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July 8, 2003

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Alameda County  
AUG 03 2003  
Environmental Health

Mr. Amir Gholami  
Hazardous Materials Specialists  
Alameda County Health Care Services  
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Alameda, California 94502-6577

Clayton Project No.70-97066.00.001

Subject: Second 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 Second 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 (925) 426-2600.

Sincerely,

Handwritten signature of Mike Krzeminski in black ink.

Mike Krzeminski  
Environmental Consultant  
Environmental Services

Handwritten signature of Jon A. Rosso in black ink.

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

WBC/mk

cc: Donna Profitt  
Rita Repko

Bank of America  
Clayton

**Second 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**

**July 8, 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 Second 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 Second 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 June 24, 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 June 24, 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 Second 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 Second 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 Second Quarter 2003 monitoring event, the groundwater gradient was determined to be 0.014 feet per foot (ft/ft) towards the west.

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The Second 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 7 of 10 samples tested, and ranged in concentration from 130 micrograms per liter ( $\mu\text{g/L}$ ) to 45,000  $\mu\text{g/L}$ .
- Benzene was detected in 5 of 10 samples tested, and ranged in concentration from 100  $\mu\text{g/L}$  to 15,000  $\mu\text{g/L}$ .
- Toluene was detected in 3 of 10 samples tested, and ranged in concentration from 1,400  $\mu\text{g/L}$  to 9,600  $\mu\text{g/L}$ .
- Ethylbenzene was detected in 5 of 10 samples tested, and ranged in concentration from 58  $\mu\text{g/L}$  to 1,100  $\mu\text{g/L}$ .
- Total Xylenes was detected in 5 of 10 samples tested, and ranged in concentration from 0.63  $\mu\text{g/L}$  to 5,200  $\mu\text{g/L}$ .

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 Second 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 2 of 10 samples tested, and ranged in concentration from 3.7  $\mu\text{g/L}$  to 10  $\mu\text{g/L}$ .
- Trichloroethene (TCE) was detected in 3 of 10 samples tested, and ranged in concentration from 6.4  $\mu\text{g/L}$  to 220  $\mu\text{g/L}$ .
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 3 of 10 samples tested, and ranged in concentration from 58  $\mu\text{g/L}$  to 1,000  $\mu\text{g/L}$ .
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 3 of 10 samples tested, and ranged in concentration from 19  $\mu\text{g/L}$  to 66  $\mu\text{g/L}$ .
- Vinyl Chloride (VC) was detected in 2 of 10 samples tested, and ranged in concentration from 4.2  $\mu\text{g/L}$  to 61  $\mu\text{g/L}$ .

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

#### **5. CONCLUSION**

The groundwater gradient determined for the Second Quarter 2003 monitoring event was found to be 0.014 ft/ft to the west, and is consistent with past determinations. The highest concentrations of TPH-g and benzene occur beneath the central portion of the subject building in the area of monitoring wells MW-1, MW-2 and MW-9. The locations of monitoring wells MW-7 and MW-10 define the western, and eastern-northern edge of

the hydrocarbon plume. The distribution of the former gasoline fuel additive 1,2-DCA appears to be associated with the petroleum hydrocarbon release.

The highest concentrations of TPH-g (in wells MW-1, MW-2, and MW-9) have decreased from those detected in the previous sampling event, while lower concentrations (in MW-8, MW-12, and MW-13) have slightly increased from the previous event. Additionally, BTEX compounds decreased in MW-1 from the previous sampling event, while increases were noted in MW-2, MW-8, MW-9, and MW-13. 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.

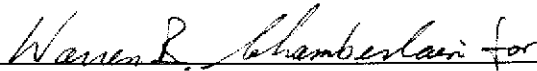
Non gasoline related chlorinated volatile organic compounds TCE, cis-1,2-DCE, trans-1,2-DCE and VC were detected in groundwater samples collected from monitoring wells MW-8, MW-12, and MW-13. The concentrations in these wells have slightly increased from those detected in the previous sampling event. 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

July 8, 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	6/24/2003	16.69	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	6/24/2003	20.79	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			
	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	6/24/2003	16.60	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	6/24/2003	15.47	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	6/24/2003	17.58	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	6/24/2003	17.61	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	6/24/2003	16.92	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
MW-11	6/24/2003	14.87	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

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-12	6/24/2003	14.05	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	6/24/2003	13.39	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
MW-1	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	
MW-2	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	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	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
<b>MW-8</b>	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	
<b>MW-9</b>	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
<b>MW-10</b>	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**

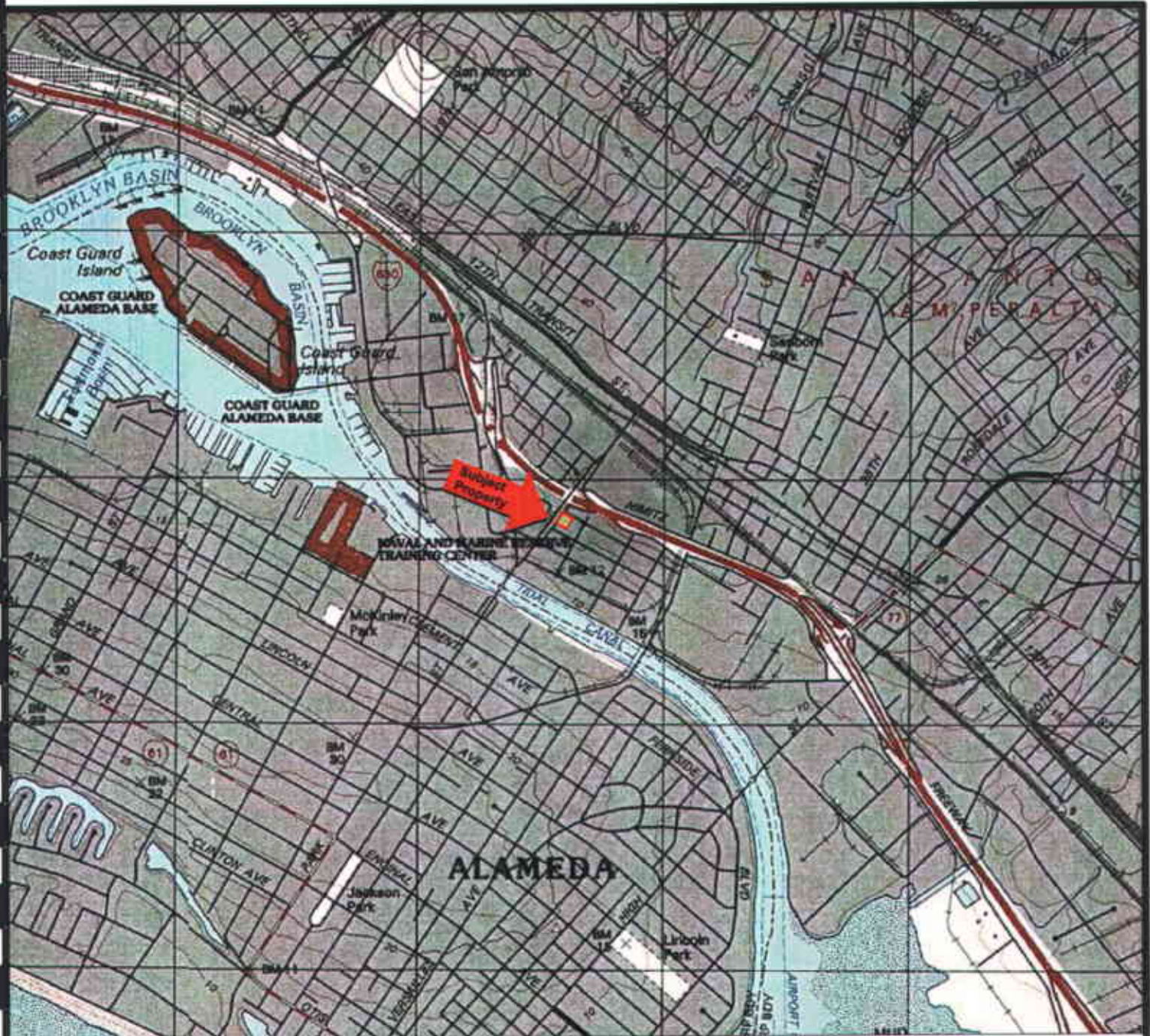
Sample Location	Date Sampled	TPHG	MTBE	Benzene	Toluene	Ethyl benzene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-11	6/24/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/16/2002	160	NA	42	0.89	4.8	11.1	<0.5	3.6	1.1	<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	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	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:

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

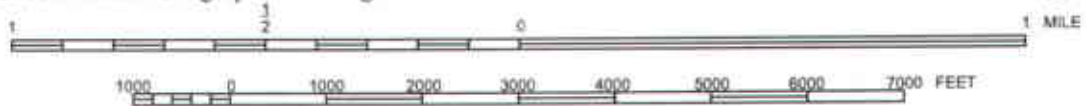
6. MTBE = methyl tert-butyl ether.
7. TCE = Trichloroethene.
8. DCE = Dichloroethene.
9. VC= Vinyl Chloride.

