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January 18, 2005

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Clayton Project No. 70-04578.00

Subject: Fourth 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 Fourth 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,

A handwritten signature in black ink that appears to read "Mathew Reimer".

Mathew Reimer  
Staff Environmental Consultant  
Environmental Services  
San Francisco Regional Office

A handwritten signature in black ink that appears to read "Donald A. Ashton".

Donald A. Ashton  
Senior Geologist  
Environmental Services  
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DAA/daa

cc: Bob Pender                            AIG Technical Services  
    Bank of America  
Donna Profitt                            Clayton Group Services  
Rita Repko



**Fourth 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**

**January 18, 2005**

*Prepared by:*  
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## **1.0 INTRODUCTION**

Clayton Group Services, Inc., (Clayton) has prepared the following Fourth Quarter 2004 Groundwater Monitoring Report 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 Environmental Health (ACEH) made 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 ACEH, groundwater monitoring is being performed on a quarterly basis. This Fourth Quarter 2004 Groundwater Monitoring Report documents field activities, and presents data used to determine the groundwater elevation, gradient and groundwater quality at the site.

## **2.0 SITE DESCRIPTION AND HISTORY**

A single 1,000-gallon gasoline UST and associated plumbing/piping were formerly located beneath the sidewalk along 7<sup>th</sup> Street immediately east of the subject 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 to define the vertical and lateral extent of petroleum hydrocarbons in groundwater. Ten (10) groundwater monitoring wells currently exist in the first encountered water bearing zone to test groundwater conditions at and near the site. First encountered water beneath the site occurs in predominantly low permeability clayey and sandy silt. Analysis of groundwater samples for volatile organic compounds revealed several non-gasoline related halogenated volatile organic compounds (HVOCs) in wells located south and southwest of the former UST location. The source of non-gasoline related VOCs, which has not been identified, is most likely related to an off-site source.

## **3.0 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 9 of the 10 existing monitoring wells (MW-1, MW-6, MW-7, MW-8, MW-9, MW-10,

MW-11, MW-12 and MW-13). One of the monitoring wells, MW-2, was inaccessible because the tenant was unavailable to provide access.

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

On December 16, 2004, depth to water was measured in nine (9) existing monitoring wells to determine the groundwater elevation, gradient and flow direction. The wells were opened and allowed to stabilize prior to measuring the depth to water. Using an electronic water level probe, the depth to water in each 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  $\frac{3}{4}$ -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  $\frac{3}{4}$ -inch diameter wells were purged using a peristaltic pump and  $\frac{1}{4}$ -inch polytubing, and the 2-inch diameter wells were purged by hand bailing with a 1-liter Teflon bailer. 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 by 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 total well casing depth (reported in well construction details).

Field logs documenting water-level measurements and well purging and sampling for the Fourth 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 non-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 a chain-of-custody document, and temporarily stored in a chilled ice-chest until transported to the laboratory.

### 3.4. LABORATORY ANALYSES

Groundwater samples were submitted for analysis to Curtis and Tompkins, Ltd., Analytical Laboratories of Berkeley, California, a State of California certified laboratory. 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)
- USEPA Method 8260B for Halogenated Volatile Organic Compounds (HVOCs)

Certified analytical data sheets and chain-of-custody documentation for the Fourth Quarter 2004 groundwater-sampling event are presented in Appendix B.

## 4.0 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 groundwater elevation contour (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 gradient of the local groundwater table 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 Fourth Quarter 2004 monitoring event, the groundwater gradient was determined to be 0.014 feet per foot (ft/ft) towards the west-southwest.

Historical depth to water measurements and groundwater elevation data are presented in Table 1. The Fourth 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 6 of 9 samples that ranged in concentration from 110 micrograms per liter ( $\mu\text{g/L}$ ) to 63,000  $\mu\text{g/L}$ .
- Benzene was detected in 6 of 9 samples that ranged in concentration from 0.94  $\mu\text{g/L}$  to 15,000  $\mu\text{g/L}$ .

- Toluene was detected in 2 of 9 samples that ranged in concentration from 89 µg/L to 1,700 µg/L.
- Ethylbenzene was detected in 4 of 9 samples that ranged in concentration from 32 µg/L to 1,300 µg/L.
- Total xylenes were detected in 5 of 9 samples that ranged in concentration from 0.59 µg/L to 5,900 µg/L.

