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June 7, 2004

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Alameda County  
JUN 08 2004  
Environmental Health

Clayton Project No.70-04578.00

Subject: First Quarter 2004 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 First Quarter 2004 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 Clayton at (925) 426-2600.

Sincerely,

Handwritten signature of Mathew Reimer in black ink.

Mathew Reimer  
Staff Environmental Consultant  
Environmental Services

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Donald A. Ashton  
Senior Geologist  
Environmental Services  
San Francisco Regional Office

DAA/daa

cc: Donna Proffitt                      Bank of America  
Rita Repko                              Clayton (2 copies, one for AIG)

Approved  
JUL 10 8 2004  
Environmental Division

**First Quarter 2004  
Groundwater Monitoring Report  
for the  
Former Lemoine Sausage Facility  
630 29<sup>th</sup> Avenue  
Oakland, California**

**Clayton Project No. 70-04578.00**

**June 7, 2004**

*Prepared by:*  
**CLAYTON GROUP SERVICES, INC.**  
**6920 Koll Center Parkway**  
**Suite 216**  
**Pleasanton, California**  
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## 1. INTRODUCTION

Clayton Group Services, Inc., (Clayton) has prepared this quarterly groundwater monitoring report to document the results of the First Quarter 2004 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 to 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 First Quarter 2004 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 groundwater that collected in the tank excavation 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. Groundwater samples were collected from 10 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 of the 10 monitoring well to determine the groundwater elevation, gradient and flow direction. The depth to water in each monitoring well was measured 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 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 hand bailing with a 1-liter Teflon bailer. 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 by subtracting the depth to water from the well casing depth (reported in well construction details).

Field logs documenting water-level measurements and well purging and sampling for the First Quarter 2004 monitoring event are presented in Appendix A. Groundwater purged from monitoring wells during sampling was stored onsite in sealed 55-gallon drums meeting U.S. Department of Transportation (USDOT) regulations and labeled with identifying information. The waste was later manifested and removed from the site by a licensed hauler as hazardous waste.

#### 3.3. GROUNDWATER SAMPLING

Prior to collecting a groundwater sample from each monitoring well, the well casing was allowed to recharge to 80-percent of the pre-purged water volume. Groundwater samples for laboratory analyses were retrieved using either a peristaltic pump with polytubing or a new 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 a State of California certified laboratory, Curtis and Tompkins Laboratories of Berkeley, California, for analysis. 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 First Quarter 2004 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 groundwater (water table) map was produced by using the surveyed monitoring well coordinates to produce contouring lines of equal elevation using the groundwater elevation data points for this monitoring event. The groundwater elevation data indicates that there has been a slight rise in the groundwater table elevation that is likely a seasonal change. The magnitude of the local groundwater gradient was determined using groundwater elevations from monitoring wells MW-1 and MW-12. The direction of groundwater flow is inferred to be perpendicular to the piezometric equipotential contours. For the First Quarter 2004 monitoring event, the groundwater gradient was determined to be 0.022 feet per foot (ft/ft) towards the west-southwest.

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The First Quarter 2004 groundwater elevation contour map and the approximate groundwater flow direction 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 that ranged in concentration from 76 micrograms per liter ( $\mu\text{g/L}$ ) to 60,000  $\mu\text{g/L}$ .
- Benzene was detected in 5 of 10 samples tested that ranged in concentration from 22  $\mu\text{g/L}$  to 14,000  $\mu\text{g/L}$ .
- Toluene was detected in 3 of 10 samples tested that ranged in concentration from 1,300  $\mu\text{g/L}$  to 3,100  $\mu\text{g/L}$ .
- Ethylbenzene was detected in 5 of 10 samples tested that ranged in concentration from 37  $\mu\text{g/L}$  to 1,300  $\mu\text{g/L}$ .
- Total Xylenes was detected in 5 of 10 samples tested that ranged in concentration from 1  $\mu\text{g/L}$  to 5,500  $\mu\text{g/L}$ .

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 First Quarter 2004 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 only 1 of 10 samples tested (MW-8) at a concentration of 3.7  $\mu\text{g/L}$ .
- Trichloroethene (TCE) was detected in 2 of 10 samples tested (MW-8, MW-12, and MW-13) that ranged in concentration from 4.4  $\mu\text{g/L}$  to 160  $\mu\text{g/L}$ .
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 3 of 10 samples tested (MW-8, MW-12, and MW-13) that ranged in concentration from 49  $\mu\text{g/L}$  to 1,100  $\mu\text{g/L}$ .
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 3 of 10 samples tested (MW-8, MW-12, and MW-13) that ranged in concentration from 23  $\mu\text{g/L}$  to 54  $\mu\text{g/L}$ .
- Vinyl Chloride (VC) was detected in 2 of 10 samples tested (MW-8 and MW-13) that ranged in concentration from 8  $\mu\text{g/L}$  to 58  $\mu\text{g/L}$ .

The concentrations of TCE and 1,2-DCE detected in groundwater samples for the First Quarter 2004 monitoring event are presented in Figure 4.

#### 5. CONCLUSION


The groundwater gradient determined for the First Quarter 2004 monitoring event was found to be 0.022 ft/ft to the west-southwest, and is relatively consistent with past determinations. The highest concentrations of TPH-g and benzene occur beneath the central portion of the subject building in the area of monitoring wells MW-2 and MW-9. These wells are located just downgradient of the former UST location. The locations of

monitoring wells MW-6, MW-7 and MW-10 define the northern, western, and eastern edge of the hydrocarbon plume. The distribution of the former gasoline fuel additive 1,2-DCA appears to be associated with the gasoline release from the former UST system.

The concentrations of TPH-g and BTEX appear to have increased slightly near the former UST location, which may be a result of the slight groundwater level increase that appears to have occurred since the last sampling event. The TPH-g and BTEX concentrations for the more distant wells have generally decreased slightly, which may indicate that margins of the petroleum hydrocarbon plume are naturally attenuating faster than the residual petroleum hydrocarbons nearer to the former UST location.

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-3, MW-8 and MW-12. The concentrations of TCE and the associated degradation products appear to be relatively stable with some indications of natural degradation. The source of chlorinated VOCs is unknown and appears to be originating off site.

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Environmental Services  
San Francisco Regional Office

June 7, 2004



Table 1

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

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-1	4/6/2004	16.69	3.57	13.12
	12/16/2003		NM	
	9/26/2003		6.88	9.81
	6/24/2003		5.29	11.40
	3/28/2003		4.44	12.25
	12/16/2002		3.91	12.78
	9/11/2002		6.17	10.52
	6/28/2002		5.61	11.08
	3/25/2002		2.77	13.92
	12/3/2001		4.17	12.52
	9/25/2001		6.76	9.93
	6/20/2001		5.85	10.84
	3/21/2001		4.29	12.40
	12/19/2000		5.50	11.19
	9/22/2000		6.30	10.39
6/15/2000	4.82	11.87		
2/8/1999	3.60	13.09		
MW-2	4/6/2004	20.79	9.40	11.39
	12/16/2003		11.50	9.29
	9/26/2003		11.20	9.59
	6/24/2003		10.24	10.55
	3/28/2003		10.27	10.52
	12/16/2002		11.15	9.64
	9/11/2002		10.89	9.90
	6/28/2002		10.65	10.14
	3/25/2002		9.21	11.58
	12/3/2001		11.13	9.66
	9/25/2001		11.78	9.01
	6/20/2001		10.92	9.87
	3/21/2001		10.01	10.78
	12/19/2000		11.38	9.41
	9/22/2000		11.49	9.30
6/15/2000	10.46	10.33		
2/8/1999	14.20	6.59		
MW-3	Removed from monitoring program in October 2001			
	9/25/2001	21.10	10.74	10.36
	6/20/2001		10.14	10.96
	3/21/2001		8.95	12.15
	12/19/2000		9.72	11.38
	9/22/2000		15.30	5.80
	6/15/2000		10.56	10.54
	2/8/1999		7.45	13.65

Table 1

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

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-4	Removed from monitoring program in October 2001			
	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	4/6/2004	16.60	4.85	11.75
	12/16/2003		4.99	11.61
	9/26/2003		6.70	9.90
	6/24/2003		5.52	11.08
	3/28/2003		NM	
	12/16/2002		3.93	12.67
	9/11/2002		5.43	11.17
	6/28/2002		5.83	10.77
	3/25/2002		3.93	12.67
	12/3/2001		4.72	11.88
	9/25/2001		6.68	9.92
	6/20/2001		6.13	10.47
	3/21/2001		4.70	11.90
	12/19/2000		5.93	10.67
	9/22/2000		6.54	10.06
6/15/2000		5.47	11.13	
MW-7	4/6/2004	15.47	5.60	9.87
	12/16/2003		5.68	9.79
	9/26/2003		7.22	8.25
	6/24/2003		6.13	9.34
	3/28/2003		5.68	9.79
	12/16/2002		5.01	10.46
	9/11/2002		6.95	8.52
	6/28/2002		6.94	8.53
	3/25/2002		6.04	9.43
	12/3/2001		6.48	8.99
	9/25/2001		7.25	8.22
	6/20/2001		6.90	8.57
	3/21/2001		5.53	9.94
	12/19/2000		7.20	8.27
	9/22/2000		7.51	7.96
6/15/2000		6.40	9.07	

Table 1

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

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-8	4/6/2004	17.58	6.74	10.84
	12/16/2003		6.69	10.89
	9/26/2003		8.71	8.87
	6/24/2003		7.44	10.14
	3/28/2003		6.62	10.96
	12/16/2002		5.63	11.95
	9/11/2002		8.40	9.18
	6/28/2002		7.71	9.87
	3/25/2002		5.40	12.18
	12/3/2001		6.58	11.00
	9/25/2001		8.89	8.69
	6/20/2001		7.96	9.62
	3/21/2001		6.40	11.18
	12/19/2000		7.71	9.87
9/22/2000	8.33	9.25		
6/15/2000	7.14	10.44		
MW-9	4/6/2004	17.61	5.97	11.64
	12/16/2003		6.76	10.85
	9/26/2003		8.14	9.47
	6/24/2003		6.42	11.19
	3/28/2003		6.08	11.53
	12/16/2002		6.58	11.03
	9/11/2002		6.91	10.70
	6/28/2002		7.71	9.90
	3/25/2002		4.98	12.63
	12/3/2001		5.79	11.82
MW-10	4/6/2004	16.92	4.54	12.38
	12/16/2003		4.94	11.98
	9/26/2003		6.98	9.94
	6/24/2003		5.40	11.52
	3/28/2003		4.54	12.38
	12/16/2002		3.74	13.18
	9/11/2002		6.16	10.76
	6/28/2002		5.65	11.27
	3/25/2002		3.00	13.92
	12/3/2001		4.22	12.70
MW-11	4/6/2004	14.87	5.49	9.38
	12/16/2003		5.61	9.26
	9/26/2003		7.16	7.71
	6/24/2003		5.86	9.01
	3/28/2003		5.17	9.70
	12/16/2002		3.92	10.95
	9/11/2002		6.91	7.96
	6/28/2002		6.35	8.52
	3/25/2002		4.68	10.19
	12/3/2001		5.67	9.20

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	4/6/2004	14.05	5.04	9.01
	12/16/2003		4.99	9.06
	9/26/2003		6.94	7.11
	6/24/2003		5.73	8.32
	3/28/2003		5.08	8.97
	12/16/2002		4.94	9.11
	9/11/2002		6.82	7.23
	6/28/2002		6.13	7.92
MW-13	4/6/2004	13.39	5.35	8.04
	12/16/2003		5.01	8.58
	9/26/2003		6.99	6.40
	6/24/2003		5.99	7.40
	3/28/2003		5.34	8.05
	12/16/2002		3.90	9.49
	9/11/2002		6.66	6.73
	6/28/2002		6.21	7.18

Notes:

1. All top of casing elevations referenced to mean sea level (msl) and surveyed with reference to the benchmark located at Peterson Street and East 7<sup>th</sup> Street.
2. NM = Not Measured

