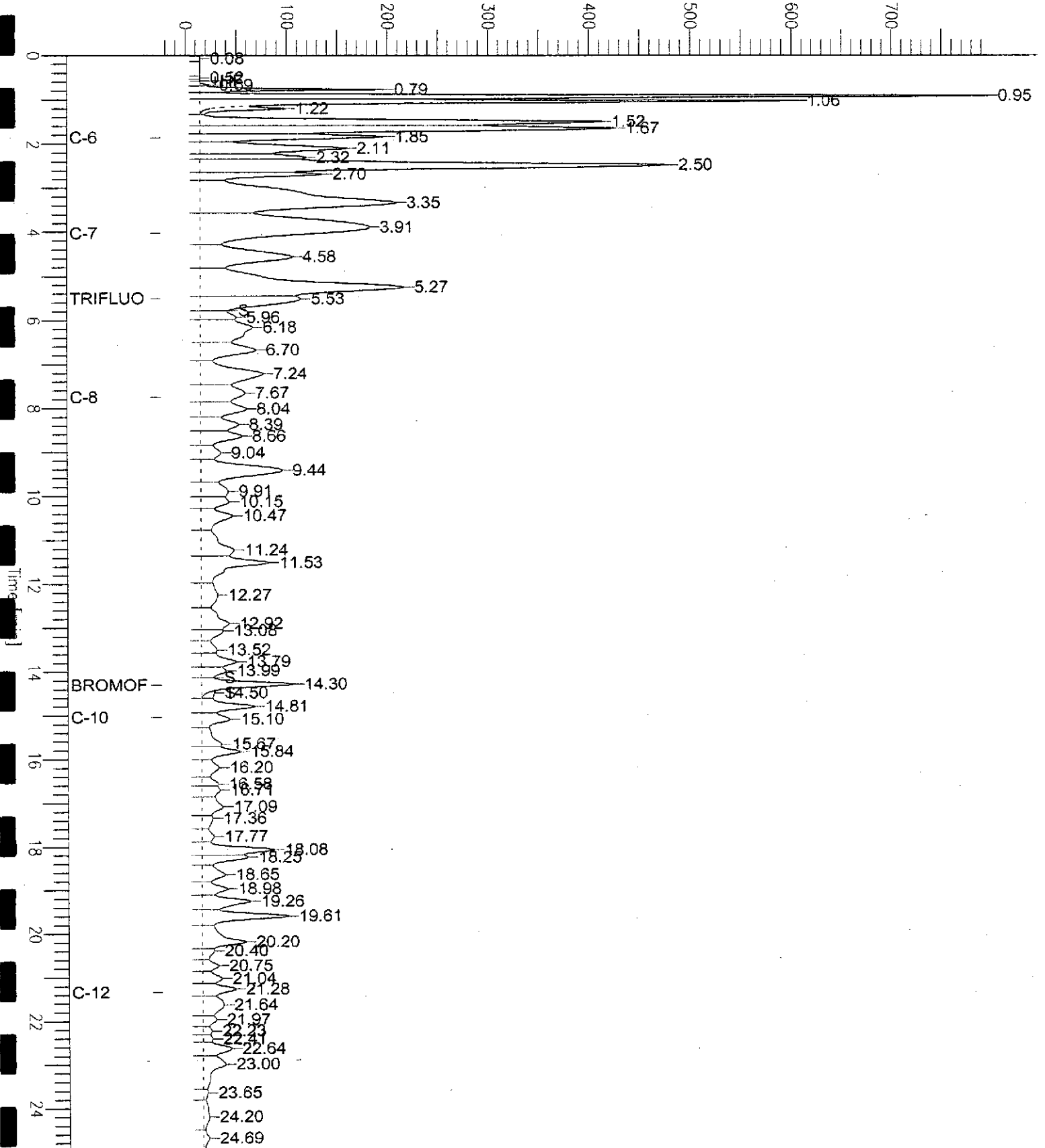
Scale Factor: 1.0

Plot Offset: -25 mV

Plot Scale: 821.4 mV

MW-13 03Q3

Response [mV]







## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	09/26/03
Units:	ug/L	Received:	09/26/03

Type:	BLANK	Batch#:	84884
Lab ID:	QC227173	Analyzed:	09/27/03
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)	92	57-150	8015B
Bromofluorobenzene (FID)	103	65-144	8015B
Trifluorotoluene (PID)	71	54-149	EPA 8021B
Bromofluorobenzene (PID)	81	58-143	EPA 8021B

Type:	BLANK	Batch#:	84890
Lab ID:	QC227196	Analyzed:	09/29/03
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)	96	57-150	8015B
Bromofluorobenzene (FID)	116	65-144	8015B
Trifluorotoluene (PID)	75	54-149	EPA 8021B
Bromofluorobenzene (PID)	92	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
C= Presence confirmed, but RPD between columns exceeds 40%  
L= Lighter hydrocarbons contributed to the quantitation  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

# Chromatogram

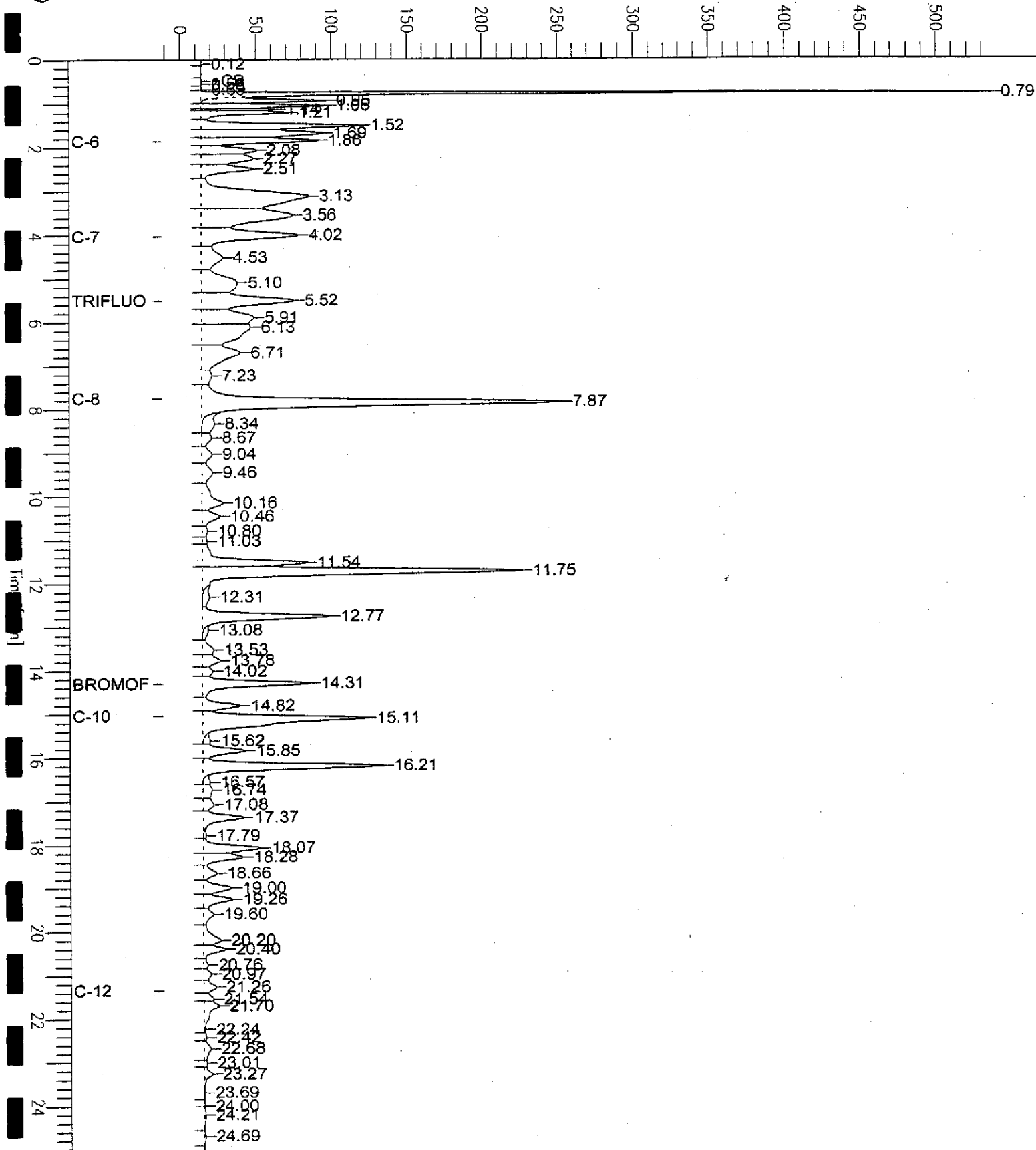
Sample Name : ccv/lcs,qc227174,84884,03ws1335,5/5000  
File Name : G:\GC05\DATA\270G003.raw  
Method : TVHBTXE  
Start Time : 0.00 min End Time : 25.00 min  
Scale Factor : 1.0 Plot Offset : -12 mV