A summary of petroleum hydrocarbons and HVOCs detected in groundwater samples is presented in Table 2. The concentrations of TPH-g and benzene detected in groundwater samples and isoconcentration contours for the Fourth Quarter 2004 monitoring event are presented in Figures 3 and 4, 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 not detected in any of the wells sampled.
- Trichloroethene (TCE) was detected in 2 of 9 samples tested (MW-12 at 240 µg/L and MW-13 at 69 µg/L).
- Cis-1,2-Dichloroethene (cis-1,2-DCE) was detected in 3 of 9 samples tested (MW-8 at 1,500 µg/L, MW-12 at 80 µg/L, and MW-13 at 240 µg/L).
- Trans-1,2-Dichloroethene (trans-1,2-DCE) was detected in 3 of 9 samples tested (MW-8 at 60 µg/L, MW-12 at 77 µg/L, and MW-13 at 32 µg/L).
- Vinyl Chloride (VC) was detected in 2 of 9 samples tested (MW-8 at 86 µg/L and MW-13 at 15 µg/L).

The concentrations of TCE and cis 1,2-DCE detected in groundwater samples for the Fourth Quarter 2004 monitoring event are presented in Figure 5.

#### **5.0 CONCLUSION**

The groundwater gradient determined for the Fourth Quarter 2004 monitoring event was found to be relatively consistent with past determinations. TPH-g and BTEX in groundwater are within observed historic concentration ranges. The highest concentrations of TPH-g and benzene typically occur in monitoring wells MW-2 (not sampled this quarter) and MW-9, beneath the central portion of the subject building 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.

Chlorinated volatile organic compounds (not a component of gasoline) found in downgradient monitoring well samples (wells MW-8, MW-12, and MW-13) some distance from the former UST location, include TCE and its associated degradation compounds of cis-1,2-DCE, trans-1,2-DCE, and VC. The suite of chlorinated

compounds and the apparent changes in concentrations indicates that natural degradation of TCE is occurring. The source of the chlorinated VOCs is unknown, appears to be originating off-site, and does not appear to be related to the gasoline release.

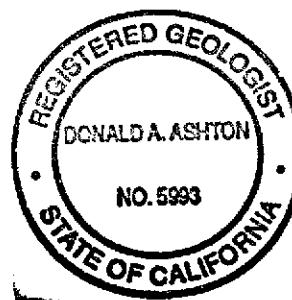
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January 18, 2005



**Table 1**  
**Summary of Groundwater Elevation Data**  
**Former Lemoine Sausage Facility**  
**630 29th Avenue**  
**Oakland, California**

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
<b>MW-1</b>	12/16/2004	16.69	4.40	12.29
	9/15/2004		NM	
	6/23/2004		5.96	10.73
	4/6/2004		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
<b>MW-2</b>	12/16/2004	20.79	NM	
	9/15/2004		10.94	9.85
	6/23/2004		11.60	9.19
	4/6/2004		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
<b>MW-3</b>	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

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

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-4	9/22/2000		15.30	5.80
	6/15/2000		10.56	10.54
	2/8/1999		7.45	13.65
<b>MW-4</b> Removed from monitoring program in October 2001				
MW-4	9/25/2001	17.78	7.40	10.38
	6/20/2001		6.78	11.00
	3/21/2001		5.77	12.01
	12/19/2000		6.40	11.38
	9/22/2000		6.90	10.88
	6/15/2000		6.30	11.48
	2/8/1999		4.13	13.65
<b>MW-5</b> Removed from monitoring program in October 2001				
MW-5	9/25/2001	21.12	10.34	10.78
	6/20/2001		9.90	11.22
	3/21/2001		8.68	12.44
	12/19/2000		9.99	11.13
	9/22/2000		9.99	11.13
	6/15/2000		10.36	10.76
	2/8/1999		7.62	13.50
<b>MW-6</b>				
MW-6	12/16/2004	16.60	4.56	12.04
	9/15/2004		6.56	10.04
	6/23/2004		5.76	10.84
	4/6/2004		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
MW-7	12/19/2000		5.93	10.67
	9/22/2000		6.54	10.06
	6/15/2000		5.47	11.13
	12/16/2004	15.47	5.15	10.32
	9/15/2004		6.70	8.77
<b>MW-7</b>				
MW-7	6/23/2004		6.20	9.27
	4/6/2004		5.60	9.87
	12/16/2003		5.68	9.79

**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	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
	12/17/2002		6.95	8.52
	12/18/2002		6.94	8.53
	12/19/2002		6.04	9.43
	12/20/2002		6.48	8.99
	12/21/2002		7.25	8.22
	12/22/2002		6.90	8.57
	12/23/2002		5.53	9.94
	12/24/2002		7.20	8.27
	12/25/2002		7.51	7.96
	12/26/2002		6.40	9.07
MW-9	12/16/2004	17.58	5.61	11.97
	9/15/2004		8.52	9.06
	6/23/2004		7.98	9.60
	4/6/2004		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