**Table 2**  
**Summary of Groundwater Analytical Results**  
**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
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-1	4/6/2004	18,000	NA	2,400	1,300	550	1,730	<2.0	<2.0	<2.0	<2.0	<2.0
	NS											
	9/26/2003	11,000	NA	1,200	960	370	1,600	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2003	14,000	NA	2,400	1,400	500	2,100	<4.2	<4.2	<4.2	<4.2	<4.2
	3/28/2003	20,000	NA	2,700	1,500	650	2,300	<3.6	<3.6	<3.6	<3.6	<3.6
	12/16/2002	20,000	NA	2,800	490	500	2,300	<4.2	<4.2	<4.2	<4.2	<4.2
	9/11/2002	27,000	NA	3,200	1,900	720	3,500	<4.2	<4.2	<4.2	<4.2	<4.2
	6/28/2002	26,000	NA	3,200	1,800	640	2,900	<3.1	<3.1	<3.1	<3.1	<3.1
	3/25/2002	11,000	NA	3,200	1,200	73	1,860	<5	<5	<5	<5	<5
	12/3/2001	15,000	NA	2,800	1,200	310	1,660	<3.1	<3.1	<3.1	<3.1	<3.1
	9/26/2001	16,000	NA	1,100	130	< 10	320	<2.5	<2.5	<2.5	<2.5	<2.5
	6/21/2001	12,000	NA	2,000	880	180	1,180	3.0	<0.5	<0.5	<0.5	<0.5
	3/21/2000	21,000	NA	3,200	1,700	290	2,600	<2.5	<2.5	<2.5	<2.5	<2.5
	12/19/2000	25,000	NA	3,200	1,900	480	3,300	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/2000	25,000	<500	3,100	1,800	470	3,600	NA	NA	NA	NA	NA
	6/15/2000	29,000	NA	3,900	<100	1,900	4,200	<5.0	<5.0	<5.0	<5.0	<5.0
	2/8/1999	48,000	NA	3,900	6,300	970	4,300	<30	NA	NA	NA	NA
MW-2	4/6/2004	27,000	NA	7,600	1,700	630	1,420	<10	<10	<10	<10	<10
	12/16/2003	22,000	NA	10,000	2,700	1,200	2,920	<25	<25	<25	<25	<25
	9/26/2003	20,000	NA	10,000	2,100	960	2,520	<17	<17	<17	<17	<17
	6/24/2003	19,000	NA	10,000	1,700	1,100	2,530	<13	<13	<13	<13	<13
	3/28/2003	30,000	NA	9,300	920	930	2,000	14	<13	<13	<13	<13
	12/16/2002	6,000	NA	1,600	410	150	402	2.7	4.5	69	6.9	<2.5
	9/11/2002	23,000	NA	6,600	1,000	600	1,320	10	<6.3	<6.3	<6.3	<6.3
	6/28/2002	8,400	NA	2,200	680	21	220	8.8	<3.1	<3.1	<3.1	<3.1
	3/25/2002	21,000	NA	11,000	3,700	1,000	2,790	<17	<17	<17	<17	<17
	12/3/2001	45,000	NA	13,000	5,100	950	2,930	14	<7.1	<7.1	<7.1	<7.1
	9/26/2001	26,000	NA	12,000	3,900	590	1,960	11	< 10	< 10	< 10	< 10
	6/21/2001	30,000	NA	8,600	2,600	440	1,230	5.6	<0.5	<0.5	<0.5	<0.5
	3/23/2001	34,000	NA	10,000	3,200	410	1,220	14	<13	<13	<13	<13
	12/19/2000	43,000	NA	9,800	4,000	810	2,430	21	<13	<13	<13	<13
	9/22/2000	24,000	<500	10,000	2,700	370	1,200	NA	NA	NA	NA	NA
	6/29/2000	31,000	NA	11,000	930	4,400	250	25	<5.0	<5.0	<5.0	<5.0
	2/8/1999	41,000	NA	11,000	4,900	650	1,720	60	NA	NA	NA	NA

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

Sample Location	Date Sampled	TPHG ug/L	MTBE ug/L	Benzene ug/L	Toluene ug/L	Ethyl benzene ug/L	Total Xylenes ug/L	1,2- DCA ug/L	TCE ug/L	cis-1,2 DCE ug/L	trans-1,2- DCE ug/L	VC ug/L
<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>1</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 Groundwater Analytical Results**  
**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
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
<b>MW-6</b>	4/6/2004	260	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 <sup>*12</sup>	< 0.5	< 0.5	< 0.5	< 0.5
	12/16/2003	< 50	NA	< 0.5	< 0.5	< 0.5	0.88	< 0.5	1.7	0.6	< 0.5	< 0.5
	9/26/2003	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.7 <sup>*7</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>*3</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>*9</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
<b>MW-7</b>	4/6/2004	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/16/2003	< 50	NA	< 0.5	< 0.5	< 0.5	0.75	< 0.5	1.8	0.6	< 0.5	< 0.5
	9/26/2003	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	6/24/2003	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/28/2003	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/16/2002	< 50	NA	< 0.5	< 0.5	1.6	3.7	< 0.5	0.5	< 0.5	< 0.5	< 0.5
	9/11/2002	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	6/28/2002	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/25/2002	< 50	NA	0.56	0.75	< 0.5	0.69	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/3/2001	82	NA	24	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	9/25/2001	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	6/21/2001	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/21/2001	160	NA	59	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/19/2000	< 50	NA	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	9/22/2000	< 50	< 5	2	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	NA
	6/15/2000	1,000	NA	250	< 10	< 10	16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

**Table 2**  
**Summary of Groundwater Analytical Results**  
**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
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-8	4/6/2004	3,800	NA	420	<0.5	53	1	3.7	4.4	1,100	39	58
	12/16/2003	1,100	NA	310	<2.5	14	<2.5	4.3	12	1,200	53	110
	9/26/2003	1,300	NA	280	3.9	38	0.85	<3.6	20	890	49	47
	6/24/2003	3,300	NA	520	<0.5	58	0.63	3.7	6.4	1,000	49	61
	3/28/2003	1,500	NA	400	<0.5	50	0.62	<2.5	3.5	700	39	41
	12/16/2002	95	NA	26	<0.5	1	<0.5	2.2	17	330	36	4.7
	9/11/2002	2,000	NA	390	1.6	39	<1.0	<3.6	17	1,000	60	91
	6/28/2002	2,200	NA	410	<1.0	40	<1.0	4.9	18	900	54	80
	3/25/2002	990	NA	280	7.2	1.4	6.8	3.6	10	790	33	49
	12/3/2001	1,200	NA	190	14	2.7	11.3	<2.5	100	650	44	31
	9/25/2001	1,500	NA	170	4.3	1.6	2.7	5.0	36	820	59	53
	6/21/2001	2,400	NA	490	<2.5	29	<2.5	4.9	28	910	48	75
	3/21/2001	3,500	NA	530	<2.5	21	<2.5	<3.6	32	760	39	58
	12/19/2000	2,700	NA	410	<2.5	4.8	<2.5	9.1	130	1,000	67	48
	9/22/2000	1,800	<25	340	<2.5	<2.5	<2.5	NA	NA	NA	NA	NA
6/15/2000	5,400	NA	150	<5	8.9	8.7	<13	210	1,100	73	25	
MW-9	4/6/2004	60,000	NA	14,000	3,100	1,300	5,500	<17	<17	<17	<17	<17
	12/16/2003	34,000	NA	14,000	4,900	940	4,700	<42	<42	<42	<42	<42
	9/26/2003	34,000	NA	12,000	5,600	880	4,700	<17	<17	<17	<17	<17
	6/24/2003	45,000	NA	15,000	9,600	1,100	5,200	10	<5	<5	<5	<5
	3/28/2003	61,000	NA	13,000	8,600	860	4,800	<20	<20	<20	<20	<20
	12/16/2002	29,000	NA	5,500	3,900	300	1,860	8.9	<5	<5	<5	<5
	9/11/2002	57,000	NA	8,300	6,100	340	4,700	18	<10	<10	<10	<10
	6/28/2002	60,000	NA	5,800	7,400	1,100	5,400	<13	<13	<13	<13	<13
	3/25/2002	71,000	NA	15,000	17,000	1,900	8,000	<31	<31	<31	<31	<31
	12/3/2001	90,000	NA	15,000	15,000	2,200	9,100	<10	<10	<10	<10	<10
MW-10	4/6/2004	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/16/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
	9/26/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/16/2002	<50	NA	<0.5	0.65	3.0	7.53	<0.5	0.8	<0.5	<0.5	<0.5
	9/11/2002	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/28/2002	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/25/2002	51	NA	2.5	3.6	0.53	2.27	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2001	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5



**Table 2**  
**Summary of Groundwater Analytical Results**  
**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
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-11	4/6/2004	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/16/2003	91	NA	4.7	<0.5	<0.5	0.51	<0.5	2.9	0.9	0.6	<0.5
	9/26/2003	<50	NA	1.2	0.69	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	6/24/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2003	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/16/2002	160	NA	42	0.89	4.8	11.1	<0.5	3.6	1.1	<0.5	<0.5
	9/11/2002	120	NA	66	<0.5	0.74	<0.5	<0.5	<0.5	0.6	<0.5	<0.5
	6/28/2002	<50	NA	7.7	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
	3/25/2002	130	NA	11	20	3.3	14.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2001	1,600	NA	470	<0.5	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-12	4/6/2004	76	NA	<0.5	<0.5	<0.5	<0.5	<0.5	160	49	54	<0.5
	12/16/2003	120	NA	<0.5	<0.5	<0.5	0.65	<0.5	140	44	44	<0.5
	9/26/2003	230	NA	2.9	1.1	3.8	6.71	<0.7	210	60	63	<0.7
	6/24/2003	140	NA	<0.5	<0.5	<0.5	<0.5	<1.0	220	58	66	<1.0
	3/28/2003	110	NA	<0.5	<0.5	<0.5	<0.5	<0.7	190	53	53	0.9
	12/16/2002	130	NA	<0.5	0.9	4.2	9.9	<0.5	200	57	60	0.9
	9/11/2002	89	NA	<0.5	<0.5	<0.5	<0.5	<0.5	180	46	51	0.9
	6/28/2002	71	NA	<0.5	<0.5	<0.5	<0.5	<0.5	170	42	47	0.9
MW-13	4/6/2004	3,300	NA	22	<1.0	37	9.0	<0.5	90 <sup>*11</sup>	190	23	8
	12/16/2003	8,100	NA	120	36	72	26.6	<0.7	66 <sup>*10</sup>	240	23	10
	9/26/2003	7,200	NA	150	<1.0	89	57	<1.0	51 <sup>*8</sup>	270	23	5.1
	6/24/2003	8,300	NA	100	<0.5	94	12	<1.0	68 <sup>*9</sup>	250	19	4.2
	3/28/2003	4,400	NA	55	<0.5	51	14.3	<0.5	85 <sup>*8</sup>	150	13	1.8
	12/16/2002	4,800	NA	90	<0.5	85	24	<0.5	76	250	9.4	1.8
	9/11/2002	4,500	NA	58	7.5	150	14	<0.5	63 <sup>*7</sup>	410	13	<1.3
	6/28/2002	5,600	NA	120	55	130	9.5	<0.5	61 <sup>*6</sup>	430	14	4.4

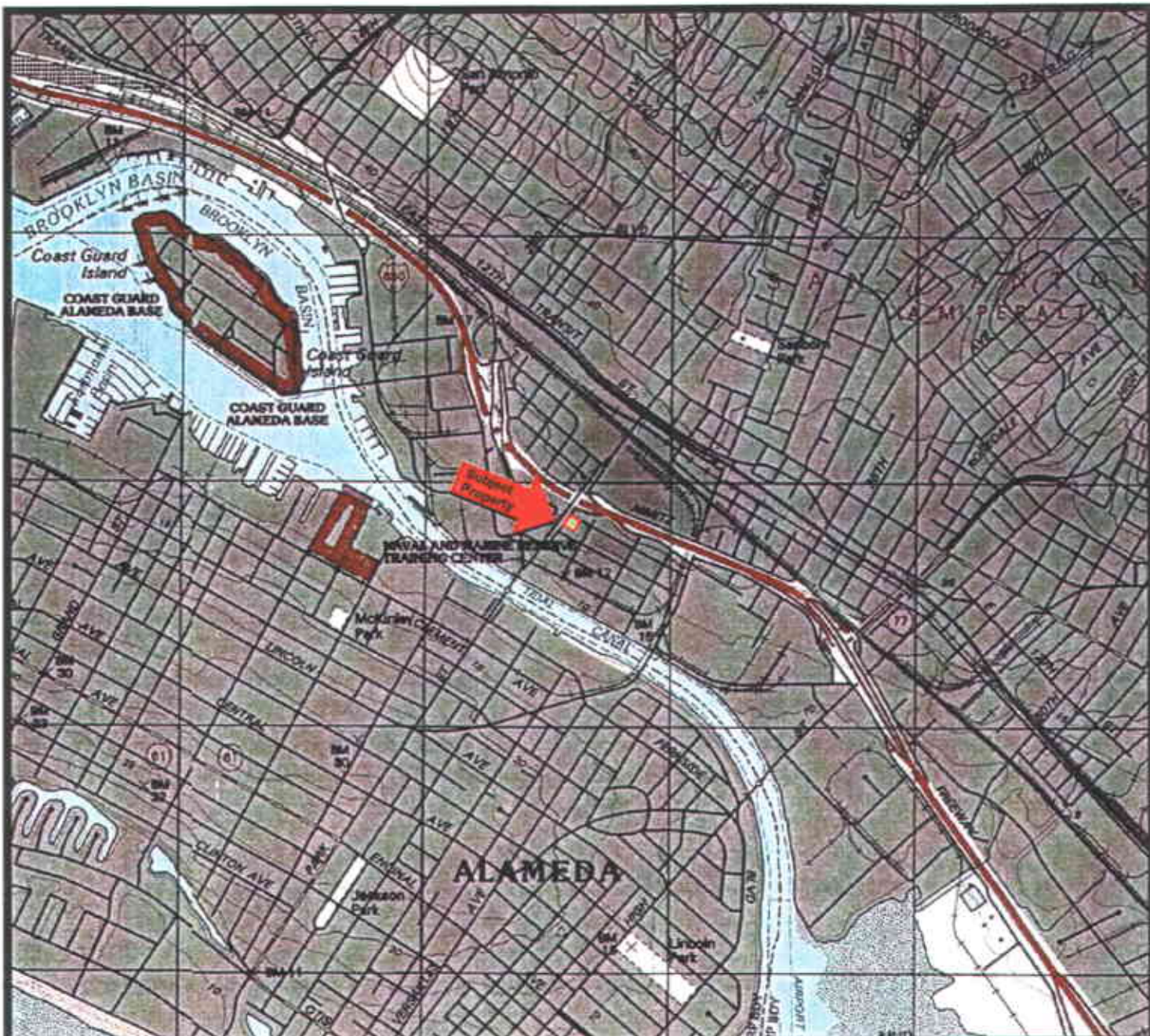
**Notes:**

- All results in micrograms per liter (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.