- \*<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

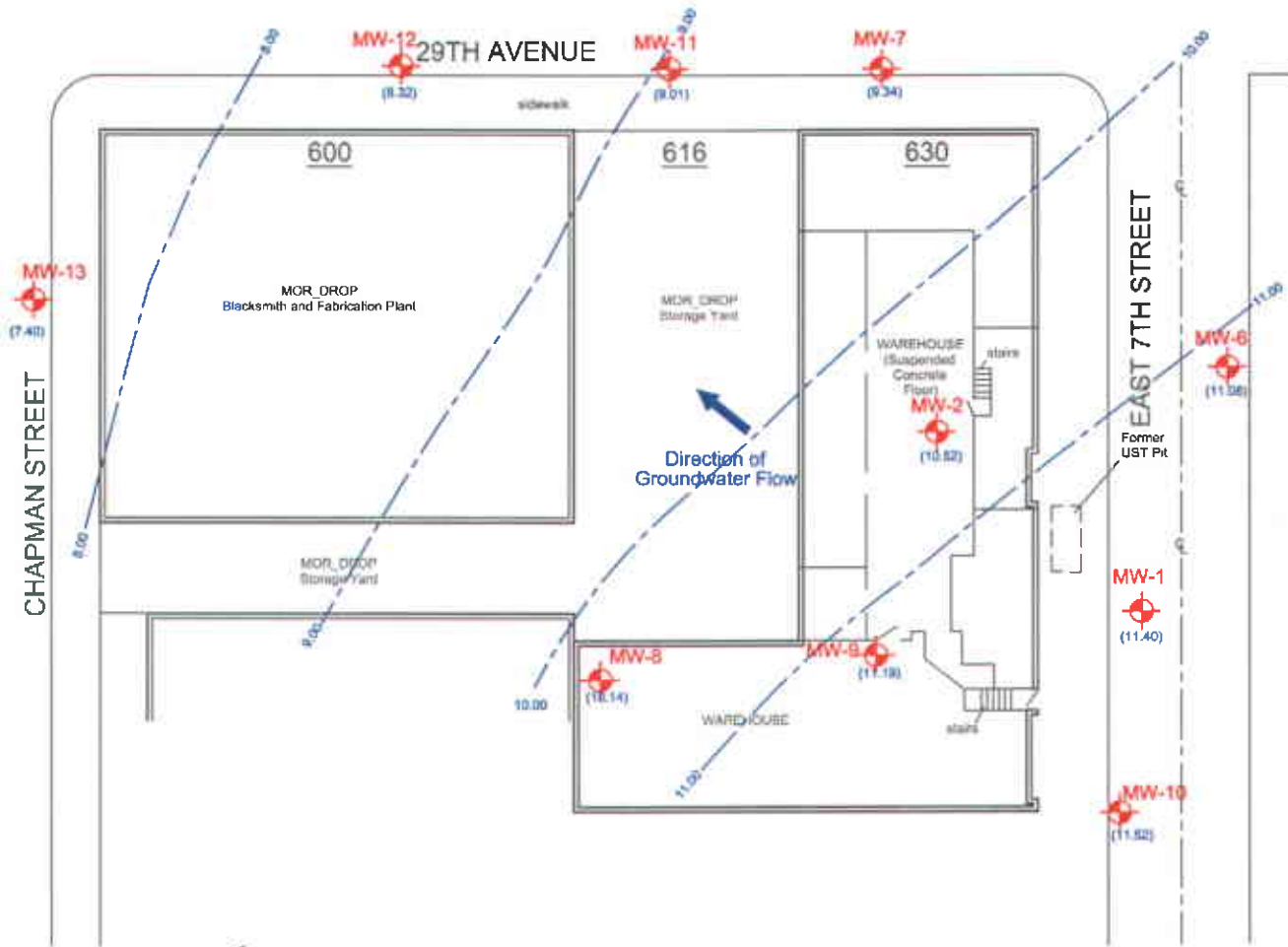


PROPERTY LOCATION MAP  
 Former Lemoine Sausage Factory  
 630 29th Avenue  
 Oakland, California  
 Clayton Project No. 70-97066.00

Figure

1





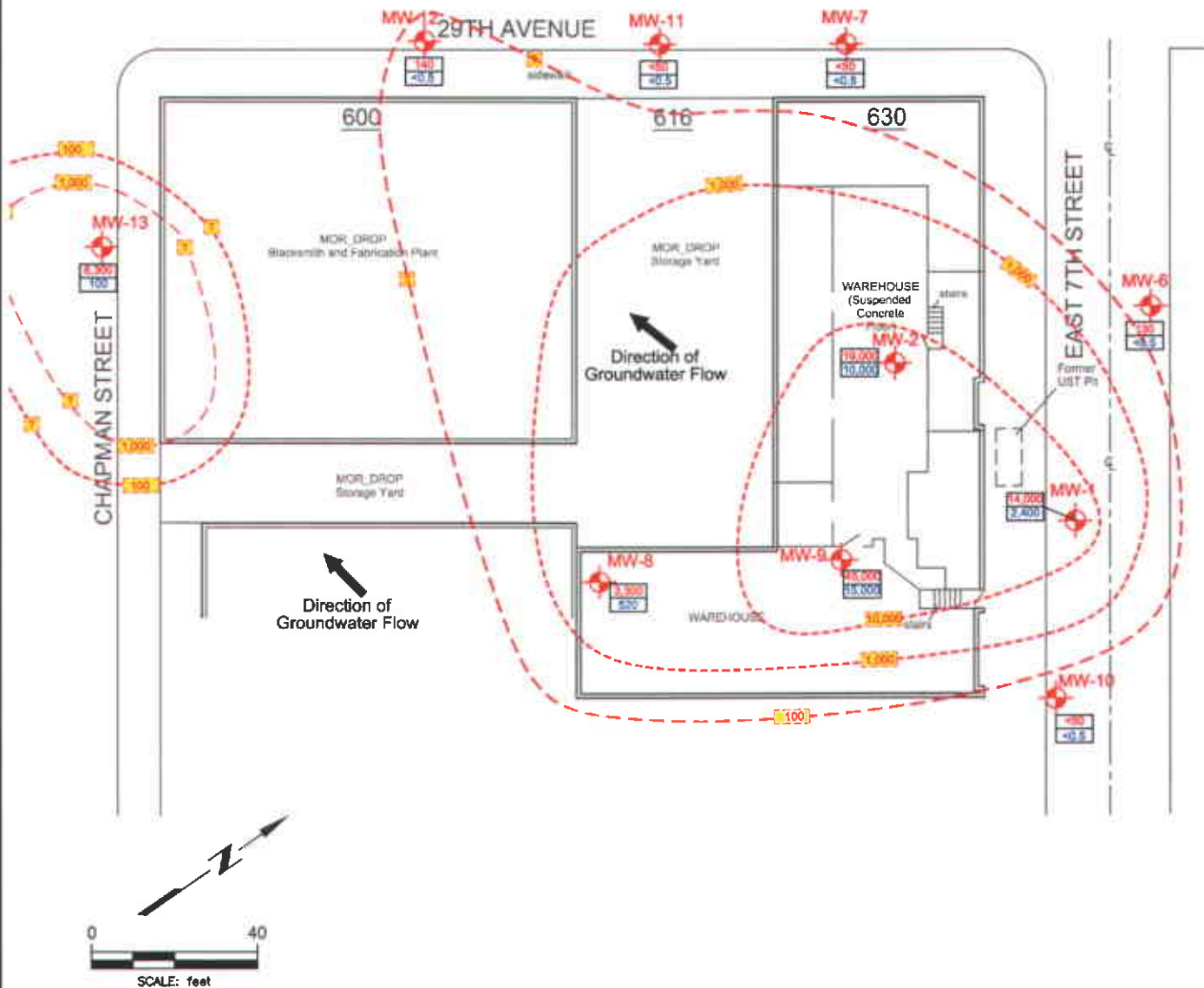
Note:  
Water table elevation contours are approximate.

LEGEND	
MW-1	Existing Monitoring Well Location (11.40) Groundwater Elevation in Feet above Mean Sea Level
10.00	Groundwater Surface Contour and Elevation

GROUNDWATER ELEVATION CONTOUR MAP  
(June 24, 2003)  
FORMER LEMOINE SAUSAGE FACTORY  
630 29TH AVENUE  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-97068.00