**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)
	12/3/2001		5.79	11.82
<b>MW-10</b>	12/16/2004	16.92	4.45	12.47
	9/15/2004		6.86	10.06
	6/23/2004		5.96	10.96
	4/6/2004		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
<b>MW-11</b>	12/16/2004	14.87	4.69	10.18
	9/15/2005		6.45	8.42
	6/23/2004		5.68	9.19
	4/6/2004		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
<b>MW-12</b>	12/16/2004	14.05	4.34	9.71
	9/15/2004		6.43	7.62
	6/23/2004		5.78	8.27
	4/6/2004		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
	12/16/2004	13.39	4.69	8.70
<b>MW-13</b>	9/15/2004		6.63	6.76
	6/23/2004		6.12	7.27
	4/6/2004		5.35	8.04
	12/16/2003		5.01	8.58

**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)
	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:

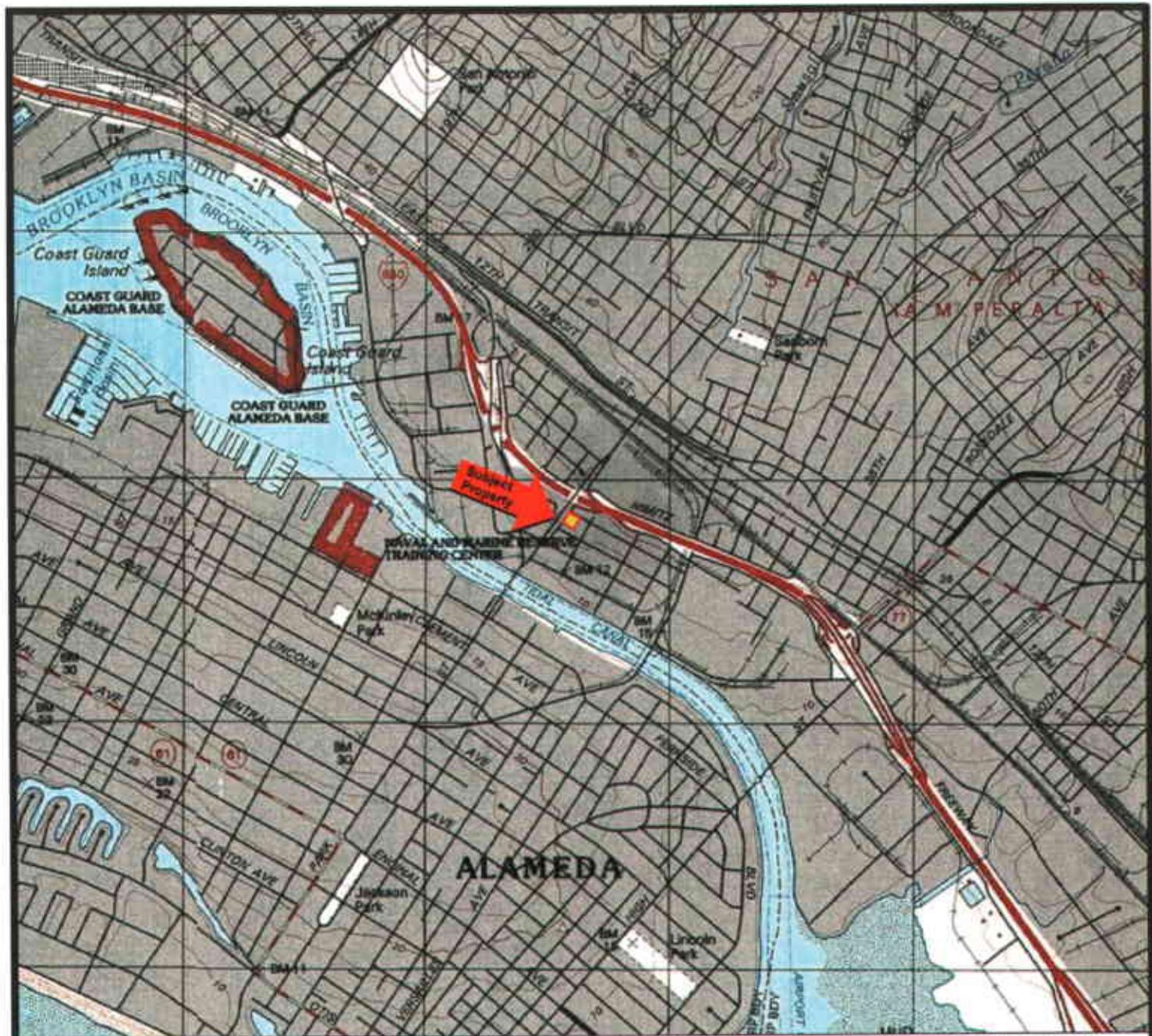
1. All top of casing elevations referenced to mean sea level (msl) and surveyed with reference to the benchmark located at Peterson Street and East 7<sup>th</sup> Street.
2. NM = Not Measured