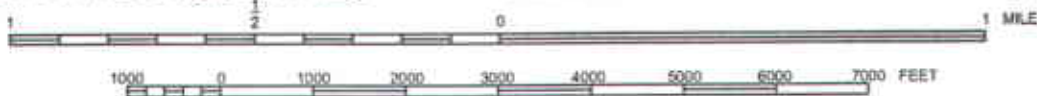
- \*1 1,1-DCA detected at 1.1 µg/L.
- \*2 1,1-DCA detected at 0.9 µg/L.
- \*3 Freon -11 detected at 0.6 µg/L.
- \*4 1,1-DCA detected at 0.9 µg/L
- \*5 1,1-DCA detected at 0.7 µg/L
- \*6 1,1-DCE detected at 4.7 µg/L
- \*7 1,1-DCE detected at 5.2 µg/L
- \*8 1,1-DCE detected at 1.9 µg/L
- \*9 1,1-DCE detected at 2.8 µg/L
- \*10 1,1-DCE detected at 1.8 µg/L

- \*11 1,1-DCE detected at 1.1 µg/L
- \*12 1,1-DCA detected at 0.5 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



QUADRANGLE LOCATION

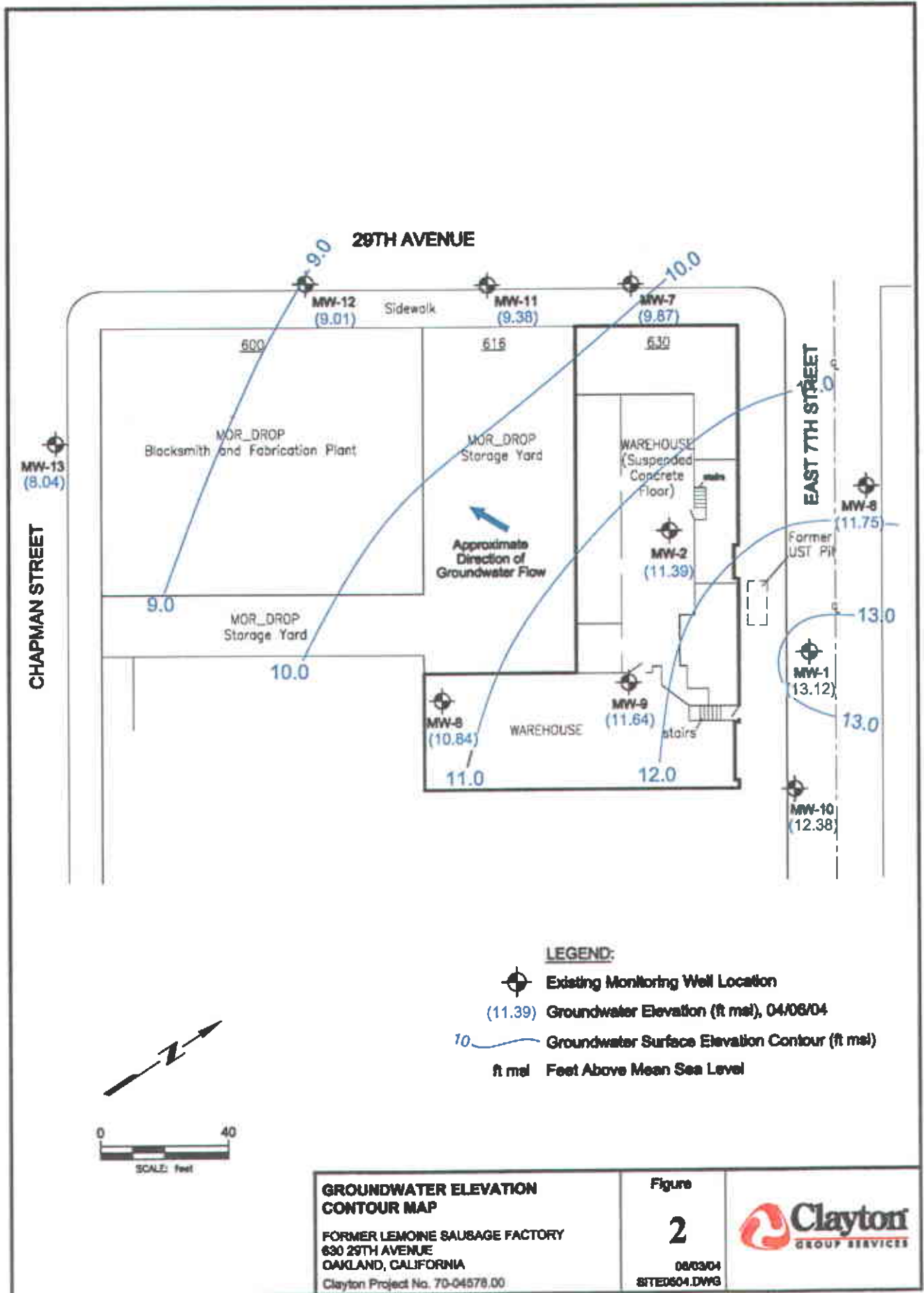
PROPERTY LOCATION MAP  
 Former Lemoine Sausage Factory  
 630 29th Avenue  
 Oakland, California  
 Clayton Project No. 70-04578.00

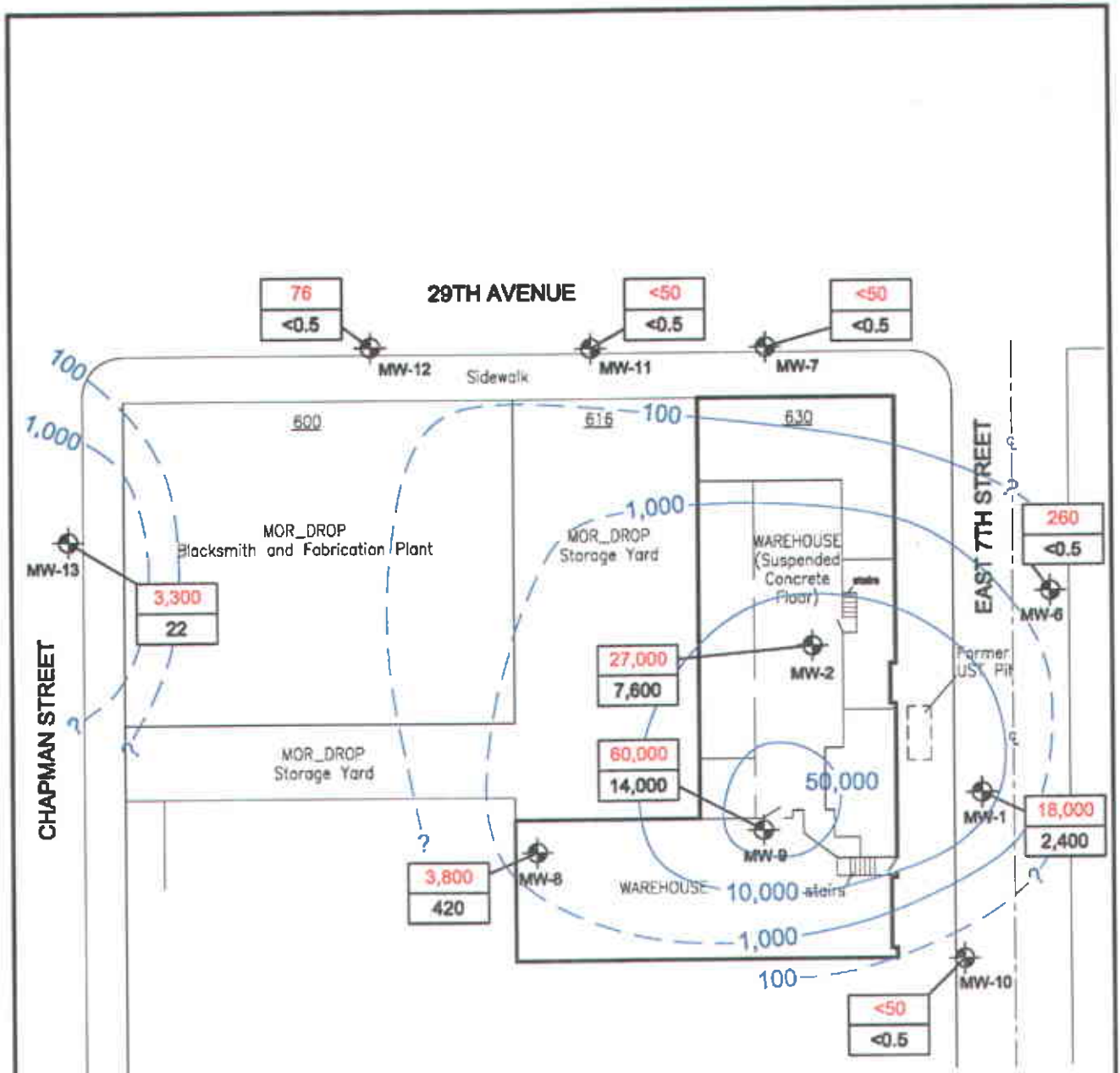
Figure

1









**LEGEND:**



Existing Monitoring Well Location

27,000

TPH-g Concentration (ug/L), 04/06/04

7,600

Benzene Concentration (ug/L), 04/06/04

100

TPH-g Isocentration Contour (ug/L)

TPH-g  
ug/L

Total Petroleum Hydrocarbons as Gasoline  
micrograms per liter



**TPH-g CONCENTRATIONS  
IN GROUNDWATER**

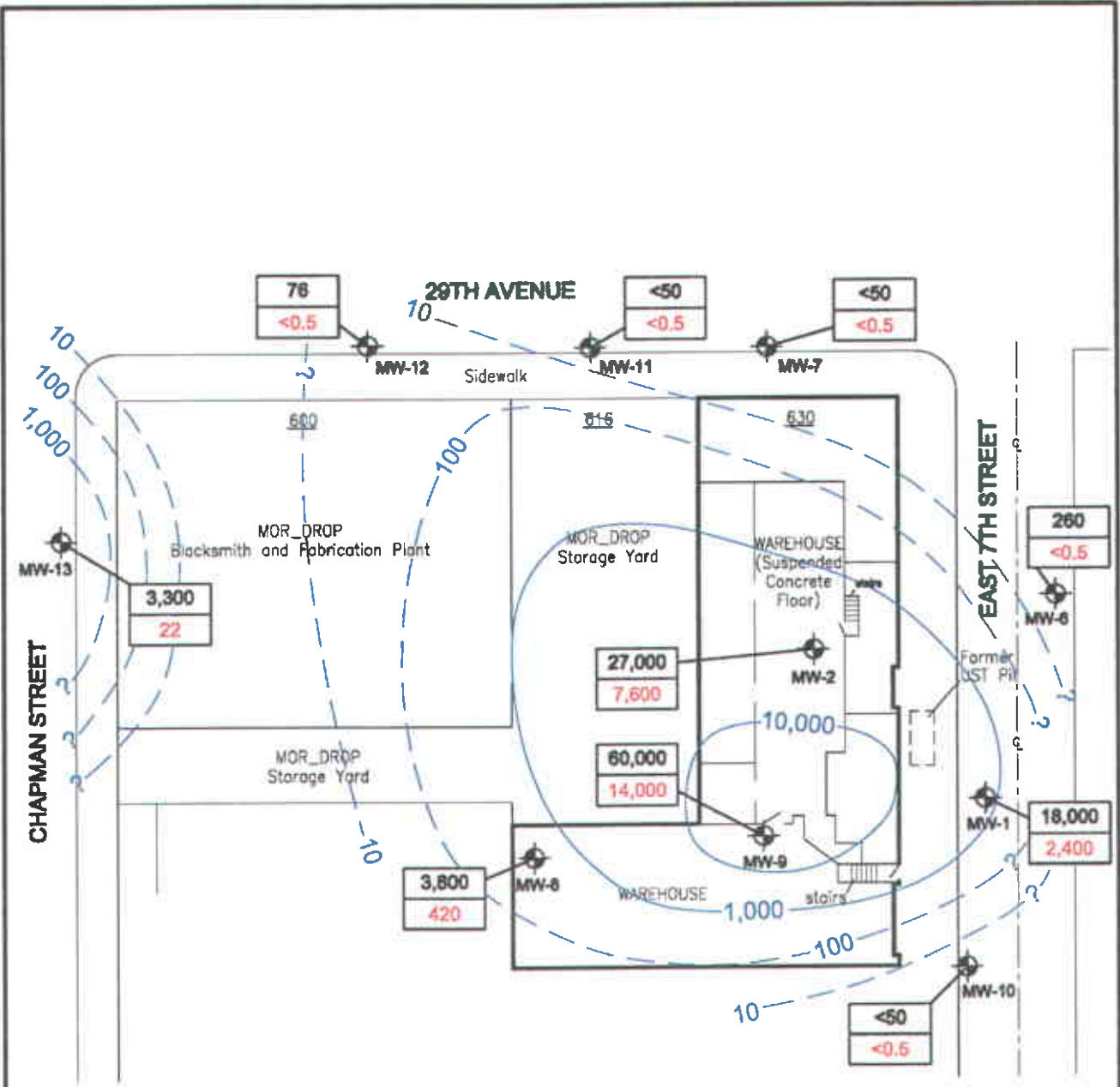
FORMER LEMOINE SAUSAGE FACTORY  
630 29TH AVENUE  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-04578.00