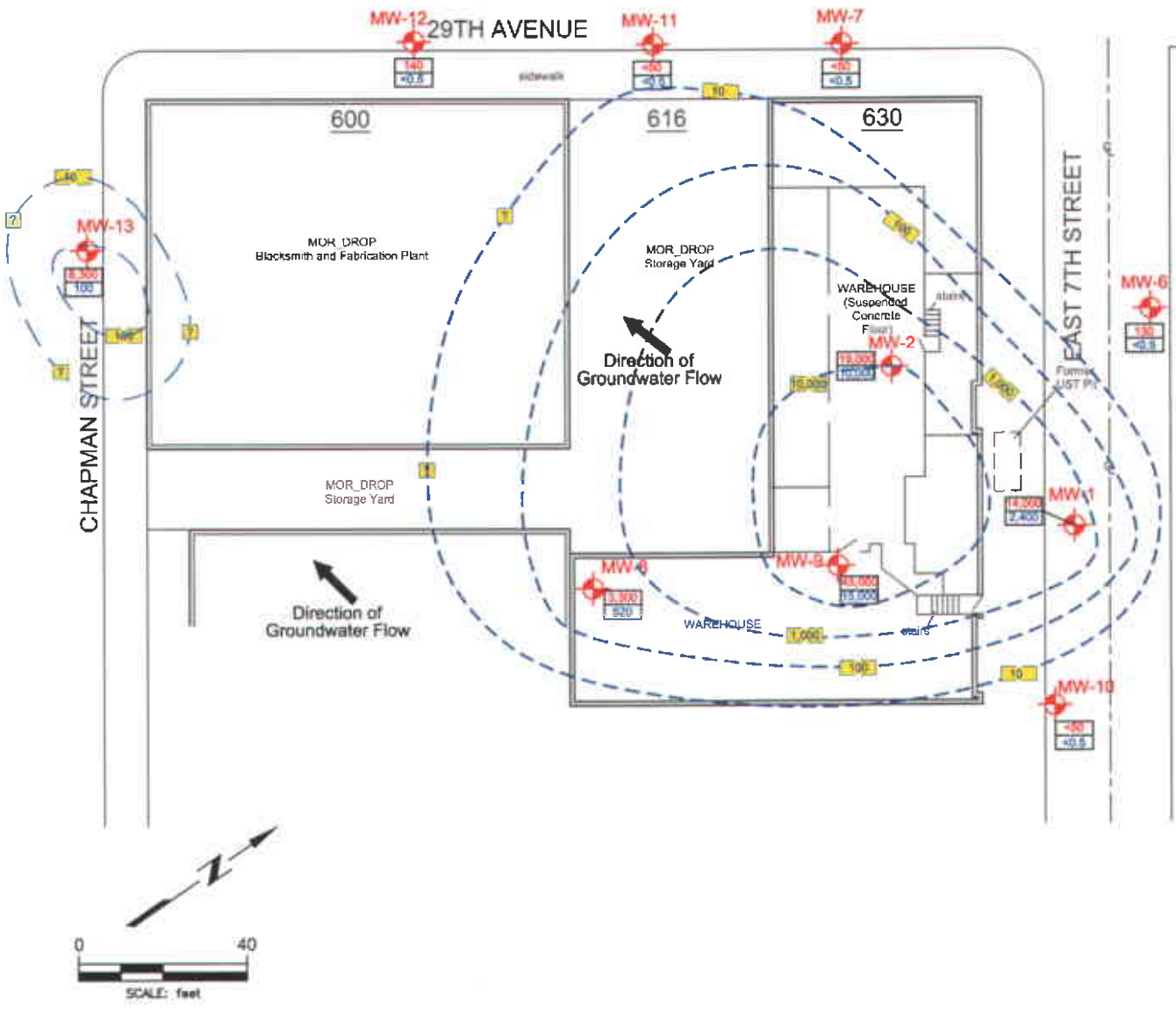
Figure  
**2**  
8/1/03  
Q2ND\_03.dwg





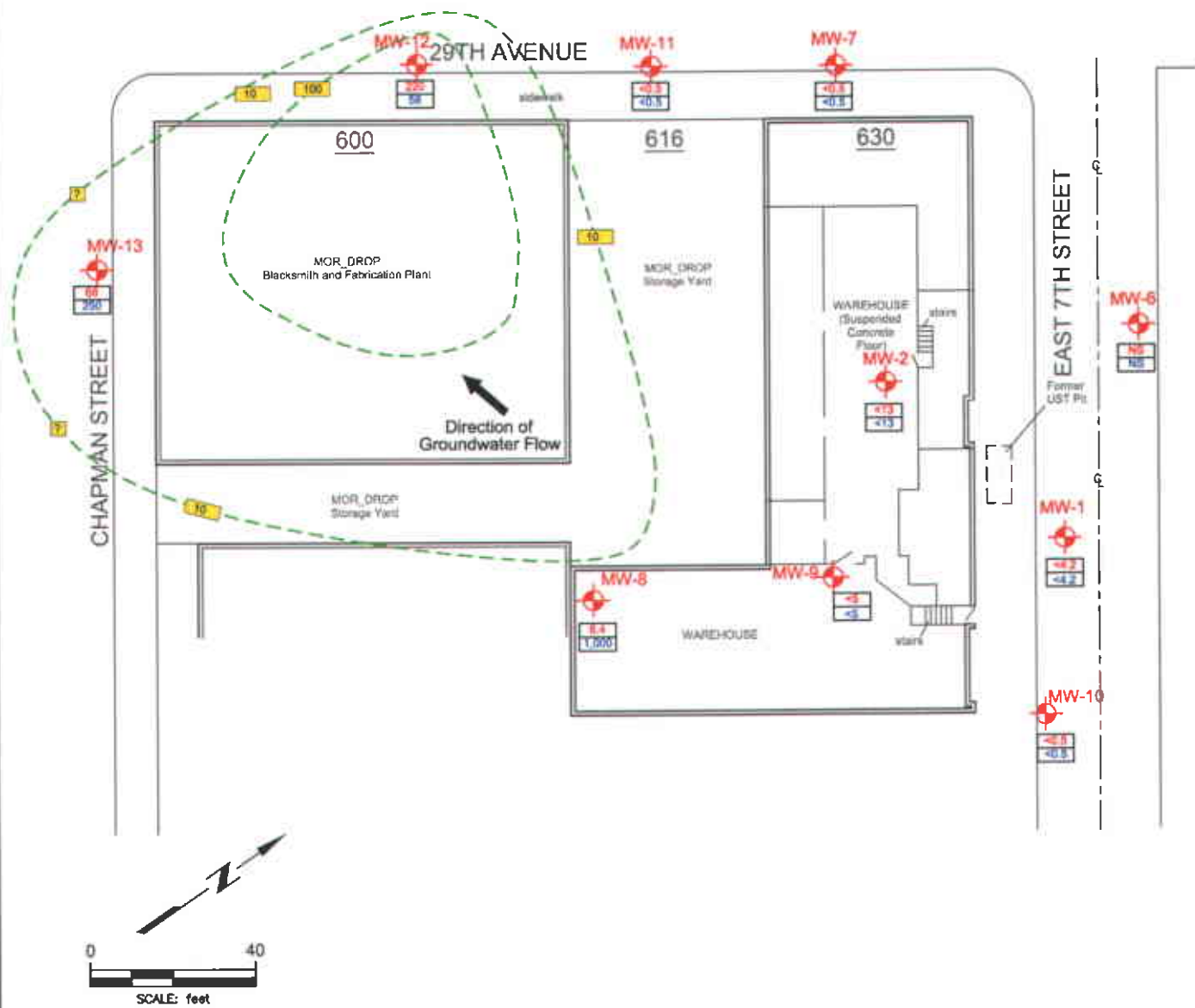
Note:  
Isoconcentration contours are approximate.

LEGEND		<b>TPH as Gasoline</b> <b>CONCENTRATIONS IN GROUNDWATER</b> June, 2003 FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	Figure <b>3a</b> 8/1/03 Q2ND_03.dwg	
MW-1	Existing Monitoring Well Location			
45,000 10,000	TPH-G Concentration (micrograms per liter) Benzene Concentration (micrograms per liter)			
1,000		Isoconcentration Contour (micrograms per liter)		



Note:  
Isoconcentration contours are approximate.

<p style="text-align: center;"><b>LEGEND</b></p> <p>MW-1  Existing Monitoring Well Location</p> <p> TPH-G Concentration (micrograms per liter)</p> <p> Benzene Concentration (micrograms per liter)</p> <p> Isoconcentration Contour (micrograms per liter)</p>	<p style="text-align: center;"><b>BENZENE</b></p> <p style="text-align: center;"><b>CONCENTRATIONS IN GROUNDWATER</b></p> <p style="text-align: center;">June, 2003</p> <p style="text-align: center;">FORMER LEMOINE SAUSAGE FACTORY</p> <p style="text-align: center;">630 29TH AVENUE</p> <p style="text-align: center;">OAKLAND, CALIFORNIA</p> <p style="text-align: center;">Clayton Project No. 70-97066.00</p>	<p>Figure</p> <p style="font-size: 2em; font-weight: bold;">3b</p> <p>8/1/03</p> <p>Q2ND_03.dwg</p>	
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**LEGEND**

- MW-12 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**  
 Juner 2003  
 FORMER LEMOINE SAUSAGE FACTORY  
 630 29TH AVENUE  
 OAKLAND, CALIFORNIA  
 Clayton Project No. 70-97066.00

Figure

**4**

4/14/03  
 Q2ND\_03.dwg



**APPENDIX A**

**SECOND QUARTER (JUNE) 2003  
GROUNDWATER SAMPLING LOGS**







**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6-24-03
	Oakland, California	Purge Method:	Submersible pump
Sampling Location:	<b>MW-6</b>	Date & Time Sampled:	6-24 10:10
Top of Casing:	16.6 (ft, msl)	Sampling Method:	Reaction
Depth to Water:	5.52 - 8.34	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	11.08	Preservatives:	NCL
Well Bottom	-3.40	# of Containers:	6 VOA
Water Column:	14.48	Field Tech:	ML
Well Casing Volume:	2.31 gal (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)
9:46	0	6.81	0.798	-27	20.2	Clear
9:50	2.3	6.84	0.506	-25	21.3	"
9:52	2.3	6.85	0.763	-25	21.0	"
9:54	2.3	6.85	0.987	-26	20.6	"
9:57	2.3	6.92	0.729	-28	21.3	"
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**Field Notes:** Gasoline odor on water

**FIELD SAMPLING DATA SHEET**

Job Location: Former Lemoine Sausage Factory	Job #: 70-97066
630 29th Avenue	Date Purged: 6-24-03
Oakland, California	Purge Method: Submersible pump
Sampling Location: MW-7	Date & Time Sampled: 6-24 5
Top of Casing: 15.47 (ft. msl)	Sampling Method: Auger 17:10
Depth to Water: 6.13 8:46	Sample Type: TPHG/BTEX/8021B
Groundwater Elevation 9.34	Preservatives: HCL
Well Bottom -4.53	# of Containers: 6 VOA
Water Column: 13.87	Field Tech: MK
Well Casing Volume: 2.21 gal (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)
12:52	0	7.38	0.710	-56	21.5	clear
12:54	2.2	7.22	0.408	-54	21.3	11
12:56	2.2	7.02	0.545	-45	20.5	11
12:58	2.2	7.14	0.400	-42	20.5	11
13:00	2.2	7.12	0.739	-35	20.7	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:	6-24-03
	Oakland, California	Purge Method:	Bubler
Sampling Location:	<b>MW-8</b>	Date & Time Sampled:	6:24 14340
Top of Casing:	17.58 (ft, msl)	Sampling Method:	Bubler
Depth to Water:	7.44 4:10	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	10.14	Preservatives:	HCL
Well Bottom	-2.42	# of Containers:	6 VOA
Water Column:	12.56	Field Tech:	mk
Well Casing Volume:	2.00 gal (WC*0.16)	Weather Conditions:	Sunny
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)
14:17	0	7.07	0.588	-34	18.1	clear
14:21	2.0	6.98	0.948	-33	17.6	u
14:26	2.0	6.91	0.524	-29	16.7	u
14:29	2.0	6.98	152.5 $\mu$ /sm	-26	16.7	u
14:33	2.0	6.92	146.4 $\mu$ /sm	-25	16.6	u
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**Field Notes:**

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6-24-03
	Oakland, California	Purge Method:	Bailer
Sampling Location:	<b>MW-9</b>	Date & Time Sampled:	6-24 15:15
Top of Casing:	17.61 (ft, msl)	Sampling Method:	Bailer
Depth to Water:	2.43 9.11	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	11.19	Preservatives:	HCL
Well Bottom	2.61	# of Containers:	6 VOA
Water Column:	8.59	Field Tech:	mx
Well Casing Volume:	1.37 gal (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)
14:47	0	6.83	<del>5.63</del> 5.95	-15	18.0	clear
14:52	1.4	6.57	5.63	-7	17.6	11
14:56	1.4	6.52	6.88	-5	17.5	11
14:59	1.4	6.48	6.89	-2	17.5	11
15:03	1.4	6.47	6.91	-1	17.6	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:	6-24-03
	Oakland, California	Purge Method:	Butler
Sampling Location:	<b>MW-10</b>	Date & Time Sampled:	6-24 10:55
Top of Casing:	16.92 (ft, msl)	Sampling Method:	Butler
Depth to Water:	5.40 - 8.39	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	11.52	Preservatives:	HCL
Well Bottom	7.92	# of Containers:	6 WVA
Water Column:	3.60	Field Tech:	MLC
Well Casing Volume:	0.576 (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)
10:22	0	7.21	0.501	-48	25.7	clear
10:24	0.5	7.17	0.260	-44	24.8	"
10:26	0.5	7.14	0.254	-40	24.0	"
10:28	0.5	7.21	0.416	-44	24.3	"
10:30	0.5	7.19	0.331	-45	24.3	"
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Field Notes:

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**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-97066
	630 29th Avenue	Date Purged:	6-24-03
	Oakland, California	Purge Method:	20 minute pump
Sampling Location:	<b>MW-12</b>	Date & Time Sampled:	6-24 12:45
Top of Casing:	14.05 (ft, msl)	Sampling Method:	Buster
Depth to Water:	5.73 0.51	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	8.32	Preservatives:	HCL
Well Bottom	-0.95	# of Containers:	6 VOA
Water Column:	9.27	Field Tech:	MLK
Well Casing Volume:	1.48 gal (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)
11:56	0	6.92	1.440	-26	21.9	Clear
11:59	1.5	6.93	1.451	-30	21.2	11
12:02	1.5	6.95	1.469	-32	20.8	11
12:04	1.5	6.96	1.471	-32	20.7	11
12:07	1.5	6.95	1.074	-31	20.4	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:	6-24-03
	Oakland, California	Purge Method:	Bubler
Sampling Location:	<b>MW-13</b>	Date & Time Sampled:	6-24 11:50
Top of Casing:	13.39 (ft, msl)	Sampling Method:	Bubler
Depth to Water:	5.94 - 8.55	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	7.40	Preservatives:	HCL
Well Bottom	-1.61	# of Containers:	6 VOA
Water Column:	9.01	Field Tech:	MMK
Well Casing Volume:	7.44 gal (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)
11:14	0	7.06	0.670	-37	24.1	clear
11:17	1.4	7.13	0.678	-37	24.5	ll
11:20	1.4	7.11	0.438	-25	21.8	ll
11:23	1.4	7.00	0.661	-32	21.3	ll
11:38	1.4	6.94	0.651	-28	22.3	ll
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Field Notes:

**APPENDIX B**

**SECOND QUARTER (JUNE) 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

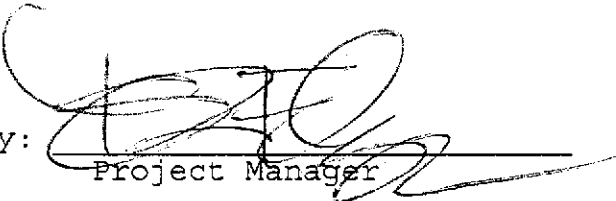
Prepared for:

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

Date: 07-JUL-03  
Lab Job Number: 166009  
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:** 166009  
**Client:** Clayton Group Services  
**Location:** Sausage Factory  
**Project:** 70-97066.00

**Receipt Date:** 06/24/03

### CASE NARRATIVE

This hardcopy data package contains sample and QC results for ten water samples that were received on June 24, 2003. The samples were received cold and intact.

**TVH / BTXE by EPA 8015B / 8021B:** High surrogate recoveries were observed for Bromofluorobenzene and Trifluorotoluene in sample ID MW-13 03Q2 (C&T#166009-010) due to coelution with a hydrocarbon peak. The results for bromofluorobenzene also exceeded the linear range of the instrument due to matrix interference. No other analytical problems were encountered.

**Purgeable Halocarbons by EPA 8260B:** No analytical problems were encountered.



# CHAIN OF CUSTODY

166009

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**

TPH as Gasoline/BTEX	8021B	AS	SOICMG															
X	X	X	X															

Sample Identification	Sample Date	Sample Time	Matrix/Media	No. of Cans	TPH as Gasoline/BTEX	8021B	AS	SOICMG	Sample Condition/Comments	Preservative
MW-01 03Q2	6/24	10:55	L	6	X	X	X	X	Received <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cold <input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Intact	HCI
MW-02 03Q2		14:10	L	6	X	X	X	HCI		
MW-06 03Q2		10:10	L	6	X	X	X	HCI		
MW-07 03Q2		13:50	L	6	X	X	X	Preservation Correct? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	HCI	
MW-08 03Q2		14:40	L	6	X	X	X		HCI	
MW-09 03Q2		15:15	L	6	X	X	X		HCI	
MW-10 03Q2		10:55	L	6	X	X	X		HCI	
MW-11 03Q2		12:40	L	6	X	X	X		HCI	
MW-12 03Q2		12:15	L	6	X	X	X		HCI	
MW-13 03Q2		11:50	L	6	X	X	X		HCI	

Collected by: MK Date/Time: 6-24  
 Relinquished by: [Signature] Date/Time: 6-24  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_

Collector's Signature: [Signature] Date/Time: 6-24  
 Received by: [Signature] Date/Time: 6-24-03  
 Received by: [Signature] Date/Time: \_\_\_\_\_  
 Sample Condition on Rcpt: \_\_\_\_\_

4:10 pm

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/24/03
Units:	ug/L	Received:	06/24/03
Batch#:	82464		

Field ID:	MW-01 03Q2	Diln Fac:	10.00
Type:	SAMPLE	Analyzed:	06/25/03
Lab ID:	166009-001		

Analyte	Result	RL	Analysis
Gasoline C7-C12	14,000	500	8015B
Benzene	2,400	5.0	EPA 8021B
Toluene	1,400	5.0	EPA 8021B
Ethylbenzene	550	5.0	EPA 8021B
m,p-Xylenes	1,100	5.0	EPA 8021B
o-Xylene	1,000	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	121	57-150	8015B
Bromofluorobenzene (FID)	112	65-144	8015B
Trifluorotoluene (PID)	134	54-149	EPA 8021B
Bromofluorobenzene (PID)	118	58-143	EPA 8021B

Field ID:	MW-02 03Q2	Diln Fac:	40.00
Type:	SAMPLE	Analyzed:	06/25/03
Lab ID:	166009-002		

Analyte	Result	RL	Analysis
Gasoline C7-C12	19,000	2,000	8015B
Benzene	10,000	20	EPA 8021B
Toluene	1,700	20	EPA 8021B
Ethylbenzene	1,100	20	EPA 8021B
m,p-Xylenes	2,300	20	EPA 8021B
o-Xylene	230	20	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	125	57-150	8015B
Bromofluorobenzene (FID)	116	65-144	8015B
Trifluorotoluene (PID)	126	54-149	EPA 8021B
Bromofluorobenzene (PID)	120	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 H= Heavier hydrocarbons contributed to the quantitation  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 LR= Response exceeds instrument's linear range