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

Sample Location	Date Sampled	TPHG 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-1</b>	12/16/2004	1,800	NA	260	89	32	119	<2.5	<2.5	<2.5	<2.5	<2.5
	9/15/2004	Not Sampled										
	6/23/2004	25,000	NA	2,700	1,700	680	2,300	<2.5	<2.5	<2.5	<2.5	<2.5
	4/6/2004	18,000	NA	2,400	1,300	550	1,730	<2.0	<2.0	<2.0	<2.0	<2.0
	12/16/2003	Not Sampled										
	9/26/2003	11,000	NA	1,200	960	370	1,600	<1.0	<1.0	<1.0	<1.0	<1.0
	6/24/2003	14,000	NA	2,400	1,400	500	2,100	<4.2	<4.2	<4.2	<4.2	<4.2
	3/28/2003	20,000	NA	2,700	1,500	650	2,300	<3.6	<3.6	<3.6	<3.6	<3.6
	12/16/2002	20,000	NA	2,800	490	500	2,300	<4.2	<4.2	<4.2	<4.2	<4.2
	9/11/2002	27,000	NA	3,200	1,900	720	3,500	<4.2	<4.2	<4.2	<4.2	<4.2
	6/28/2002	26,000	NA	3,200	1,800	640	2,900	<3.1	<3.1	<3.1	<3.1	<3.1
	3/25/2002	11,000	NA	3,200	1,200	73	1,860	<5	<5	<5	<5	<5
	12/3/2001	15,000	NA	2,800	1,200	310	1,660	<3.1	<3.1	<3.1	<3.1	<3.1
	9/26/2001	16,000	NA	1,100	130	<10	320	<2.5	<2.5	<2.5	<2.5	<2.5
	6/21/2001	12,000	NA	2,000	880	180	1,180	3.0	<0.5	<0.5	<0.5	<0.5
	3/21/2000	21,000	NA	3,200	1,700	290	2,600	<2.5	<2.5	<2.5	<2.5	<2.5
	12/19/2000	25,000	NA	3,200	1,900	480	3,300	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/2000	25,000	<500	3,100	1,800	470	3,600	NA	NA	NA	NA	NA
	6/15/2000	29,000	NA	3,900	<100	1,900	4,200	<5.0	<5.0	<5.0	<5.0	<5.0
	2/8/1999	48,000	NA	3,900	6,300	970	4,300	<30	NA	NA	NA	NA
<b>MW-2</b>	12/16/2004	Not Sampled										
	9/15/2004	46,000	NA	13,000	1,300	1,400	2,710	<17	<17	<17	<17	<17
	6/23/2004	33,000	NA	8,200	1,800	870	1,930	<17	<17	<17	<17	<17
	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

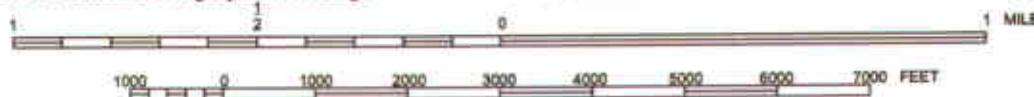
**Table 2**  
**Summary of Groundwater Analytical Results**  
**Former Lemoine Sausage Facility**  
**630 29th Avenue, Oakland, California**

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>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
<b>MW-6</b>	12/16/2004	240	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	9/15/2004	<50	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5* <sup>10</sup>	<0.5	<0.5	<0.5	<0.5
	6/23/2004	63	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.8	<0.5	<0.5	<0.5	<0.5
	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>4</sup>	< 0.5	< 0.5	< 0.5	< 0.5
	6/24/2003	130	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	3/28/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/16/2002	62	NA	< 0.5	0.54	3.0	8.39	1.0* <sup>4</sup>	0.7	< 0.5	< 0.5	< 0.5
	9/11/2002	120	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5* <sup>4</sup>	< 0.5	< 0.5	< 0.5	< 0.5
	6/28/2002	120	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5
	3/25/2002	1,200	NA	22	8.0	5.7	13.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
	12/3/2001	72	NA	< 0.5	< 0.5	< 0.5	< 0.5	1.6* <sup>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>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	< 0.5	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