Figure

**3a**

06/03/04  
SITE0504.DWG





**LEGEND:**

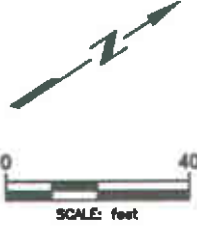
Existing Monitoring Well Location

27,000 TPH-g Concentration (ug/L), 04/06/04

7,600 Benzene Concentration (ug/L), 04/06/04

10 Benzene Isocentration Contour (ug/L)

TPH-g Total Petroleum Hydrocarbons as Gasoline  
ug/L micrograms per liter



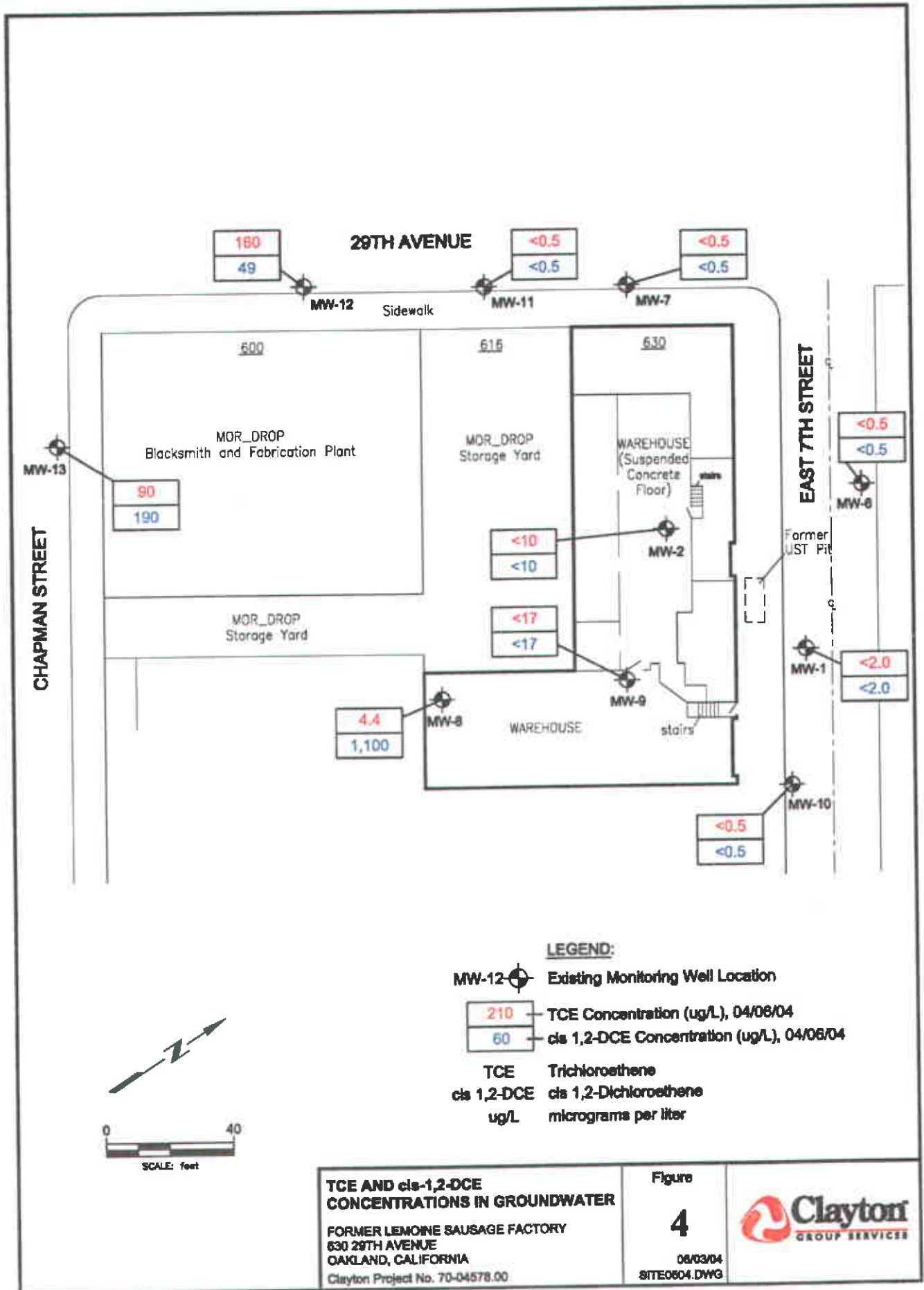
**BENZENE CONCENTRATIONS  
IN GROUNDWATER**  
FORMER LEMON SAUSAGE FACTORY  
630 29TH AVENUE  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-04578.00

Figure

**3b**

08/03/04  
SITE0604.DWG





**APPENDIX A**  
**FIRST QUARTER 2004**  
**GROUNDWATER SAMPLING LOGS**

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	4/6/04
	Oakland, California	Purge Method:	peri. pump
Sampling Location:	<b>MW-1</b>	Date & Time Sampled:	4/6/04 8:25
Top of Casing:	16.69 (ft, msl)	Sampling Method:	peri. pump
Depth to Water:	3.57	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	13.12	Preservatives:	HCL
Well Bottom	7.69	# of Containers:	6
Water Column:	4.12 5.43	Field Tech:	MR
Well Casing Volume:	0.05 <del>0.04</del> (WC* 0.01)	Weather Conditions:	unny
Casing Volumes Purged:			
Purge Rate:			3/4" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
8 : 21	0	6.70	1.243	18	16.5	clear
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Field Notes:

One set of parameters taken due to small amount of water in well.



**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	4/6/04
	Oakland, California	Purge Method:	peri pump
Sampling Location:	<b>MW-2</b>	Date & Time Sampled:	4/6/04 14:40
Top of Casing:	20.79 (ft, msl)	Sampling Method:	peri pump
Depth to Water:	9.40	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	11.39	Preservatives:	HCL
Well Bottom	0.79	# of Containers:	0
Water Column:	10.60	Field Tech:	MR
Well Casing Volume:	0.10 (WC* 0.01)	Weather Conditions:	Sunny
Casing Volumes Purged:			
Purge Rate:			3/4" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity (µmhos/cm)	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
14:35	0	6.48	42.0	33	17.9	cloudy
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**Field Notes:**  
 8:45 Peripump not drawing water from well. No parameters or samples were taken.  
 14:35 Attempt again. Working this time.  
 One set of parameters taken due to small amount of water in well

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	4/6/04
	Oakland, California	Purge Method:	disposable barrier
Sampling Location:	<b>MW-6</b>	Date & Time Sampled:	4/6/04 15:55
Top of Casing:	16.6 (ft, msl)	Sampling Method:	disposable barrier
Depth to Water:	4.85	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	11.75	Preservatives:	HCL
Well Bottom	-3.40	# of Containers:	6
Water Column:	15.15	Field Tech:	MR
Well Casing Volume:	2.4 (WC* 0.16)	Weather Conditions:	Sunny
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)
15:25	0	7.03	1.375	2	20.2	clear
15:31	2.4	6.96	1.209	6	19.6	"
15:36	2.4	6.97	1.201	6	18.8	"
15:41	2.4	6.88	1.191	10	19.1	"
15:46	2.4	6.86	1.181	12	18.8	"
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Field Notes:

### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	7/6/04
	Oakland, California	Purge Method:	disposable bucket
Sampling Location:	<b>MW-7</b>	Date & Time Sampled:	4/6/04 13:05
Top of Casing:	15.47 (ft. msl)	Sampling Method:	disposable bucket
Depth to Water:	5.60	Sample Type:	TPHG/BTEX/8021B
Groundwater Elevation	9.87	Preservatives:	HCL
Well Bottom	-4.53	# of Containers:	6
Water Column:	14.4	Field Tech:	MFL
Well Casing Volume:	2.30 (WC* 0.16)	Weather Conditions:	sunny
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)
12 : 35	0	7.08	.976	0	18.6	clear
12 : 40	2.3	7.10	.984	1	18.7	"
12 : 45	2.3	7.12	1.000	2	18.5	"
12 : 50	2.3	7.13	1.000	3	18.0	"
12 : 55	2.3	7.03	.990	3	18.7	"
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**Field Notes:**

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	4/6/04
	Oakland, California	Purge Method:	disposable bailer
Sampling Location:	<b>MW-8</b>	Date & Time Sampled:	4/6/04 13:55
Top of Casing:	17.58 (ft. msl)	Sampling Method:	disposable bailer
Depth to Water:	6.74	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	10.84	Preservatives:	HCC
Well Bottom	-2.42	# of Containers:	6
Water Column:	13.26	Field Tech:	MR
Well Casing Volume:	2.12 (WC* 0.16)	Weather Conditions:	Sunny
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)
13:30	0	6.96	1.270	12	16.6	clear
13:34	2.2	6.90	1.265	10	15.5	"
13:38	2.2	6.89	1.271	14	15.9	"
13:42	2.2	6.81	1.253	14	16.0	"
13:47	2.2	6.90	1.273	9	16.0	"
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**Field Notes:**  
*Initial sampling.*

### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	4/6/04
	Oakland, California	Purge Method:	disposable bailer
Sampling Location:	<b>MW-9</b>	Date & Time Sampled:	4/6/04 15:15
Top of Casing:	17.61 (ft, msl)	Sampling Method:	disposable bailer
Depth to Water:	5.97	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	11.64	Preservatives:	HCL
Well Bottom	2.61	# of Containers:	6
Water Column:	14.25	Field Tech:	MR
Well Casing Volume:	2.28 (WC* 0.16)	Weather Conditions:	unny
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)
14:15	0	6.50	5.42	31	16.2	clear
14:50	2.3	6.55	7.32	29	16.3	"
14:55	2.3	6.51	9.45	32	16.9	"
15:02	2.3	6.42	10.57	35	17.0	"
15:08	2.3	6.56	10.38	28	16.7	"
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**Field Notes:**  
 4/15 stopped purging to sample a different well that was previously not sampled (MW-2)

**FIELD SAMPLING DATA SHEET**

Job Location: Former Lemoine Sausage Factory	Job #: 70-04578.00
630 29th Avenue	Date Purged: 4/6/04
Oakland, California	Purge Method: disposable bailer
Sampling Location: <b>MW-10</b>	Date & Time Sampled: 4/6/04 9:55
Top of Casing: 16.92 (ft, msl)	Sampling Method: disposable bailer
Depth to Water: 4.54	Sample Type: TPHG/BTEX /8021B
Groundwater Elevation 12.38	Preservatives: HCL
Well Bottom 7.92	# of Containers: 6
Water Column: 4.46	Field Tech: MR
Well Casing Volume: 0.71 (WC* 0.16)	Weather Conditions: sunny
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)
9:33	0	7.16	.680	3	20.0	clear
9:37	0.75	7.11	.634	1	18.9	clear
9:40	0.75	7.09	.630	0	19.2	clear
9:43	0.75	7.08	.723	0	18.7	clear
9:47	0.75	7.13	.645	3	18.8	clear
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Field Notes:

**FIELD SAMPLING DATA SHEET**

Job Location: Former Lemoine Sausage Factory	Job #: 70-04578.00
630 29th Avenue	Date Purged: 4/6/04
Oakland, California	Purge Method: disposable MR bottles
Sampling Location: <b>MW-11</b>	Date & Time Sampled: 4/6/04 12:25
Top of Casing: 14.87 (ft, msl)	Sampling Method: disposable bottle
Depth to Water: 5.49	Sample Type: TPHG/BTEX/8021B
Groundwater Elevation: 9.38	Preservatives: HCL
Well Bottom: -0.13	# of Containers: 6
Water Column: 9.51	Field Tech: MR
Well Casing Volume: 1.52 (WC* 0.16)	Weather Conditions: Sunny
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)
12:00	0	6.96	1.702	6	19.1	clear
12:04	1.6	7.04	1.672	2	17.9	"
12:08	1.6	7.00	1.684	6	18.2	"
12:12	1.6	7.00	1.714	4	18.4	light brown
12:16	1.6	7.00	1.705	4	18.1	brown
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Field Notes:

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	4/6/04
	Oakland, California	Purge Method:	disposable bailer
Sampling Location:	<b>MW-12</b>	Date & Time Sampled:	4/6/04 11:28
Top of Casing:	14.05 (ft, msl)	Sampling Method:	disposable bailer
Depth to Water:	5.04	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	9.01	Preservatives:	HCL
Well Bottom	-0.95	# of Containers:	6
Water Column:	9.96	Field Tech:	MR
Well Casing Volume:	1.57 (WC* 0.16)	Weather Conditions:	cloudy
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)
11 : 06	0	6.94	2.22	8	16.3	clear
11 : 10	1.6	7.05	2.23	3	16.8	"
11 : 14	1.6	6.99	2.24	6	17.7	"
11 : 18	1.6	6.92	1.984	10	16.4	"
11 : 22	1.6	6.92	1.937	10	16.6	"
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Field Notes:



### FIELD SAMPLING DATA SHEET

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00
	630 29th Avenue	Date Purged:	4/6/04
	Oakland, California	Purge Method:	disposable bucket
Sampling Location:	<b>MW-13</b>	Date & Time Sampled:	4/6/04 10:45
Top of Casing:	13.39 (ft, msl)	Sampling Method:	disposable bucket
Depth to Water:	5.35	Sample Type:	TPHG/BTEX /8021B
Groundwater Elevation	8.04	Preservatives:	NCL
Well Bottom	-1.61	# of Containers:	6
Water Column:	9.65	Field Tech:	MR
Well Casing Volume:	1.54 (WC* 0.16)	Weather Conditions:	sunny
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 : 18	1.6	7.09	858	0	19.6	clear
10 : 25	1.6	7.15	896	1	19.7	"
10 : 30	1.6	7.10	890	1	19.9	"
10 : 35	1.6	7.18	887	5	19.4	"
10 : 39	1.6	7.11	888	1	19.1	"
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**Field Notes:**

**APPENDIX B**

**FIRST QUARTER 2004**

**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

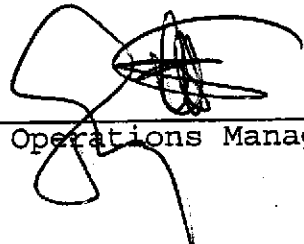
Prepared for:

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

Date: 19-APR-04  
Lab Job Number: 171594  
Project ID: 70-04578.00  
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: **171594**  
Client: **Clayton Group Services**  
Project Name: **Sausage Factory**

Order Date: **04/06/04**

### **CASE NARRATIVE**

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

**TVH/BTXE:** High surrogate recovery was observed for Trifluorotoluene in sample ID MW-08 (C&T#171594-005) due to coelution with a hydrocarbon peak. No other analytical problems were encountered.