Sample # :  
Date : 9/27/03 06:00 PM  
Time of Injection : 9/27/03 05:35 PM  
Low Point : -12.16 mV High Point : 536.51 mV  
Plot Scale : 548.7 mV

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*Gasoline*

Response [mV]





## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC227174	Batch#:	84884
Matrix:	Water	Analyzed:	09/27/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,044	102	80-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		118	57-150
Bromofluorobenzene (FID)		135	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	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:	QC227175	Batch#:	84884
Matrix:	Water	Analyzed:	09/27/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	20.00	21.75	109	78-123
Toluene	20.00	19.48	97	79-120
Ethylbenzene	20.00	18.93	95	80-120
m,p-Xylenes	40.00	39.74	99	76-120
o-Xylene	20.00	20.00	100	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		75	54-149
Bromofluorobenzene (PID)		94	58-143

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	167821	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:	QC227197	Batch#:	84890
Matrix:	Water	Analyzed:	09/29/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	10.00	11.49	115	78-123
Toluene	10.00	10.27	103	79-120
Ethylbenzene	10.00	10.38	104	80-120
m,p-Xylenes	20.00	21.54	108	76-120
o-Xylene	10.00	10.87	109	80-121

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		77	54-149
Bromofluorobenzene (PID)		94	58-143

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC227198	Batch#:	84890
Matrix:	Water	Analyzed:	09/29/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,056	106	80-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		113	57-150
Bromofluorobenzene (FID)		129	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Field ID:	MW-07 03Q3	Diln Fac:	1.000
MSS Lab ID:	167821-004	Batch#:	84884
Matrix:	Water	Sampled:	09/26/03
Units:	ug/L	Received:	09/26/03

Type: MS Analyzed: 09/27/03  
 Lab ID: QC227176

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	16.15	2,000	2,214	110	76-120
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		132	57-150
Bromofluorobenzene (FID)		142	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Analyzed: 09/28/03  
 Lab ID: QC227177

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,158	107	76-120	3	20
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		122	57-150
Bromofluorobenzene (FID)		132	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

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

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	84890
MSS Lab ID:	167846-001	Sampled:	09/29/03
Matrix:	Water	Received:	09/29/03
Units:	ug/L	Analyzed:	09/29/03
Diln Fac:	1.000		

Type: MS Lab ID: QC227292

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	84.46	2,000	2,240	108	76-120
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		124	57-150
Bromofluorobenzene (FID)		148 *	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC227293

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,172	104	76-120	3	20
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		123	57-150
Bromofluorobenzene (FID)		149 *	65-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

\* = Value outside of QC limits; see narrative

NA = Not Analyzed

RPD = Relative Percent Difference



## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-02 03Q3	Batch#:	84948
Lab ID:	167821-002	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	09/30/03
Diln Fac:	33.33		