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

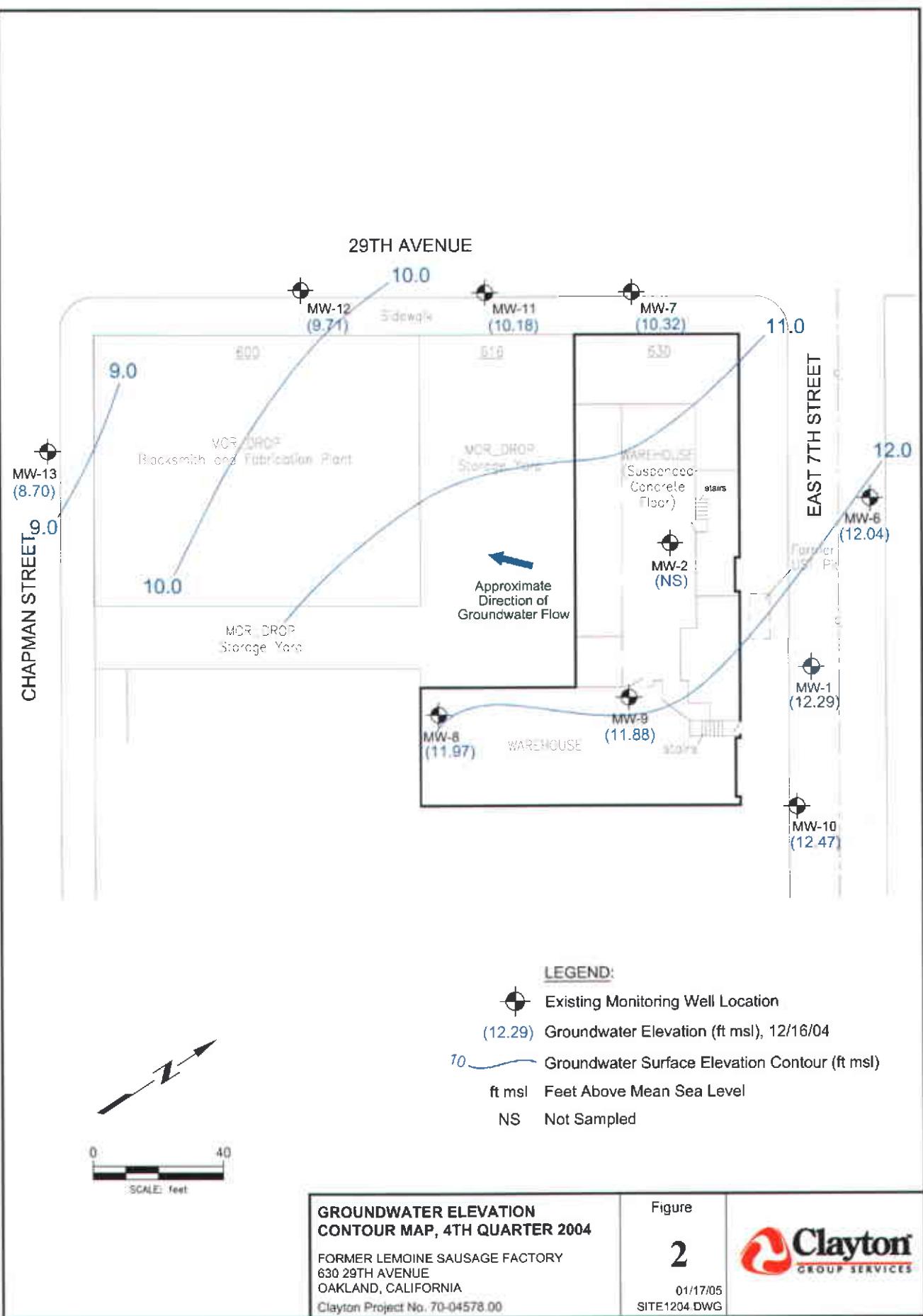


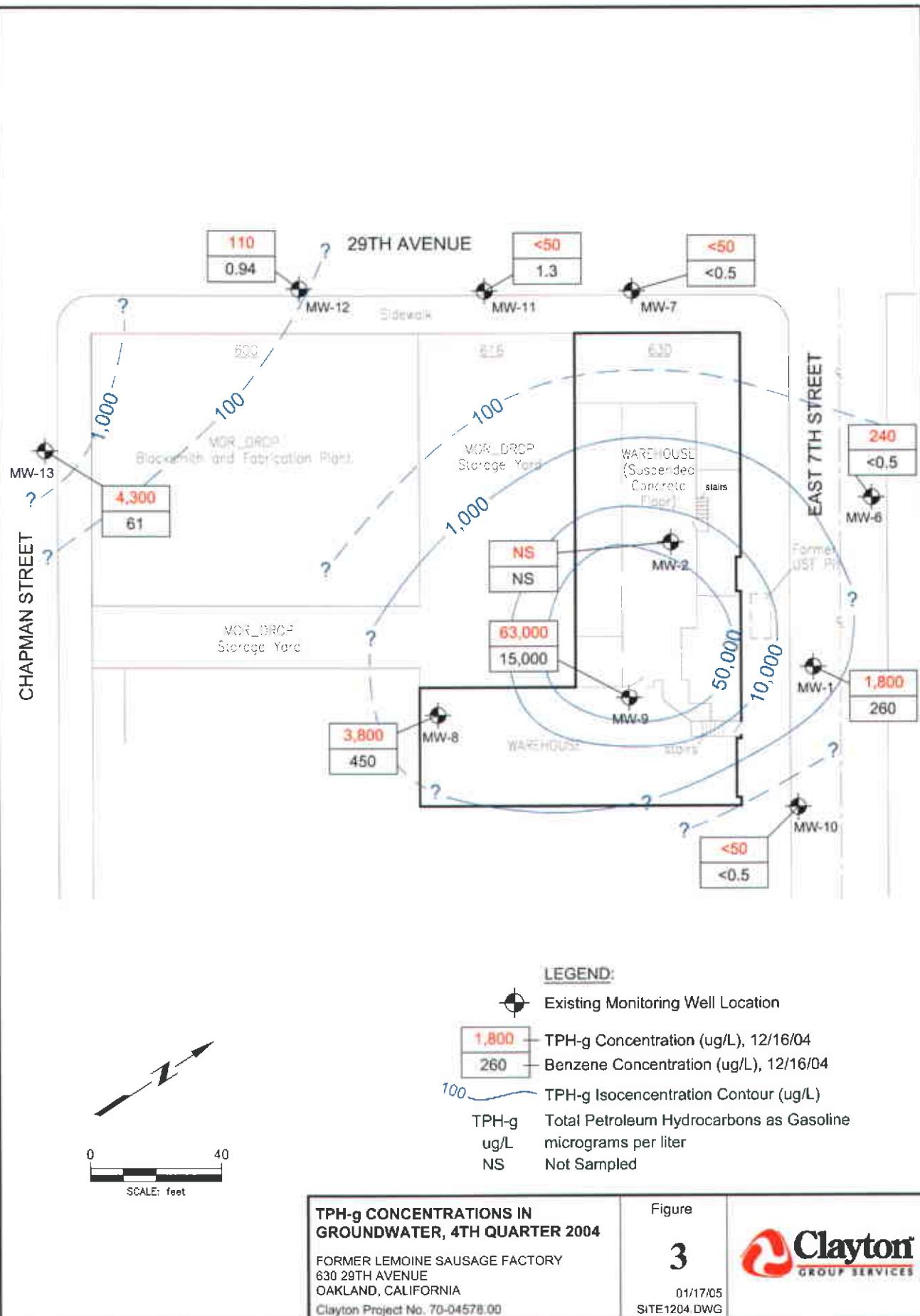
PROPERTY LOCATION MAP  
Former Lemoine Sausage Factory  
630 29th Avenue  
Oakland, California  
Clayton Project No. 70-04578.00