**Purgeable Halocarbons:** No analytical problems were encountered.



# CHAIN OF CUSTODY

CT# 171594

Lab: Curtis&Tompkins

TAT: Standard

**Report results to:**

Name Mat Reimer  
 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: mreimer@claytongrp.com

**Project Information**

Project No. 70-04578.00  
 Name Sausage Factory  
 Location 630 29<sup>th</sup> Avenue, Oakland  
 Global\_Id T0600102114  
 Log code CGSP

Special instructions and/or specific regulatory requirements:

**Analyses Requested**

Sample ID	Sample Date	Sample Time	Matrix/Media	No. of Conts	TPH as Gasoline/BTEX	8021B	8010 MS	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other
MW-01	4/6/04	8:25	W	6	X	X												
MW-02		14:40		6														
MW-06		15:55		6														
MW-07		13:05		6														
MW-08		13:55		6														
MW-09		15:15		6														
MW-10		9:55		6														
MW-11		12:25		6														
MW-12		11:28		6														
MW-13		10:45		6														

**Sample Condition/Comments**

Preservative

Sample Identification	Sample Date	Sample Time	Matrix/Media	No. of Conts	TPH as Gasoline/BTEX	8021B	8010 MS	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Other	Sample Condition/Comments	Preservative
MW-01	4/6/04	8:25	W	6	X	X													171594-001	HCI
MW-02		14:40		6															-002	HCI
MW-06		15:55		6															-003	HCI
MW-07		13:05		6															-004	HCI
MW-08		13:55		6															-005	HCI
MW-09		15:15		6															-006	HCI
MW-10		9:55		6															-007	HCI
MW-11		12:25		6															-008	HCI
MW-12		11:28		6															-009	HCI
MW-13		10:45		6															-010	HCI

Collected by: Mat Reimer Date/Time 4/6/04 16:45  
 Relinquished by: Mat Reimer Date/Time 4/6/04 16:45  
 Relinquished by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Method of Shipment: hand delivered

Collector's Signature: Mat Reimer Date/Time 4/6/04 16:45  
 Received by: Shirley Lyman Date/Time 4/6/04 16:45  
 Received by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Sample Condition on Rcpt: Cold + Intact 4/6/04

Cold  Ambient  On Ice  
 Intact

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	04/06/04
Units:	ug/L	Received:	04/06/04

Field ID:	MW-01	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	90089
Lab ID:	171594-001	Analyzed:	04/07/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	18,000	500	EPA 8015B
Benzene	2,400	5.0	EPA 8021B
Toluene	1,300	5.0	EPA 8021B
Ethylbenzene	550	5.0	EPA 8021B
m,p-Xylenes	1,000	5.0	EPA 8021B
o-Xylene	730	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	102	74-142	EPA 8015B
Bromofluorobenzene (FID)	100	80-139	EPA 8015B
Trifluorotoluene (PID)	106	55-139	EPA 8021B
Bromofluorobenzene (PID)	97	62-134	EPA 8021B

Field ID:	MW-02	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	90089
Lab ID:	171594-002	Analyzed:	04/07/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	27,000	1,000	EPA 8015B
Benzene	7,600	10	EPA 8021B
Toluene	1,700	10	EPA 8021B
Ethylbenzene	630	10	EPA 8021B
m,p-Xylenes	1,200	10	EPA 8021B
o-Xylene	220	10	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	102	74-142	EPA 8015B
Bromofluorobenzene (FID)	104	80-139	EPA 8015B
Trifluorotoluene (PID)	91	55-139	EPA 8021B
Bromofluorobenzene (PID)	99	62-134	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit  
 Page 1 of 5

# GC07 TVH 'A' Data File RTX 502

Sample Name : 171594-001,90089  
 File Name : G:\GC07\DATA\098A020.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : 1.0

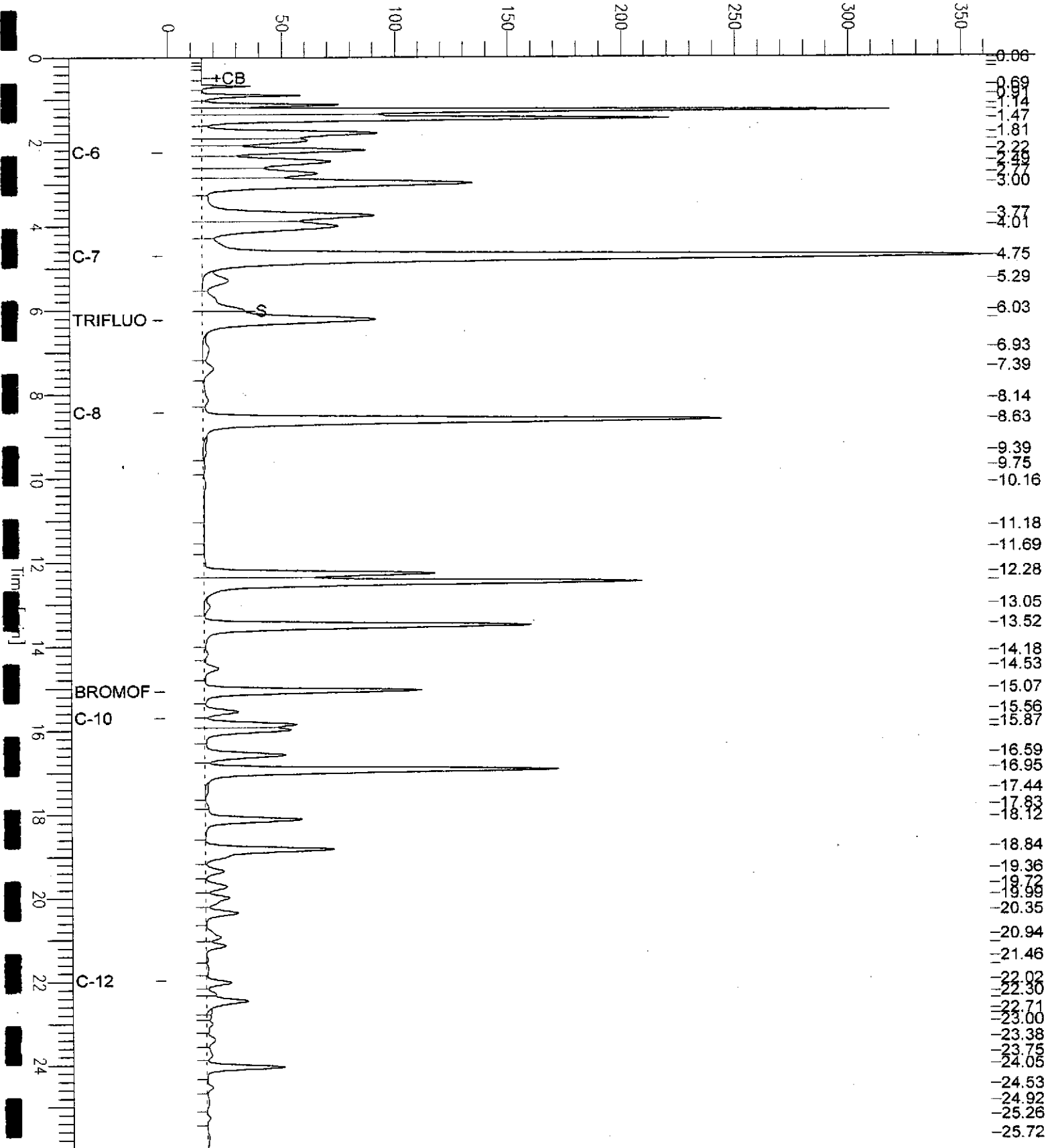
End Time : 26.00 min  
 Plot Offset : -3 mV

Sample #: b7  
 Date : 4/8/04 08:07 AM  
 Time of Injection: 4/7/04 10:11 PM  
 Low Point : -2.59 mV  
 Plot Scale: 363.8 mV

Page 1 of 1

MW-01

Response [mV]



# GC07 TVH 'A' Data File RTX 502

Sample Name : 171594-002,90089

Sample #: c1.0

Page 1 of 1

File Name : G:\GC07\DATA\098A019.raw

Date : 4/7/04 10:02 PM

Method : TVHBTXE

Time of Injection: 4/7/04 09:36 PM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : -15.96 mV

High Point : 628.13 mV

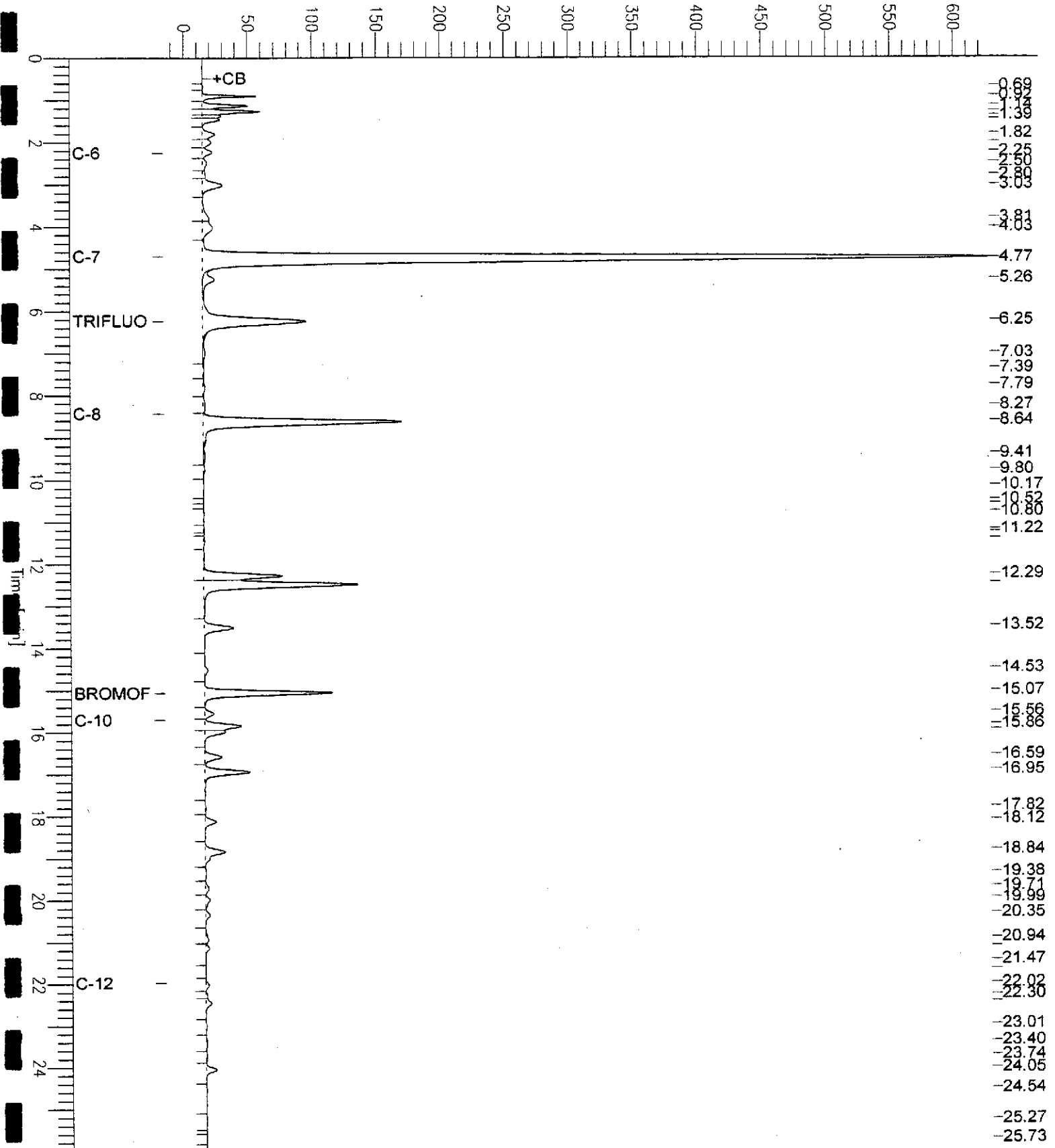
Scale Factor: 1.0

Plot Offset: -16 mV

Plot Scale: 644.1 mV

*MW-02*

Response [mV]