Analyte	Result	RL
Chloromethane	ND	33
Vinyl Chloride	ND	17
Bromomethane	ND	33
Chloroethane	ND	33
Trichlorofluoromethane	ND	33
Freon 113	ND	33
1,1-Dichloroethene	ND	17
Methylene Chloride	ND	670
trans-1,2-Dichloroethene	ND	17
1,1-Dichloroethane	ND	17
cis-1,2-Dichloroethene	ND	17
Chloroform	ND	33
1,1,1-Trichloroethane	ND	17
Carbon Tetrachloride	ND	17
1,2-Dichloroethane	ND	17
Trichloroethene	ND	17
1,2-Dichloropropane	ND	17
Bromodichloromethane	ND	17
cis-1,3-Dichloropropene	ND	17
trans-1,3-Dichloropropene	ND	17
1,1,2-Trichloroethane	ND	17
Tetrachloroethene	ND	17
Dibromochloromethane	ND	17
Chlorobenzene	ND	17
Bromoform	ND	17
1,1,2,2-Tetrachloroethane	ND	17
1,3-Dichlorobenzene	ND	17
1,4-Dichlorobenzene	ND	17
1,2-Dichlorobenzene	ND	17

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	88	77-129
Toluene-d8	96	80-120
Bromofluorobenzene	100	80-123

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

## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-06 03Q3	Batch#:	84903
Lab ID:	167821-003	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	09/29/03
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	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	0.7	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	115	80-123

ND= Not Detected  
 RL= Reporting Limit

## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-07 03Q3	Batch#:	84903
Lab ID:	167821-004	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	09/29/03
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	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	105	80-120
Bromofluorobenzene	120	80-123

**Purgeable Halocarbons by GC/MS**

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-08 03Q3	Batch#:	84948
Lab ID:	167821-005	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	09/30/03
Diln Fac:	7.143		

Analyte	Result	RL
Chloromethane	ND	7.1
Vinyl Chloride	47	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	49	3.6
1,1-Dichloroethane	ND	3.6
cis-1,2-Dichloroethene	890	3.6
Chloroform	ND	7.1
1,1,1-Trichloroethane	ND	3.6
Carbon Tetrachloride	ND	3.6
1,2-Dichloroethane	ND	3.6
Trichloroethene	20	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	91	77-129
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-123

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



## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-09 03Q3	Batch#:	85023
Lab ID:	167821-006	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	10/02/03
Diln Fac:	33.33		

Analyte	Result	RL
Chloromethane	ND	33
Vinyl Chloride	ND	17
Bromomethane	ND	33
Chloroethane	ND	33
Trichlorofluoromethane	ND	33
Freon 113	ND	33
1,1-Dichloroethene	ND	17
Methylene Chloride	ND	670
trans-1,2-Dichloroethene	ND	17
1,1-Dichloroethane	ND	17
cis-1,2-Dichloroethene	ND	17
Chloroform	ND	33
1,1,1-Trichloroethane	ND	17
Carbon Tetrachloride	ND	17
1,2-Dichloroethane	ND	17
Trichloroethene	ND	17
1,2-Dichloropropane	ND	17
Bromodichloromethane	ND	17
cis-1,3-Dichloropropene	ND	17
trans-1,3-Dichloropropene	ND	17
1,1,2-Trichloroethane	ND	17
Tetrachloroethene	ND	17
Dibromochloromethane	ND	17
Chlorobenzene	ND	17
Bromoform	ND	17
1,1,2,2-Tetrachloroethane	ND	17
1,3-Dichlorobenzene	ND	17
1,4-Dichlorobenzene	ND	17
1,2-Dichlorobenzene	ND	17

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-123

ND= Not Detected

RL= Reporting Limit



## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-10 03Q3	Batch#:	84903
Lab ID:	167821-007	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	09/29/03
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	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	104	80-120
Bromofluorobenzene	118	80-123