GC04 TVH 'J' Data File FID

Sample Name : 166009-001,82464

Sample #: a1

Page 1 of 1

FileName : G:\GC04\DATA\175J025.raw

Date : 6/25/03 09:58 AM

Method : TVHBTXE

Time of Injection: 6/25/03 06:47 AM

Start Time : 0.00 min End Time : 26.00 min

Low Point : 50.98 mV

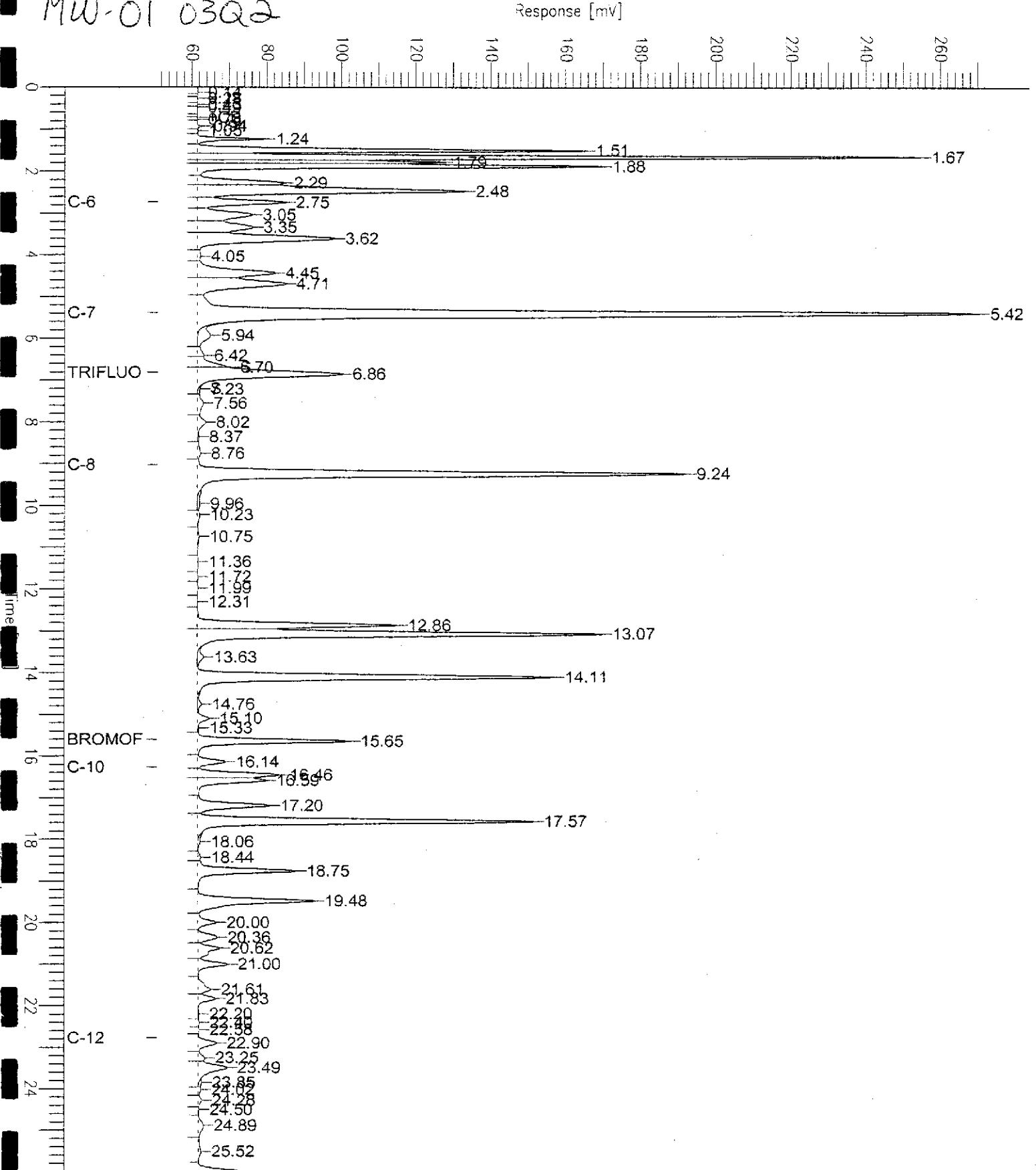
High Point : 270.62 mV

Scale Factor: 1.0

Plot Offset: 51 mV

Plot Scale: 219.6 mV

MW-01 03Q2



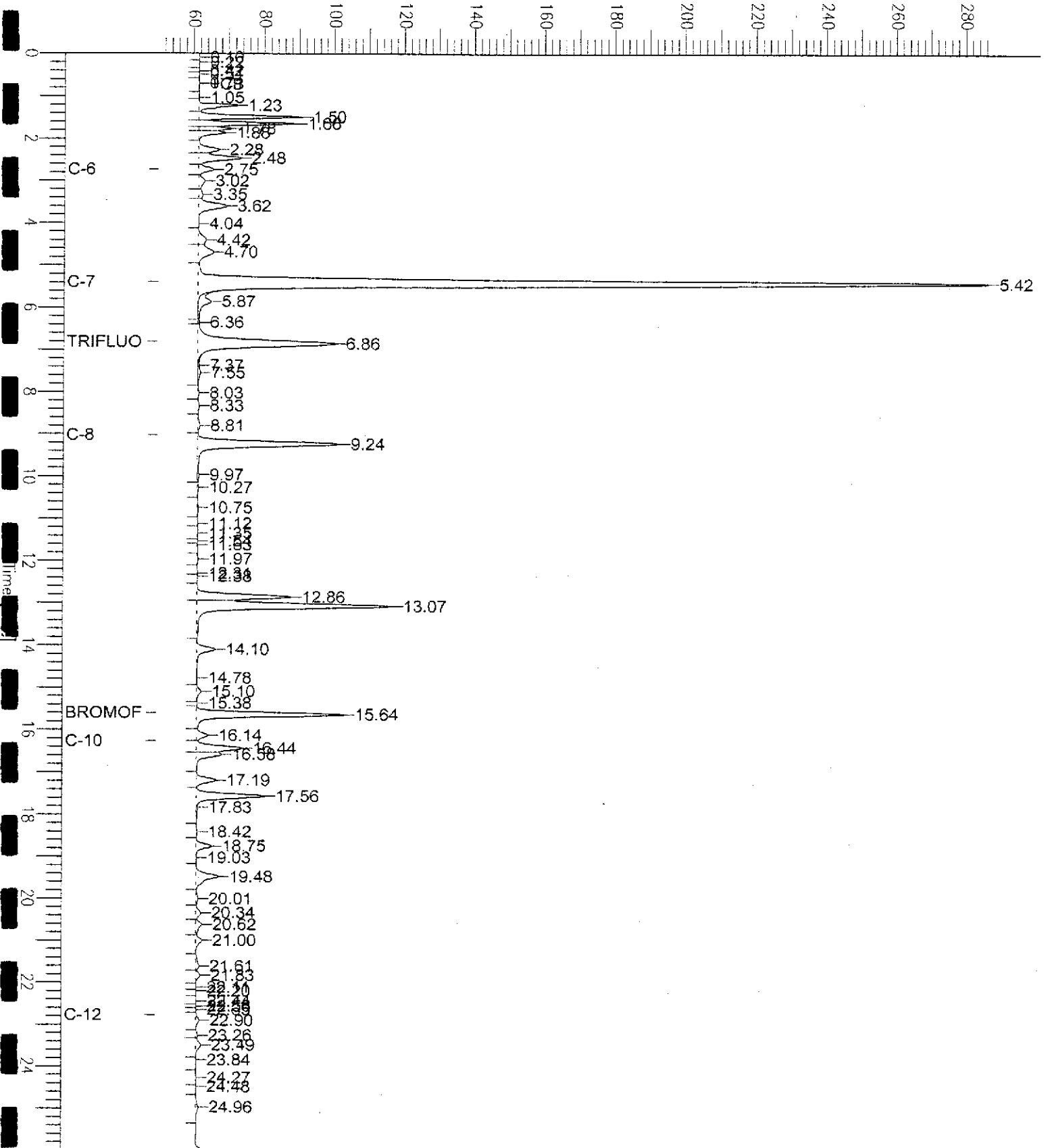
# GC04 TVH 'J' Data File FID

Sample Name : 166009-002,82464  
File Name : G:\GC04\DATA\175J024.raw  
Method : TVHBTXE  
Start Time : 0.00 min End Time : 26.00 min  
Scale Factor : 1.0 Plot Offset: 50 mV

Sample #: a1 Page 1 of 1  
Date : 6/25/03 06:37 AM  
Time of Injection: 6/25/03 06:10 AM  
Low Point : 50.08 mV High Point : 286.70 mV  
Plot Scale: 236.6 mV

MW-02 03Q2

Response [mV]





## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/24/03
Units:	ug/L	Received:	06/24/03
Batch#:	82464		

Field ID:	MW-06 03Q2	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	06/24/03
Lab ID:	166009-003		

Analyte	Result	RL	Analysis
Gasoline C7-C12	130 H Y	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)	122	57-150	8015B
Bromofluorobenzene (FID)	125	65-144	8015B
Trifluorotoluene (PID)	125	54-149	EPA 8021B
Bromofluorobenzene (PID)	128	58-143	EPA 8021B

Field ID:	MW-07 03Q2	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	06/24/03
Lab ID:	166009-004		

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)	113	57-150	8015B
Bromofluorobenzene (FID)	113	65-144	8015B
Trifluorotoluene (PID)	114	54-149	EPA 8021B
Bromofluorobenzene (PID)	117	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 H= Heavier hydrocarbons contributed to the quantitation  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 b= See narrative

ND= Not Detected  
 RL= Reporting Limit  
 LR= Response exceeds instrument's linear range

GC04 TVH 'J' Data File FID

Sample Name : 156009-003,82464

Sample #: a1

Page 1 of 1

FileName : G:\GC04\DATA\175J010.raw

Date : 6/25/03 10:31 AM

Method : TVHBTXE

Time of Injection: 6/24/03 09:45 PM

Start Time : 0.00 min End Time : 26.00 min

Low Point : 58.32 mV

High Point : 105.04 mV

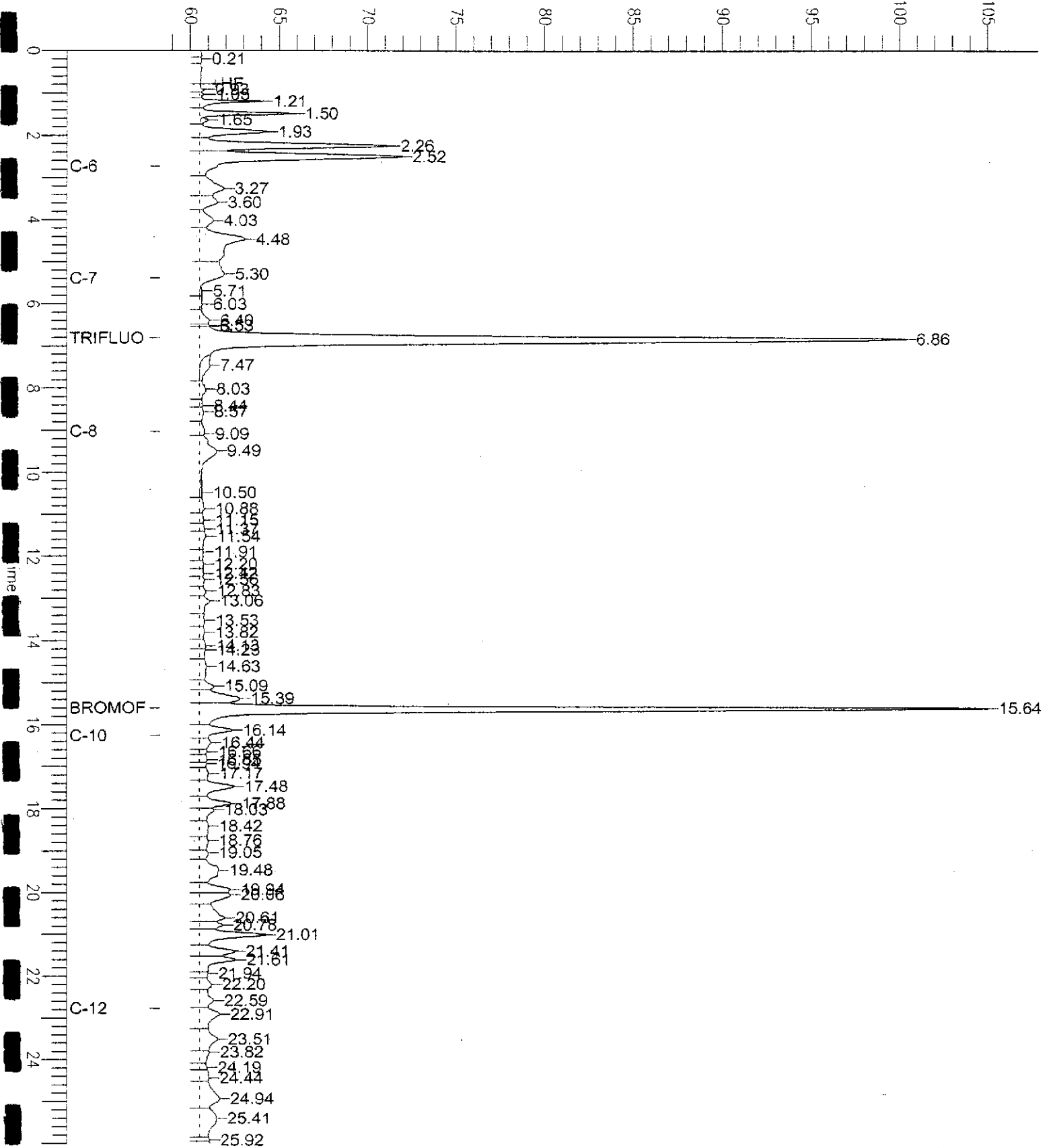
Scale Factor: 1.0

Plot Offset: 58 mV

Plot Scale: 46.7 mV

MW-06 03Q2

Response [mV]



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/24/03
Units:	ug/L	Received:	06/24/03
Batch#:	82464		

Field ID:	MW-08 03Q2	Lab ID:	166009-005
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Analyzed	Analysis
Gasoline C7-C12	3,300 L Y	50	1.000	06/24/03	8015B
Benzene	520	1.0	2.000	06/25/03	EPA 8021B
Toluene	ND	0.50	1.000	06/24/03	EPA 8021B
Ethylbenzene	58	0.50	1.000	06/24/03	EPA 8021B
m,p-Xylenes	ND	0.50	1.000	06/24/03	EPA 8021B
o-Xylene	0.63	0.50	1.000	06/24/03	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Analyzed	Analysis
Trifluorotoluene (FID)	131	57-150	1.000	06/24/03	8015B
Bromofluorobenzene (FID)	129	65-144	1.000	06/24/03	8015B
Trifluorotoluene (PID)	126	54-149	1.000	06/24/03	EPA 8021B
Bromofluorobenzene (PID)	128	58-143	1.000	06/24/03	EPA 8021B

Field ID:	MW-09 03Q2	Diln Fac:	50.00
Type:	SAMPLE	Analyzed:	06/25/03
Lab ID:	166009-006		

Analyte	Result	RL	Analysis
Gasoline C7-C12	45,000	2,500	8015B
Benzene	15,000	25	EPA 8021B
Toluene	9,600	25	EPA 8021B
Ethylbenzene	1,100	25	EPA 8021B
m,p-Xylenes	4,000	25	EPA 8021B
o-Xylene	1,200	25	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	127	57-150	8015B
Bromofluorobenzene (FID)	113	65-144	8015B
Trifluorotoluene (PID)	124	54-149	EPA 8021B
Bromofluorobenzene (PID)	118	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 H= Heavier hydrocarbons contributed to the quantitation  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 LR= Response exceeds instrument's linear range

# GC04 TVH 'J' Data File FID

Sample Name : 166009-005.82464

Sample #: a1

Page 1 of 1

FileName : G:\GC04\DATA\175J012.raw

Date : 6/25/03 09:58 AM

Method : TVHBTXE

Time of Injection: 6/24/03 10:57 PM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 9.04 mV