**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	04/06/04
Units:	ug/L	Received:	04/06/04

Field ID:	MW-06	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	90089
Lab ID:	171594-003	Analyzed:	04/07/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	260	50	EPA 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	74-142	EPA 8015B
Bromofluorobenzene (FID)	102	80-139	EPA 8015B
Trifluorotoluene (PID)	88	55-139	EPA 8021B
Bromofluorobenzene (PID)	95	62-134	EPA 8021B

Field ID:	MW-07	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	90089
Lab ID:	171594-004	Analyzed:	04/07/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 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)	90	74-142	EPA 8015B
Bromofluorobenzene (FID)	105	80-139	EPA 8015B
Trifluorotoluene (PID)	87	55-139	EPA 8021B
Bromofluorobenzene (PID)	94	62-134	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit  
 Page 2 of 5

# GC07 TVH 'A' Data File RTX 502

Sample Name : mss,171594-003,90089  
 FileName : G:\GC07\DATA\098A005.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : 1.0

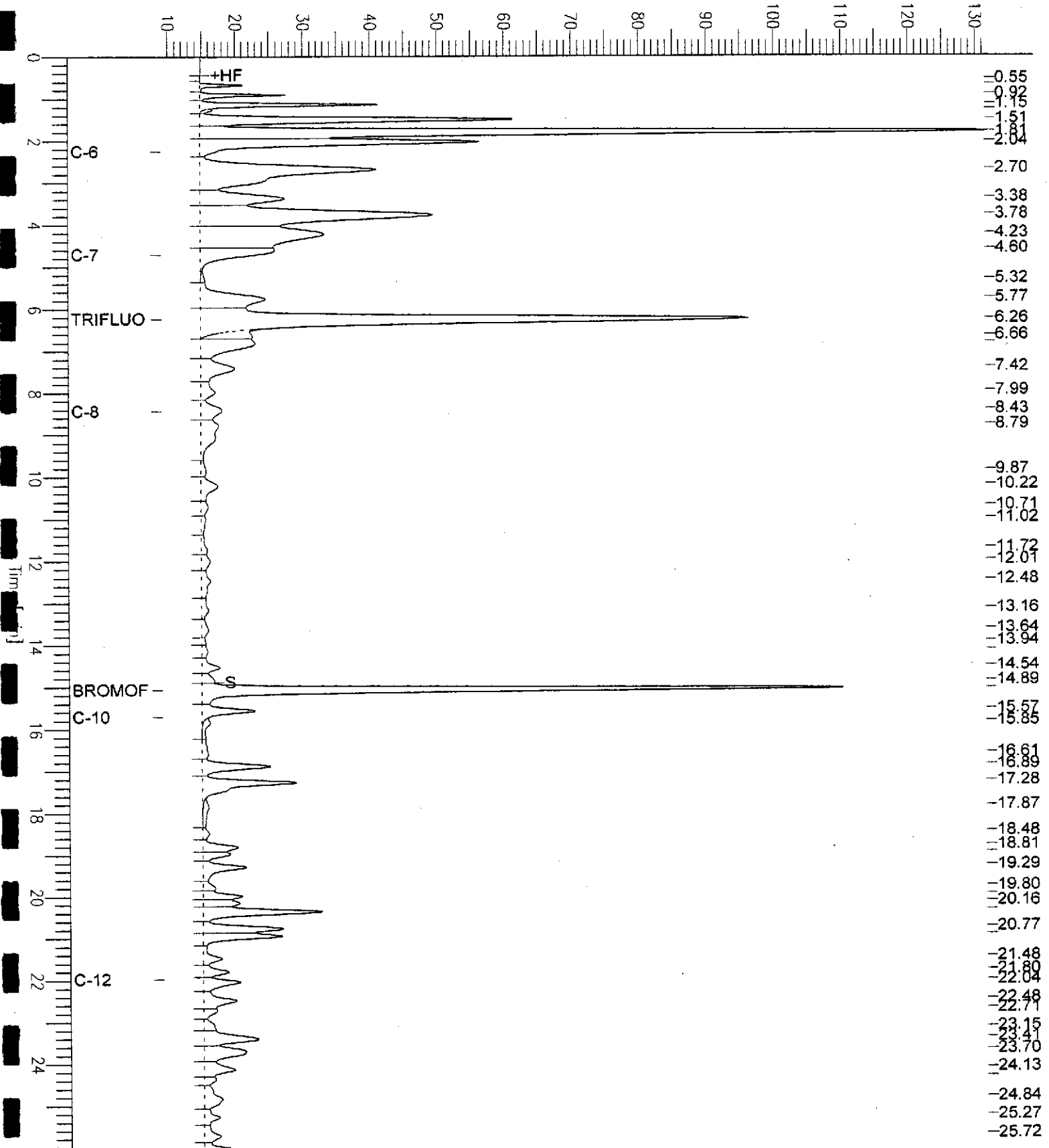
End Time : 26.00 min  
 Plot Offset : 9 mV

Sample #: b1.0  
 Date : 4/8/04 08:07 AM  
 Time of Injection: 4/7/04 01:21 PM  
 Low Point : 9.00 mV  
 Plot Scale: 122.4 mV  
 High Point : 131.42 mV

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MW-06

Response [mV]



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	04/06/04
Units:	ug/L	Received:	04/06/04

Field ID:	MW-08	Lab ID:	171594-005
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	3,800	50	1.000	90089	04/07/04	EPA 8015B
Benzene	420	1.0	2.000	90170	04/09/04	EPA 8021B
Toluene	ND	0.50	1.000	90089	04/07/04	EPA 8021B
Ethylbenzene	53	0.50	1.000	90089	04/07/04	EPA 8021B
m,p-Xylenes	1.2 C	0.50	1.000	90089	04/07/04	EPA 8021B
o-Xylene	ND	0.50	1.000	90089	04/07/04	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	168 *	74-142	1.000	90089	04/07/04	EPA 8015B
Bromofluorobenzene (FID)	111	80-139	1.000	90089	04/07/04	EPA 8015B
Trifluorotoluene (PID)	135	55-139	1.000	90089	04/07/04	EPA 8021B
Bromofluorobenzene (PID)	99	62-134	1.000	90089	04/07/04	EPA 8021B

Field ID:	MW-09	Lab ID:	171594-006
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	60,000	1,300	25.00	90089	04/07/04	EPA 8015B
Benzene	14,000	20	40.00	90170	04/09/04	EPA 8021B
Toluene	3,100	13	25.00	90089	04/07/04	EPA 8021B
Ethylbenzene	1,300	13	25.00	90089	04/07/04	EPA 8021B
m,p-Xylenes	4,300	13	25.00	90089	04/07/04	EPA 8021B
o-Xylene	1,200	13	25.00	90089	04/07/04	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	109	74-142	25.00	90089	04/07/04	EPA 8015B
Bromofluorobenzene (FID)	99	80-139	25.00	90089	04/07/04	EPA 8015B
Trifluorotoluene (PID)	89	55-139	25.00	90089	04/07/04	EPA 8021B
Bromofluorobenzene (PID)	95	62-134	25.00	90089	04/07/04	EPA 8021B

Field ID:	MW-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	90089
Lab ID:	171594-007	Analyzed:	04/07/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 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)	90	74-142	EPA 8015B
Bromofluorobenzene (FID)	100	80-139	EPA 8015B
Trifluorotoluene (PID)	79	55-139	EPA 8021B
Bromofluorobenzene (PID)	90	62-134	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

# GC07 TVH 'A' Data File RTX 502

Sample Name : 171594-005,90089  
 File Name : G:\GC07\DATA\098A007.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min  
 Scale Factor : 1.0

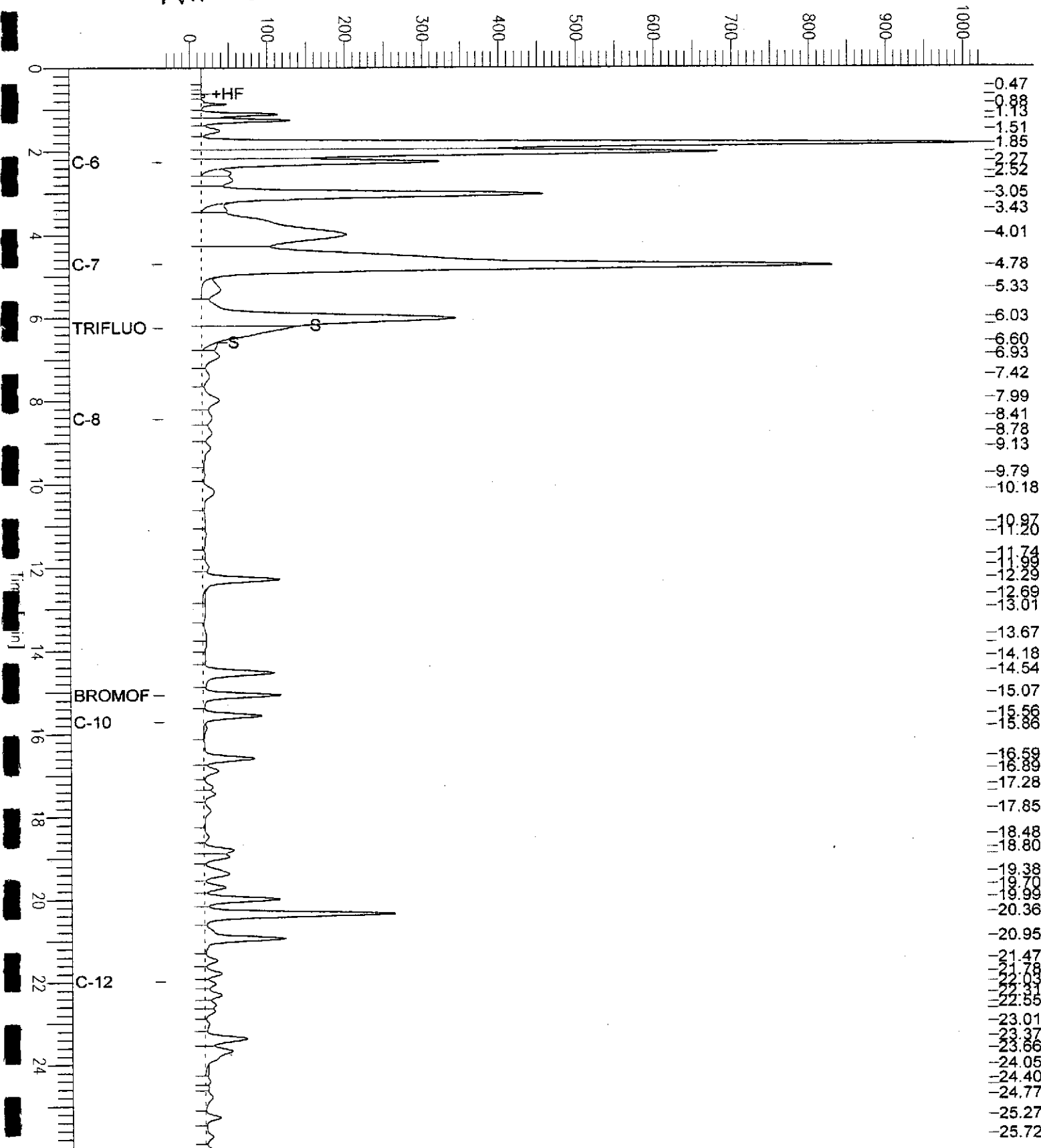
End Time : 26.00 min  
 Plot Offset : -36 mV

Sample #: b2.2  
 Date : 4/8/04 08:07 AM  
 Time of Injection: 4/7/04 02:32 PM  
 Low Point : -35.85 mV  
 High Point : 1028.44 mV  
 Plot Scale: 1064.3 mV

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*MW-08*

Response [mV]