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-11 03Q3	Batch#:	84903
Lab ID:	167821-008	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	09/29/03
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	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	77-129
Toluene-d8	104	80-120
Bromofluorobenzene	116	80-123

ND= Not Detected  
 RL= Reporting Limit



## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-12 03Q3	Batch#:	84948
Lab ID:	167821-009	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	09/30/03
Diln Fac:	1.429		

Analyte	Result	RL
Chloromethane	ND	1.4
Vinyl Chloride	ND	0.7
Bromomethane	ND	1.4
Chloroethane	ND	1.4
Trichlorofluoromethane	ND	1.4
Freon 113	ND	1.4
1,1-Dichloroethene	ND	0.7
Methylene Chloride	ND	29
trans-1,2-Dichloroethene	63	0.7
1,1-Dichloroethane	ND	0.7
cis-1,2-Dichloroethene	60	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	210	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	90	77-129
Toluene-d8	95	80-120
Bromofluorobenzene	103	80-123

ND= Not Detected

RL= Reporting Limit



## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-13 03Q3	Batch#:	84986
Lab ID:	167821-010	Sampled:	09/26/03
Matrix:	Water	Received:	09/26/03
Units:	ug/L	Analyzed:	10/01/03
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	5.1	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	ND	2.0
1,1-Dichloroethene	1.9	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	23	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	270	1.0
Chloroform	ND	2.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	51	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	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 #:	167821	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:	QC227249	Batch#:	84903
Matrix:	Water	Analyzed:	09/29/03
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	99	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	115	80-123

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	167821	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:	QC227419	Batch#:	84948
Matrix:	Water	Analyzed:	09/30/03
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	89	77-129
Toluene-d8	96	80-120
Bromofluorobenzene	103	80-123

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

Lab #:	167821	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:	QC227562	Batch#:	84986
Matrix:	Water	Analyzed:	10/01/03
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	99	80-120
Bromofluorobenzene	110	80-123

ND= Not Detected

RL= Reporting Limit



## Purgeable Halocarbons by GC/MS

Lab #:	167821	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:	QC227699	Batch#:	85023
Matrix:	Water	Analyzed:	10/02/03
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	101	80-120
Bromofluorobenzene	104	80-123

ND= Not Detected

RL= Reporting Limit

**Purgeable Halocarbons by GC/MS**

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	84903
Units:	ug/L	Analyzed:	09/29/03
Diln Fac:	1.000		

Type: BS Lab ID: QC227247

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	41.34	83	73-126
Trichloroethene	50.00	49.27	99	79-125
Chlorobenzene	50.00	54.00	108	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-123

Type: BSD Lab ID: QC227248

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	43.62	87	73-126	5	20
Trichloroethene	50.00	50.00	100	79-125	1	20
Chlorobenzene	50.00	50.78	102	80-120	6	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	77-129
Toluene-d8	106	80-120
Bromofluorobenzene	103	80-123



**Purgeable Halocarbons by GC/MS**

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	84986
Units:	ug/L	Analyzed:	10/01/03
Diln Fac:	1.000		

Type: BS Lab ID: QC227560

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	48.28	97	73-126
Trichloroethene	50.00	50.76	102	79-125
Chlorobenzene	50.00	50.93	102	80-120

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

Type: BSD Lab ID: QC227561

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	45.52	91	73-126	6	20
Trichloroethene	50.00	50.05	100	79-125	1	20
Chlorobenzene	50.00	49.27	99	80-120	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-123





## Purgeable Halocarbons by GC/MS

Lab #:	167821	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	85023
Units:	ug/L	Analyzed:	10/02/03
Diln Fac:	1.000		

Type: BS Lab ID: QC227697

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	44.37	89	73-126
Trichloroethene	50.00	48.52	97	79-125
Chlorobenzene	50.00	47.75	95	80-120

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

Type: BSD Lab ID: QC227698

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	45.12	90	73-126	2	20
Trichloroethene	50.00	50.07	100	79-125	3	20
Chlorobenzene	50.00	50.00	100	80-120	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-123