High Point : 1094.35 mV

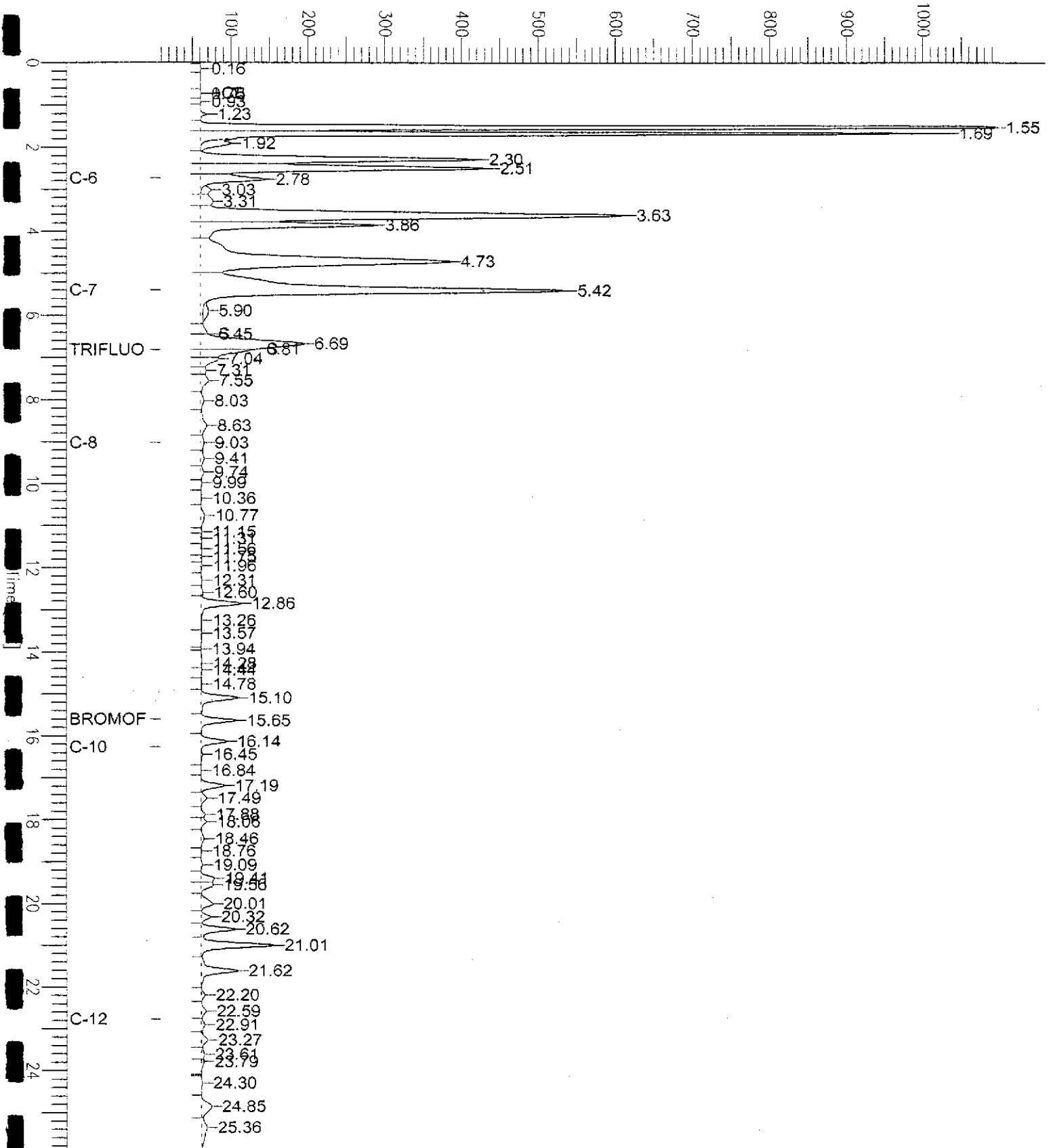
Scale Factor: 1.0

Plot Offset: 9 mV

Plot Scale: 1085.3 mV

MW-08 03Q2

Response [mV]



GC04 TVH 'J' Data File FID

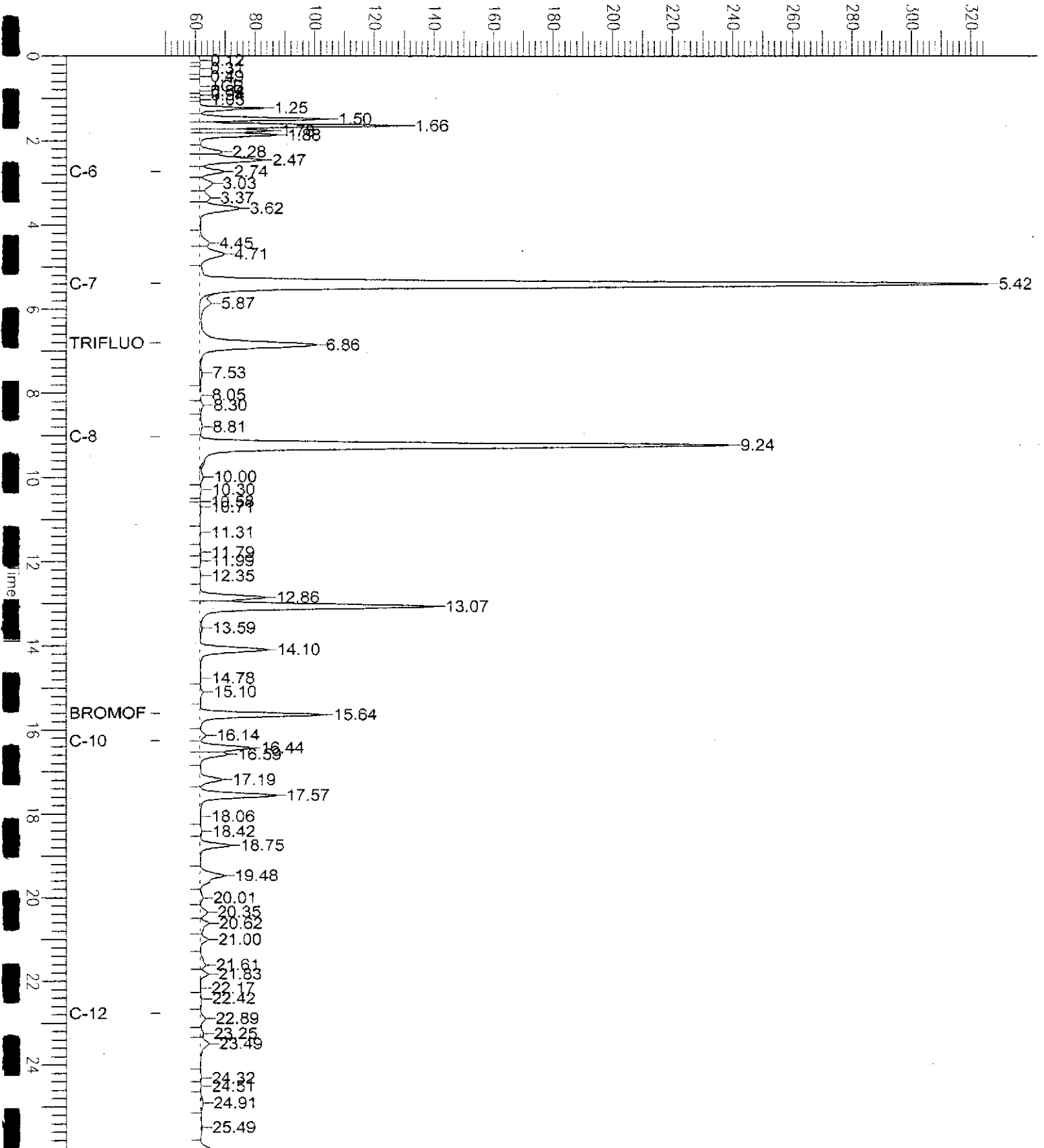
Sample Name : 166009-006,82464  
File Name : G:\GC04\DATA\175J023.raw  
Method : TVHBTXE  
Start Time : 0.00 min  
Scale Factor : 1.0

End Time : 26.00 min  
Plot Offset : 48 mV

Sample #: a1  
Date : 6/25/03 06:00 AM  
Time of Injection: 6/25/03 05:34 AM  
Low Point : 48.22 mV  
Plot Scale: 277.6 mV  
High Point : 325.81 mV

MW-09 03Q2

Response [mV]



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/24/03
Units:	ug/L	Received:	06/24/03
Batch#:	82464		

Field ID:	MW-10 03Q2	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	06/24/03
Lab ID:	166009-007		

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)	117	57-150	8015B
Bromofluorobenzene (FID)	124	65-144	8015B
Trifluorotoluene (PID)	118	54-149	EPA 8021B
Bromofluorobenzene (PID)	128	58-143	EPA 8021B

Field ID:	MW-11 03Q2	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	06/25/03
Lab ID:	166009-008		

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)	115	57-150	8015B
Bromofluorobenzene (FID)	119	65-144	8015B
Trifluorotoluene (PID)	117	54-149	EPA 8021B
Bromofluorobenzene (PID)	122	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 H= Heavier hydrocarbons contributed to the quantitation  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 LR= Response exceeds instrument's linear range

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/24/03
Units:	ug/L	Received:	06/24/03
Batch#:	82464		

Field ID:	MW-12 03Q2	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	06/25/03
Lab ID:	166009-009		

Analyte	Result	RL	Analysis
Gasoline C7-C12	140 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	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	117	57-150	8015B
Bromofluorobenzene (FID)	113	65-144	8015B
Trifluorotoluene (PID)	121	54-149	EPA 8021B
Bromofluorobenzene (PID)	116	58-143	EPA 8021B

Field ID:	MW-13 03Q2	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	06/25/03
Lab ID:	166009-010		

Analyte	Result	RL	Analysis
Gasoline C7-C12	8,300 L Y	50	8015B
Benzene	100 C	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	94	0.50	EPA 8021B
m,p-Xylenes	12 C	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	74	57-150	8015B
Bromofluorobenzene (FID)	236 *	>LR b 65-144	8015B
Trifluorotoluene (PID)	168 *	54-149	EPA 8021B
Bromofluorobenzene (PID)	164 *	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 H= Heavier hydrocarbons contributed to the quantitation  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 LR= Response exceeds instrument's linear range

# GC04 TVH 'J' Data File FID

Sample Name : 166009-009,82464

Sample #: a1

Page 1 of 1

File Name : G:\GC04\DATA\175J020.raw

Date : 6/25/03 04:12 AM

Method : TVHBTXE

Time of Injection: 6/25/03 03:46 AM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 58.70 mV