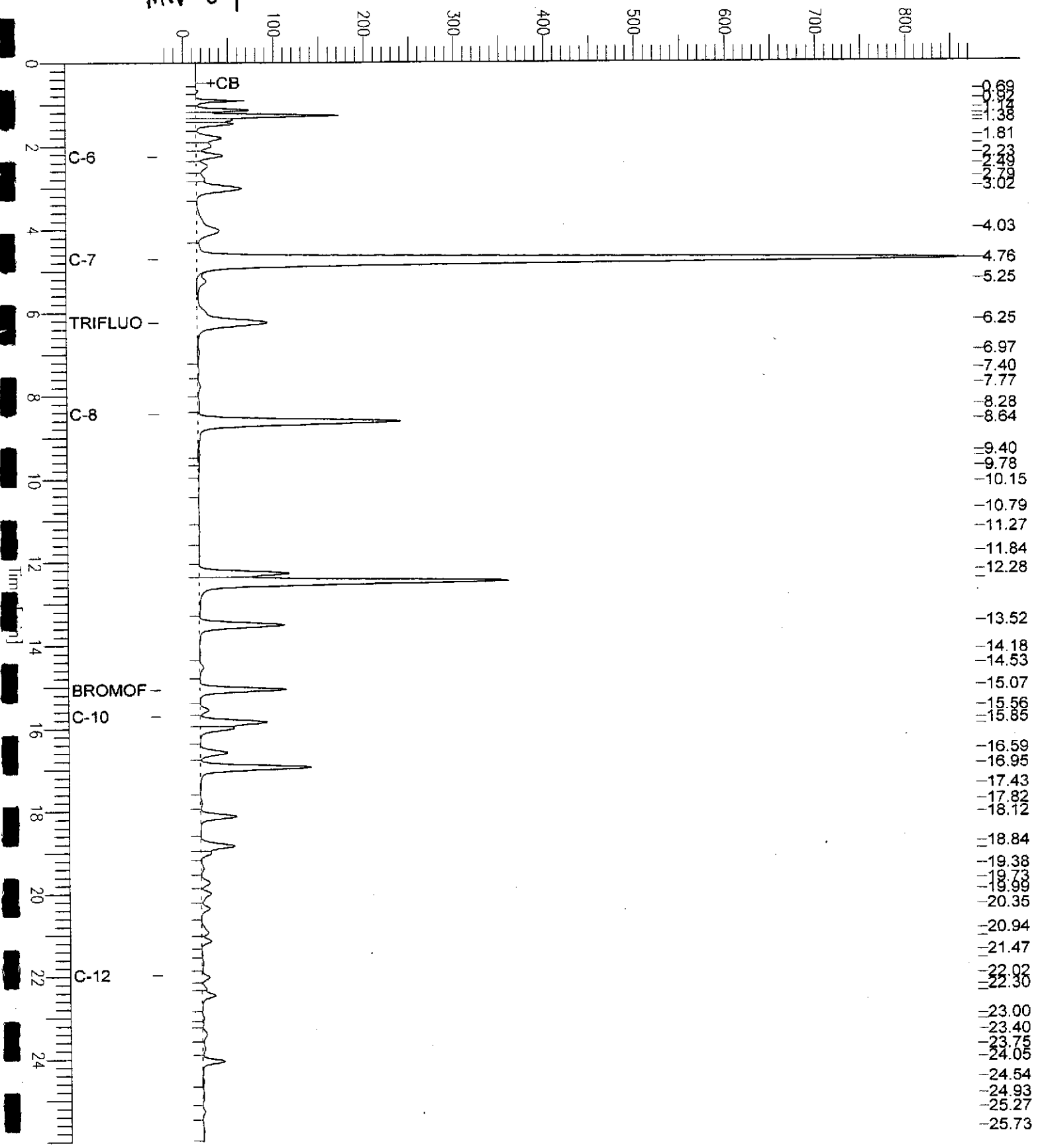
# GC07 TVH 'A' Data File RTX 502

Sample Name : 171594-006,90089  
 File Name : G:\GC07\DATA\098A018.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min      End Time : 26.00 min  
 Scale Factor : 1.0      Plot Offset: -28 mV

Sample #: b1.3      Page 1 of 1  
 Date : 4/7/04 09:27 PM  
 Time of Injection: 4/7/04 09:01 PM  
 Low Point : -28.27 mV      High Point : 874.32 mV  
 Plot Scale: 902.6 mV

*MW-09*

Response [mV]



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	04/06/04
Units:	ug/L	Received:	04/06/04

Field ID:	MW-11	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	90089
Lab ID:	171594-008	Analyzed:	04/07/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 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)	90	74-142	EPA 8015B
Bromofluorobenzene (FID)	100	80-139	EPA 8015B
Trifluorotoluene (PID)	82	55-139	EPA 8021B
Bromofluorobenzene (PID)	92	62-134	EPA 8021B

Field ID:	MW-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	90089
Lab ID:	171594-009	Analyzed:	04/07/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	76	50	EPA 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)	93	74-142	EPA 8015B
Bromofluorobenzene (FID)	107	80-139	EPA 8015B
Trifluorotoluene (PID)	91	55-139	EPA 8021B
Bromofluorobenzene (PID)	96	62-134	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%  
 ND= Not Detected  
 RL= Reporting Limit

# GC07 TVH 'A' Data File RTX 502

Sample Name : 171594-009,90089

Sample #: b1.0

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File Name : G:\GC07\DATA\098A010.raw

Date : 4/7/04 04:45 PM

Method : TVHBTXE

Time of Injection: 4/7/04 04:19 PM

Start Time : 0.00 min End Time : 26.00 min

Low Point : 9.84 mV

High Point : 112.94 mV

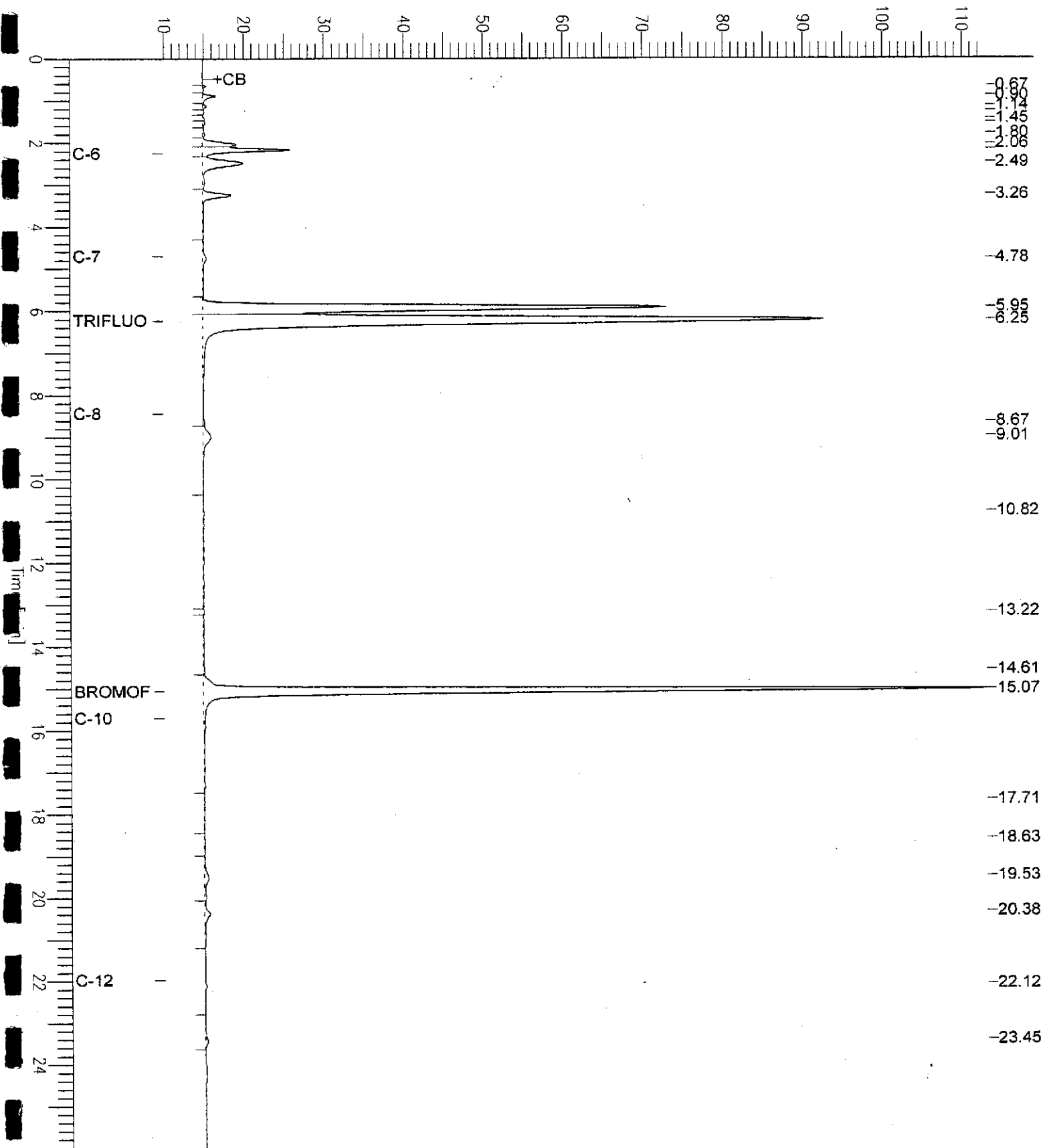
Scale Factor: 1.0

Plot Offset: 10 mV

Plot Scale: 103.1 mV

MW-12

Response [mV]



## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	04/06/04
Units:	ug/L	Received:	04/06/04

Field ID:	MW-13	Lab ID:	171594-010
Type:	SAMPLE	Diln Fac:	2.000

Analyte	Result	RL	Batch#	Analyzed	Analysis
Gasoline C7-C12	3,300	100	90089	04/07/04	EPA 8015B
Benzene	22 C	1.0	90089	04/07/04	EPA 8021B
Toluene	ND	1.0	90089	04/07/04	EPA 8021B
Ethylbenzene	37	1.0	90170	04/09/04	EPA 8021B
m,p-Xylenes	9.0 C	1.0	90089	04/07/04	EPA 8021B
o-Xylene	ND	1.0	90170	04/09/04	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	141	74-142	90089	04/07/04	EPA 8015B
Bromofluorobenzene (FID)	120	80-139	90089	04/07/04	EPA 8015B
Trifluorotoluene (PID)	106	55-139	90089	04/07/04	EPA 8021B
Bromofluorobenzene (PID)	102	62-134	90089	04/07/04	EPA 8021B

Type:	BLANK	Batch#:	90089
Lab ID:	QC247077	Analyzed:	04/07/04
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 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)	89	74-142	EPA 8015B
Bromofluorobenzene (FID)	100	80-139	EPA 8015B
Trifluorotoluene (PID)	83	55-139	EPA 8021B
Bromofluorobenzene (PID)	93	62-134	EPA 8021B

Type:	BLANK	Batch#:	90170
Lab ID:	QC247379	Analyzed:	04/09/04
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Benzene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	74-142	EPA 8015B
Bromofluorobenzene (FID)	104	80-139	EPA 8015B
Trifluorotoluene (PID)	91	55-139	EPA 8021B
Bromofluorobenzene (PID)	100	62-134	EPA 8021B

\*= Value outside of QC limits; see narrative  
 C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected  
 RL= Reporting Limit



# GC07 TVH 'A' Data File RTX 502

Sample Name : 171594-010,90089

Sample #: b1.0

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File Name : G:\GC07\DATA\098A021.raw

Date : 4/8/04 08:07 AM

Method : TVHBTXE

Time of Injection: 4/7/04 10:45 PM

Start Time : 0.00 min End Time : 26.00 min

Low Point : 1.49 mV

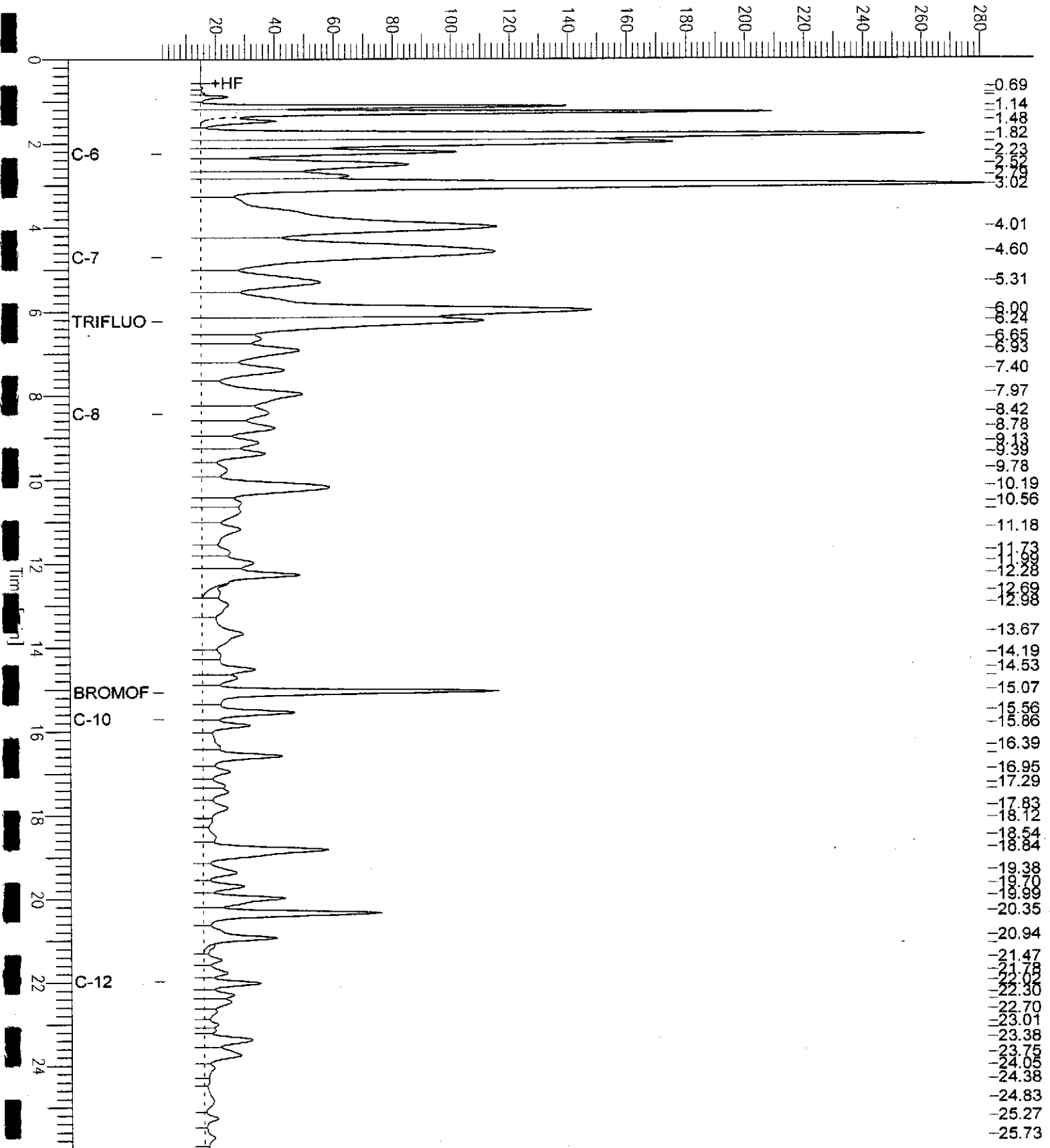
High Point : 281.55 mV

Scale Factor: 1.0 Plot Offset: 1 mV

Plot Scale: 280.1 mV

*MW-13*

Response [mV]