High Point : 112.63 mV

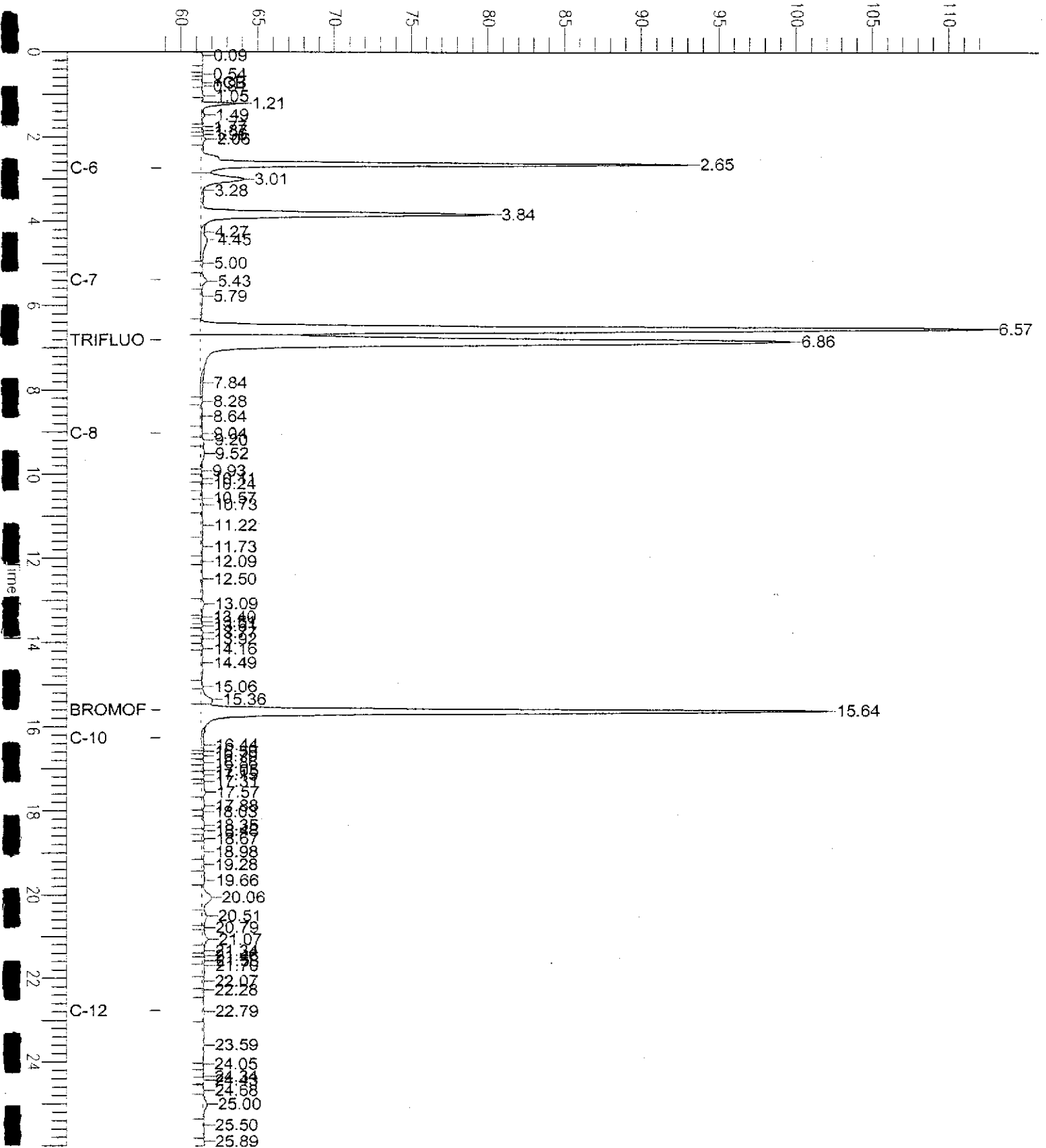
Scale Factor: 1.0

Plot Offset: 59 mV

Plot Scale: 53.9 mV

MW-12 03Q2

Response [mV]





# GC04 TVH 'J' Data File FID

Sample Name : 166009-010,82464

Sample #: a1

Page 1 of 1

File Name : G:\GC04\DATA\175J021.raw

Date : 6/25/03 10:04 AM

Method : TVHBTXE

Time of Injection: 6/25/03 04:22 AM

Start Time : 0.00 min End Time : 26.00 min

Low Point : 9.59 mV

High Point : 1094.23 mV

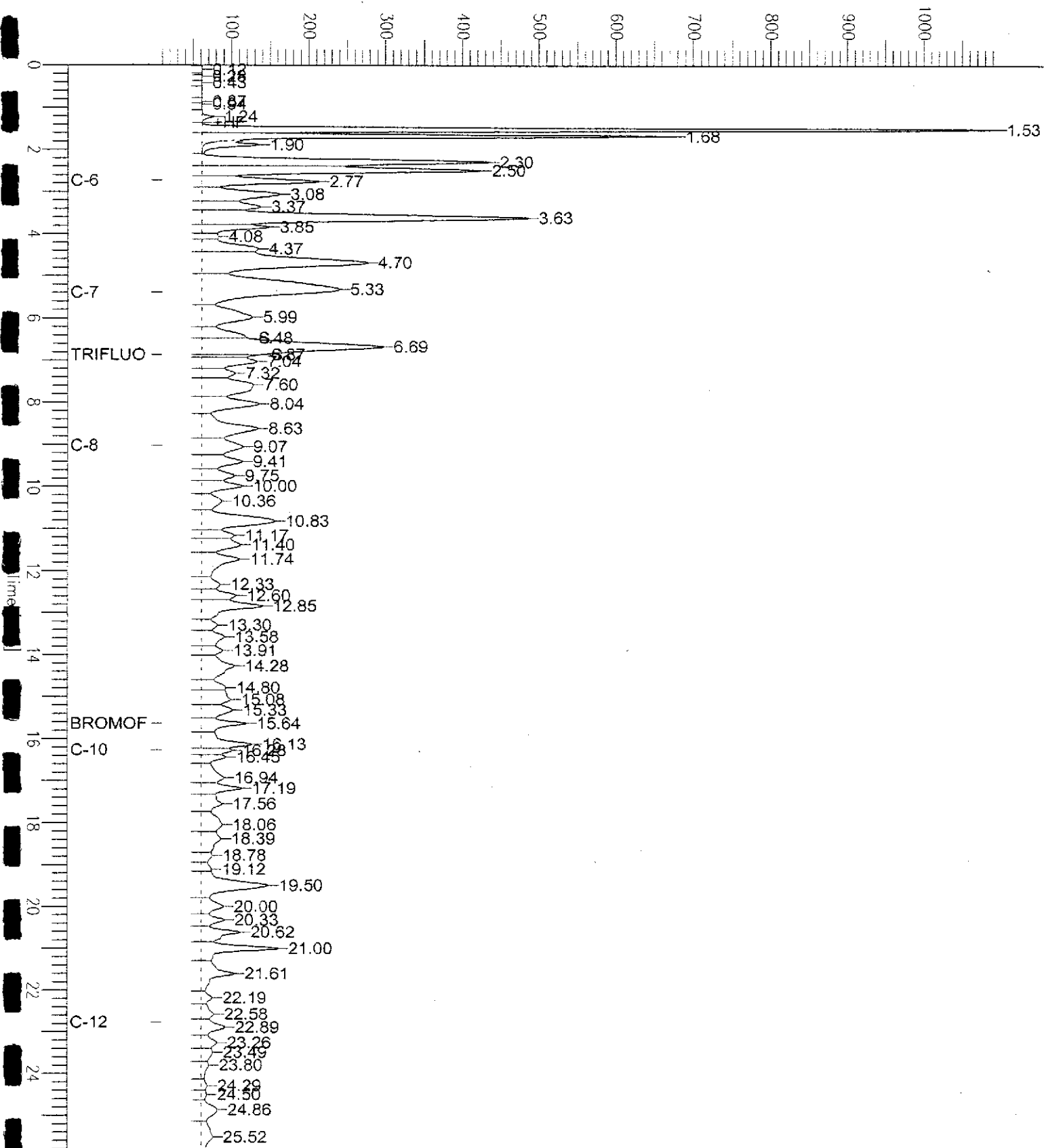
Scale Factor: 1.0

Plot Offset: 10 mV

Plot Scale: 1084.6 mV

MW-13 03Q2

Response [mV]



# GC04 TVH 'J' Data File FID

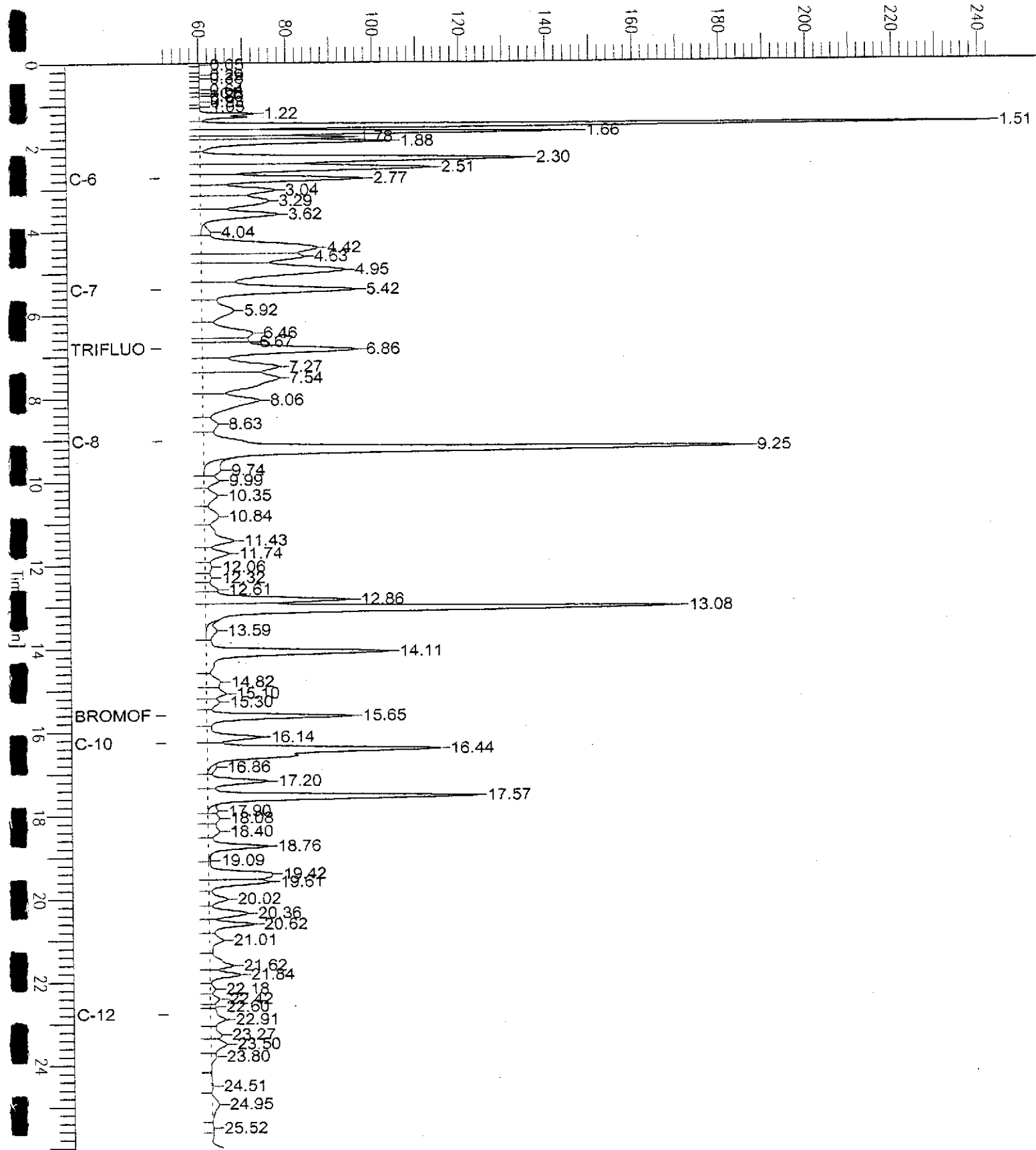
Sample Name : ccv/lcs.qc217620,82464,03ws1038,5/5000  
Sample Name : G:\GC04\DATA\175J005.raw  
Method : TVHBTXE  
Start Time : 0.00 min  
Scale Factor : 1.0

Sample # :  
Date : 6/25/03 09:57 AM  
Time of Injection: 6/24/03 06:34 PM  
Low Point : 51.07 mV  
Plot Scale: 191.4 mV

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*Gasoline*

Response [mV]



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/24/03
Units:	ug/L	Received:	06/24/03
Batch#:	82464		

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC217619	Analyzed:	06/24/03

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)	108	57-150	8015B
Bromofluorobenzene (FID)	106	65-144	8015B
Trifluorotoluene (PID)	110	54-149	EPA 8021B
Bromofluorobenzene (PID)	108	58-143	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 H= Heavier hydrocarbons contributed to the quantitation  
 L= Lighter hydrocarbons contributed to the quantitation  
 Y= Sample exhibits chromatographic pattern which does not resemble standard  
 Z= Sample exhibits unknown single peak or peaks  
 b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 LR= Response exceeds instrument's linear range

### Total Volatile Hydrocarbons

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC217620	Batch#:	82464
Matrix:	Water	Analyzed:	06/24/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,796	90	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	57-150
Bromofluorobenzene (FID)	95	65-144



**Benzene, Toluene, Ethylbenzene, Xylenes**

Lab #:	166009	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:	QC217621	Batch#:	82464
Matrix:	Water	Analyzed:	06/24/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	17.97	90	78-123
Toluene	20.00	19.01	95	79-120
Ethylbenzene	20.00	18.28	91	80-120
m,p-Xylenes	40.00	37.95	95	76-120
o-Xylene	20.00	18.69	93	80-121

Surrogate	%REC	Limits
Trifluorotoluene (PID)	104	54-149
Bromofluorobenzene (PID)	103	58-143

**Total Volatile Hydrocarbons**

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Batch#:	82464
MSS Lab ID:	166003-007	Sampled:	06/23/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/24/03
Diln Fac:	1.000		

Type: MS Lab ID: QC217622

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	55.68	2,000	1,969	96	76-120
Surrogate	%REC	Limits			
Trifluorotoluene (FID)	133	57-150			
Bromofluorobenzene (FID)	118	65-144			

Type: MSD Lab ID: QC217623

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,976	96	76-120	0	20
Surrogate	%REC	Limits				
Trifluorotoluene (FID)	140	57-150				
Bromofluorobenzene (FID)	127	65-144				

**Purgeable Halocarbons by GC/MS**

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-01 03Q2	Batch#:	82539
Lab ID:	166009-001	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/27/03
Diln Fac:	8.333		

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

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-129
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-123

**Purgeable Halocarbons by GC/MS**

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-02 03Q2	Batch#:	82543
Lab ID:	166009-002	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/28/03
Diln Fac:	25.00		

Analyte	Result	RL
Chloromethane	ND	25
Vinyl Chloride	ND	13
Bromomethane	ND	25
Chloroethane	ND	25
Trichlorofluoromethane	ND	25
Freon 113	ND	25
1,1-Dichloroethene	ND	13
Methylene Chloride	ND	500
trans-1,2-Dichloroethene	ND	13
1,1-Dichloroethane	ND	13
cis-1,2-Dichloroethene	ND	13
Chloroform	ND	25
1,1,1-Trichloroethane	ND	13
Carbon Tetrachloride	ND	13
1,2-Dichloroethane	ND	13
Trichloroethene	ND	13
1,2-Dichloropropane	ND	13
Bromodichloromethane	ND	13
cis-1,3-Dichloropropene	ND	13
trans-1,3-Dichloropropene	ND	13
1,1,2-Trichloroethane	ND	13
Tetrachloroethene	ND	13
Dibromochloromethane	ND	13
Chlorobenzene	ND	13
Bromoform	ND	13
1,1,2,2-Tetrachloroethane	ND	13
1,3-Dichlorobenzene	ND	13
1,4-Dichlorobenzene	ND	13
1,2-Dichlorobenzene	ND	13

Surrogate	REC	Limits
1,2-Dichloroethane-d4	89	77-129
Toluene-d8	91	80-120
Bromofluorobenzene	101	80-123

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

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-06 03Q2	Batch#:	82511
Lab ID:	166009-003	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/26/03
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	0.6	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	96	77-129
Toluene-d8	94	80-120
Bromofluorobenzene	109	80-123

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

## Purgeable Halocarbons by GC/MS

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-07 03Q2	Batch#:	82511
Lab ID:	166009-004	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/26/03
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	102	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-123

**Purgeable Halocarbons by GC/MS**

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-08 03Q2	Batch#:	82543
Lab ID:	166009-005	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/27/03
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	61	3.1
Bromomethane	ND	6.3
Chloroethane	ND	6.3
Trichlorofluoromethane	ND	6.3
Freon 113	ND	6.3
1,1-Dichloroethene	ND	3.1
Methylene Chloride	ND	130
trans-1,2-Dichloroethene	49	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	1,000	3.1
Chloroform	ND	6.3
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	3.7	3.1
Trichloroethene	6.4	3.1
1,2-Dichloropropane	ND	3.1
Bromodichloromethane	ND	3.1
cis-1,3-Dichloropropene	ND	3.1
trans-1,3-Dichloropropene	ND	3.1
1,1,2-Trichloroethane	ND	3.1
Tetrachloroethene	ND	3.1
Dibromochloromethane	ND	3.1
Chlorobenzene	ND	3.1
Bromoform	ND	3.1
1,1,2,2-Tetrachloroethane	ND	3.1
1,3-Dichlorobenzene	ND	3.1
1,4-Dichlorobenzene	ND	3.1
1,2-Dichlorobenzene	ND	3.1

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	94	77-129
Toluene-d8	95	80-120
Bromofluorobenzene	101	80-123

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

## Purgeable Halocarbons by GC/MS

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-09 03Q2	Batch#:	82511
Lab ID:	166009-006	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/26/03
Diln Fac:	10.00		

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

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	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 #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-10 03Q2	Batch#:	82511
Lab ID:	166009-007	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/26/03
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	95	80-120
Bromofluorobenzene	102	80-123

ND= Not Detected

RL= Reporting Limit



## Purgeable Halocarbons by GC/MS

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-11 03Q2	Batch#:	82511
Lab ID:	166009-008	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/26/03
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	84	77-129
Toluene-d8	90	80-120
Bromofluorobenzene	99	80-123

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-12 03Q2	Batch#:	82511
Lab ID:	166009-009	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/26/03
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	66	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	58	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	220	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	91	77-129
Toluene-d8	95	80-120
Bromofluorobenzene	101	80-123

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-13 03Q2	Batch#:	82543
Lab ID:	166009-010	Sampled:	06/24/03
Matrix:	Water	Received:	06/24/03
Units:	ug/L	Analyzed:	06/27/03
Diln Fac:	2.000		

Analyte	Result	RL
Chloromethane	ND	2.0
Vinyl Chloride	4.2	1.0
Bromomethane	ND	2.0
Chloroethane	ND	2.0
Trichlorofluoromethane	ND	2.0
Freon 113	ND	2.0
1,1-Dichloroethene	2.8	1.0
Methylene Chloride	ND	40
trans-1,2-Dichloroethene	19	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	250	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	68	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	94	77-129
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-123



## Purgeable Halocarbons by GC/MS

Lab #:	166009	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:	QC217819	Batch#:	82511
Matrix:	Water	Analyzed:	06/26/03
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	98	77-129
Toluene-d8	94	80-120
Bromofluorobenzene	106	80-123

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

Lab #:	166009	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:	QC217820	Batch#:	82511
Matrix:	Water	Analyzed:	06/26/03
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	98	77-129
Toluene-d8	95	80-120
Bromofluorobenzene	102	80-123

## Purgeable Halocarbons by GC/MS

Lab #:	166009	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:	QC217925	Batch#:	82539
Matrix:	Water	Analyzed:	06/27/03
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	110	77-129
Toluene-d8	98	80-120
Bromofluorobenzene	104	80-123

## Purgeable Halocarbons by GC/MS

Lab #:	166009	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:	QC217935	Batch#:	82543
Matrix:	Water	Analyzed:	06/27/03
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	95	77-129
Toluene-d8	95	80-120
Bromofluorobenzene	105	80-123



## Purgeable Halocarbons by GC/MS

Lab #:	166009	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:	QC217936	Batch#:	82543
Matrix:	Water	Analyzed:	06/27/03
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	100	80-120
Bromofluorobenzene	107	80-123

ND= Not Detected

RL= Reporting Limit

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**Purgeable Halocarbons by GC/MS**

Lab #:	166009	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	82543
Units:	ug/L	Analyzed:	06/27/03
Diln Fac:	1.000		

Type: BS Lab ID: QC217933

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	55.74	111	73-126
Trichloroethene	50.00	53.02	106	79-125
Chlorobenzene	50.00	52.89	106	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	90	77-129
Toluene-d8	95	80-120
Bromofluorobenzene	103	80-123

Type: BSD Lab ID: QC217934

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	52.11	104	73-126	7	20
Trichloroethene	50.00	52.99	106	79-125	0	20
Chlorobenzene	50.00	52.79	106	80-120	0	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	86	77-129
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-123