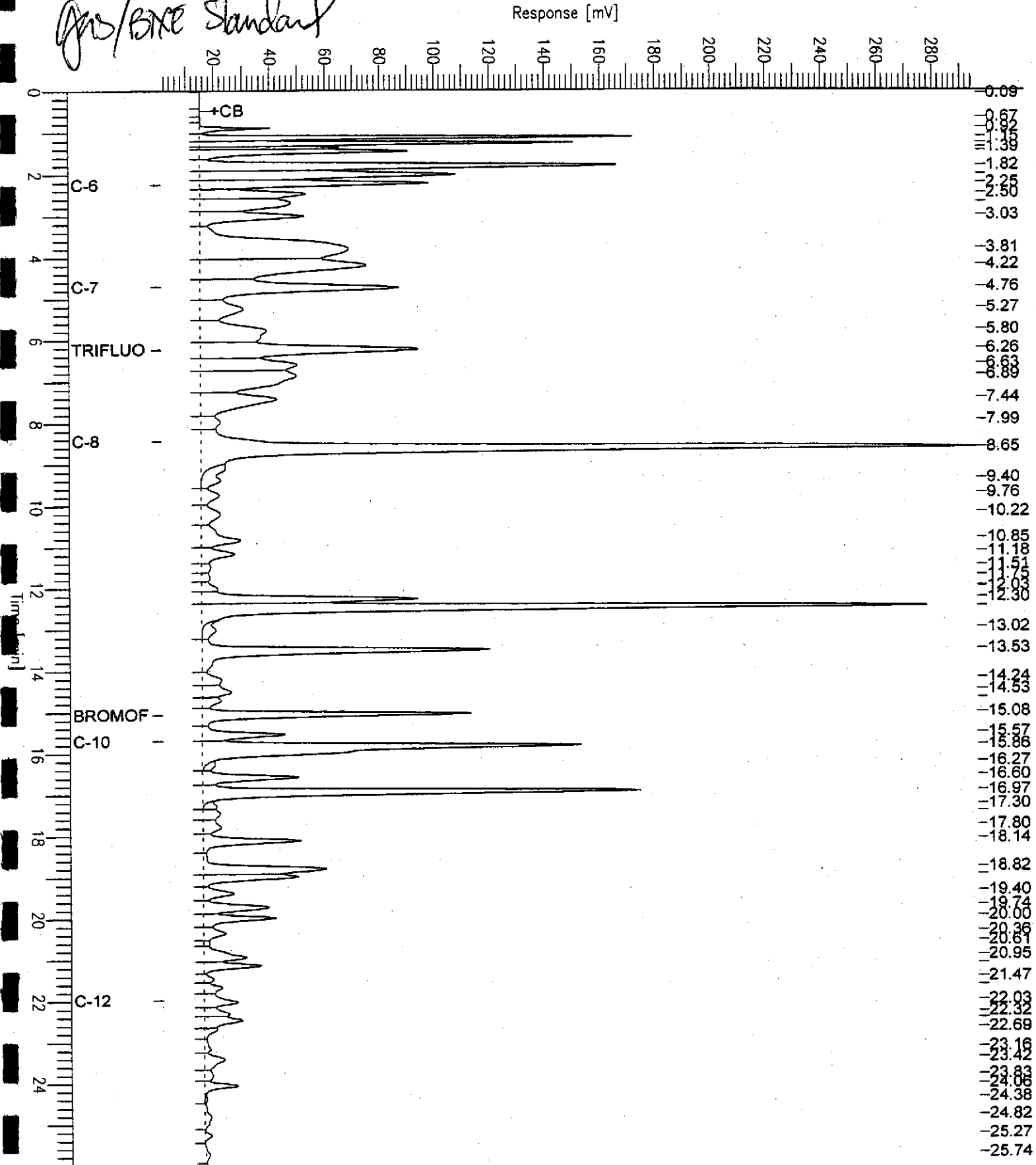


# GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc247079,90089,04ws0672,S/5000  
 File Name : G:\GC07\DATA\098A002.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min      End Time : 26.00 min  
 Scale Factor : 1.0      Plot Offset : 1 mV

Sample # :  
 Date : 4/7/04 12:02 PM      Page 1 of 1  
 Time of Injection: 4/7/04 11:36 AM  
 Low Point : 1.03 mV      High Point : 295.76 mV  
 Plot Scale: 294.7 mV

*gas/BNE Standard*



## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC247078	Batch#:	90089
Matrix:	Water	Analyzed:	04/07/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	20.00	20.60	103	80-120
Toluene	20.00	22.40	112	80-120
Ethylbenzene	20.00	22.18	111	80-120
m,p-Xylenes	40.00	44.81	112	80-120
o-Xylene	20.00	21.75	109	80-120

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		87	55-139
Bromofluorobenzene (PID)		99	62-134

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC247079	Batch#:	90089
Matrix:	Water	Analyzed:	04/07/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,224	111	80-120
Benzene		NA		
Toluene		NA		
Ethylbenzene		NA		
m,p-Xylenes		NA		
o-Xylene		NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		106	74-142
Bromofluorobenzene (FID)		105	80-139
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8021B
Type:	BS	Diln Fac:	1.000
Lab ID:	QC247381	Batch#:	90170
Matrix:	Water	Analyzed:	04/09/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	18.40	92	80-120
Ethylbenzene	20.00	19.38	97	80-120
o-Xylene	20.00	18.53	93	80-120

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		90	55-139
Bromofluorobenzene (PID)		99	62-134

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8021B
Type:	BSD	Diln Fac:	1.000
Lab ID:	QC247439	Batch#:	90170
Matrix:	Water	Analyzed:	04/09/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	19.54	98	80-120	6	20
Ethylbenzene	20.00	20.86	104	80-120	7	20
o-Xylene	20.00	19.94	100	80-120	7	20

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		104	55-139
Bromofluorobenzene (PID)		114	62-134

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8015B
Field ID:	MW-06	Batch#:	90089
MSS Lab ID:	171594-003	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/07/04
Diln Fac:	1.000		

Type: MS Lab ID: QC247103

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	256.7	2,000	2,290	102	80-120
Benzene			NA		
Toluene			NA		
Ethylbenzene			NA		
m,p-Xylenes			NA		
o-Xylene			NA		

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		114	74-142
Bromofluorobenzene (FID)		103	80-139
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: MSD Lab ID: QC247104

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,293	102	80-120	0	20
Benzene		NA				
Toluene		NA				
Ethylbenzene		NA				
m,p-Xylenes		NA				
o-Xylene		NA				

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		116	74-142
Bromofluorobenzene (FID)		105	80-139
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

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

**Purgeable Halocarbons by GC/MS**

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-01	Batch#:	90083
Lab ID:	171594-001	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/07/04
Diln Fac:	4.000		

Analyte	Result	RL
Chloromethane	ND	4.0
Vinyl Chloride	ND	2.0
Bromomethane	ND	4.0
Chloroethane	ND	4.0
Trichlorofluoromethane	ND	4.0
Freon 113	ND	4.0
1,1-Dichloroethene	ND	2.0
Methylene Chloride	ND	80
trans-1,2-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
Chloroform	ND	4.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
1,2-Dichloroethane	ND	2.0
Trichloroethene	ND	2.0
1,2-Dichloropropane	ND	2.0
Bromodichloromethane	ND	2.0
cis-1,3-Dichloropropene	ND	2.0
trans-1,3-Dichloropropene	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Tetrachloroethene	ND	2.0
Dibromochloromethane	ND	2.0
Chlorobenzene	ND	2.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	93	80-124
Toluene-d8	95	80-120
Bromofluorobenzene	98	80-120



**Purgeable Halocarbons by GC/MS**

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-02	Batch#:	90083
Lab ID:	171594-002	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/07/04
Diln Fac:	20.00		

Analyte	Result	RL
Chloromethane	ND	20
Vinyl Chloride	ND	10
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	20
Freon 113	ND	20
1,1-Dichloroethene	ND	10
Methylene Chloride	ND	400
trans-1,2-Dichloroethene	ND	10
1,1-Dichloroethane	ND	10
cis-1,2-Dichloroethene	ND	10
Chloroform	ND	20
1,1,1-Trichloroethane	ND	10
Carbon Tetrachloride	ND	10
1,2-Dichloroethane	ND	10
Trichloroethene	ND	10
1,2-Dichloropropane	ND	10
Bromodichloromethane	ND	10
cis-1,3-Dichloropropene	ND	10
trans-1,3-Dichloropropene	ND	10
1,1,2-Trichloroethane	ND	10
Tetrachloroethene	ND	10
Dibromochloromethane	ND	10
Chlorobenzene	ND	10
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
1,2-Dichlorobenzene	ND	10

Surrogate	UREC	Limits
1,2-Dichloroethane-d4	93	80-124
Toluene-d8	92	80-120
Bromofluorobenzene	100	80-120

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-06	Batch#:	90126
Lab ID:	171594-003	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/08/04
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	0.5	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	103	80-124
Toluene-d8	96	80-120
Bromofluorobenzene	103	80-120



## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-07	Batch#:	90083
Lab ID:	171594-004	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/07/04
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	89	80-124
Toluene-d8	89	80-120
Bromofluorobenzene	106	80-120

ND= Not Detected

RL= Reporting Limit

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## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-08	Batch#:	90126
Lab ID:	171594-005	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/08/04
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	58	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	39	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	1,100	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	4.4	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	95	80-124
Toluene-d8	90	80-120
Bromofluorobenzene	98	80-120

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-09	Batch#:	90083
Lab ID:	171594-006	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/07/04
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	87	80-124
Toluene-d8	95	80-120
Bromofluorobenzene	87	80-120

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-10	Batch#:	90126
Lab ID:	171594-007	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/08/04
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	94	80-124
Toluene-d8	94	80-120
Bromofluorobenzene	105	80-120

**Purgeable Halocarbons by GC/MS**

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	90126
Lab ID:	171594-008	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/08/04
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	93	80-124
Toluene-d8	92	80-120
Bromofluorobenzene	97	80-120

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

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-12	Batch#:	90084
Lab ID:	171594-009	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/07/04
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	54	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	49	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	160	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	80-124
Toluene-d8	103	80-120
Bromofluorobenzene	104	80-120



**Purgeable Halocarbons by GC/MS**

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-13	Batch#:	90126
Lab ID:	171594-010	Sampled:	04/06/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/08/04
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	7.9	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	1.1	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	23	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	190	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	90	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	91	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	100	80-120

## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC247056	Batch#:	90083
Matrix:	Water	Analyzed:	04/07/04
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	94	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected  
 RL= Reporting Limit  
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## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC247061	Batch#:	90084
Matrix:	Water	Analyzed:	04/07/04
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	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected  
 RL= Reporting Limit  
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## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC247187	Batch#:	90126
Matrix:	Water	Analyzed:	04/08/04
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	80-124
Toluene-d8	91	80-120
Bromofluorobenzene	103	80-120

## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC247054	Batch#:	90083
Matrix:	Water	Analyzed:	04/07/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	52.84	106	76-120
Trichloroethene	50.00	47.15	94	80-120
Chlorobenzene	50.00	56.51	113	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	92	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	96	80-120

## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	90084
Units:	ug/L	Analyzed:	04/07/04
Diln Fac:	1.000		

Type: BS Lab ID: QC247059

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	54.94	110	76-120
Trichloroethene	50.00	52.86	106	80-120
Chlorobenzene	50.00	51.59	103	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC247060

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	51.53	103	76-120	6	20
Trichloroethene	50.00	51.12	102	80-120	3	20
Chlorobenzene	50.00	49.58	99	80-120	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	80-124
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-120

## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	90126
Units:	ug/L	Analyzed:	04/08/04
Diln Fac:	1.000		

Type: BS Lab ID: QC247185

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	53.91	108	76-120
Trichloroethene	50.00	45.38	91	80-120
Chlorobenzene	50.00	56.85	114	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	93	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC247186

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	54.31	109	76-120	1	20
Trichloroethene	50.00	44.87	90	80-120	1	20
Chlorobenzene	50.00	52.61	105	80-120	8	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	91	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	171594	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	90083
MSS Lab ID:	171585-001	Sampled:	04/05/04
Matrix:	Water	Received:	04/06/04
Units:	ug/L	Analyzed:	04/07/04
Diln Fac:	1.000		

Type: MS Lab ID: QC247057

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.08000	50.00	47.52	95	77-120
Trichloroethene	<0.1500	50.00	46.29	93	74-121
Chlorobenzene	<0.1400	50.00	54.84	110	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	80-124
Toluene-d8	96	80-120
Bromofluorobenzene	95	80-120

Type: MSD Lab ID: QC247058

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	44.35	89	77-120	7	20
Trichloroethene	50.00	40.39	81	74-121	14	20
Chlorobenzene	50.00	52.14	104	80-120	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	85	80-124
Toluene-d8	93	80-120
Bromofluorobenzene	97	80-120