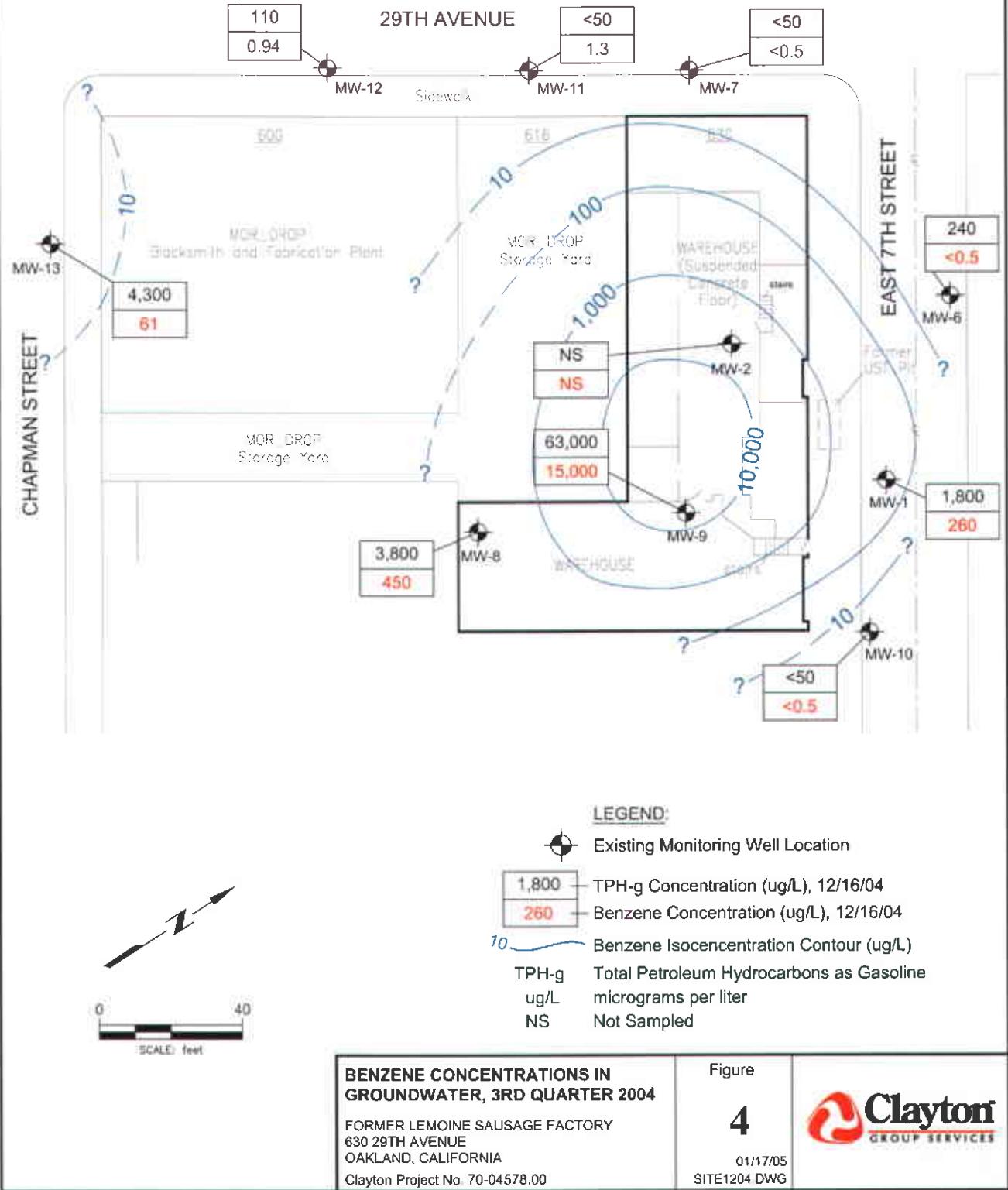
Figure

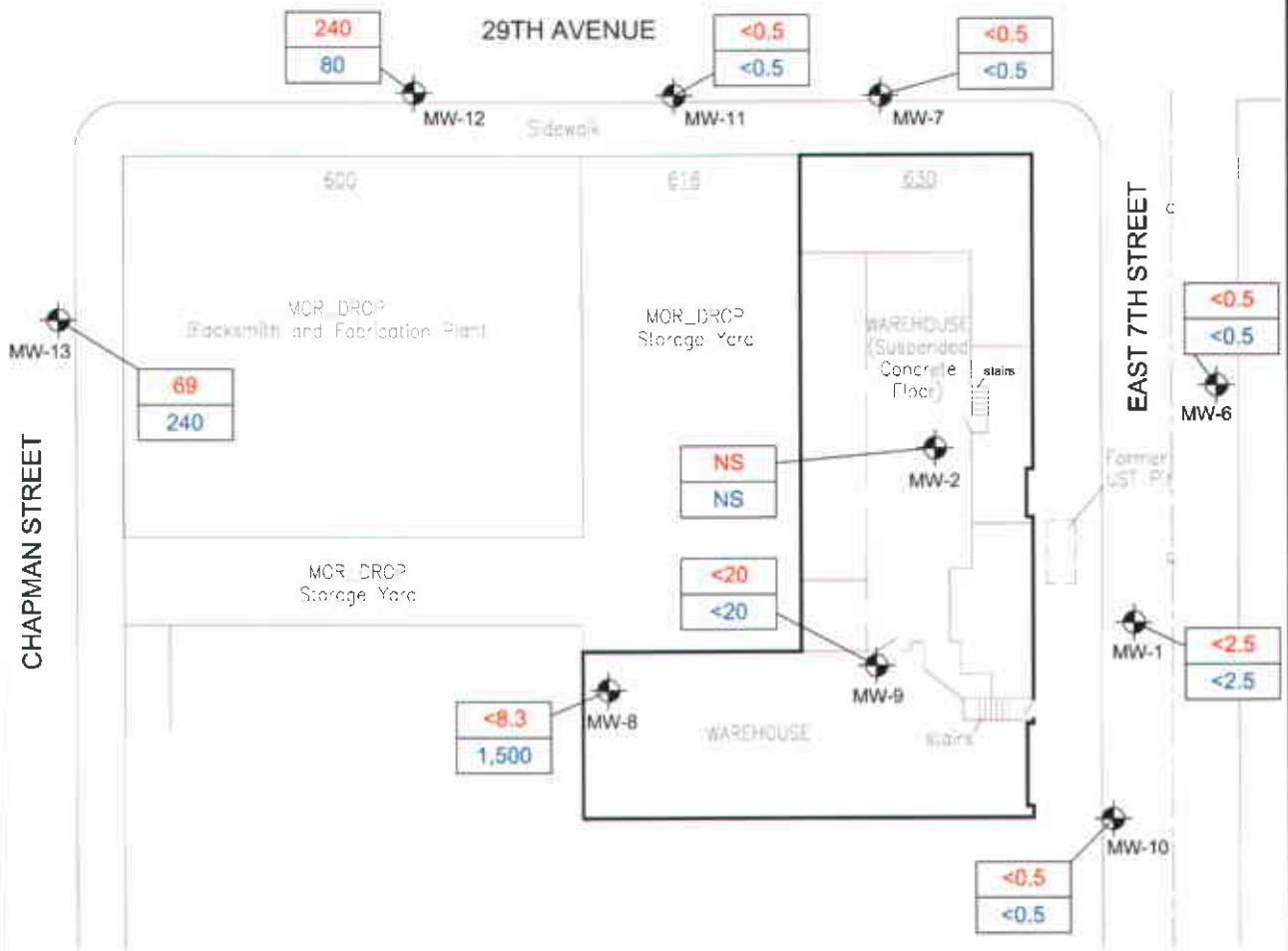
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**Clayton**  
GROUP SERVICES



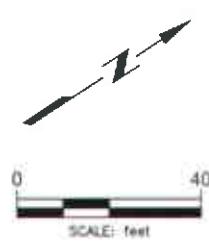






LEGEND:

- MW-12 - Existing Monitoring Well Location
- |     |  |
|-----|--|
| 240 | TCE Concentration (ug/L), 12/16/04         |
| 80  | cis 1,2-DCE Concentration (ug/L), 12/16/04 |
- TCE Trichloroethene
- cis 1,2-DCE cis 1,2-Dichloroethene
- ug/L micrograms per liter
- NS Not Sampled



**TCE AND cis-1,2-DCE CONCENTRATIONS IN GROUNDWATER,  
4TH QUARTER 2004**  
FORMER LEMOINE SAUSAGE FACTORY  
630 29TH AVENUE  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-04578.00

Figure  
**5**  
01/17/05  
SITE1204 DWG



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

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory 630 29th Avenue Oakland, California	Job #:	70-04578.00		
Sampling Location:	<b>MW-1</b>	Date Purged:	12.16.04		
Top of Casing:	16.69 (ft, msl)	Purge Method:	peri pump		
Depth to Water:	4.40	Date & Time Sampled:	12.16.04	12:20	
Groundwater Elevation	12.29	Sampling Method:	peri pump		
Well Bottom	7.69	Sample Type:	TPHG/BTEX /8010 MS		
Water Column:	4.6	Preservatives:	HCL		
Well Casing Volume:	0.05 (WC* 0.01)	# of Containers:	6		
Casing Volumes Purged:					
Purge Rate:	3/4" dia well				
Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos/cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F or }^{\circ}\text{C}$ )
12:20	0	7.36	1.350	19	16.6 garnish gray
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Field Notes:	Only one set of parameters taken due to limited amount of water in well.				

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory	Job #:	70-04578.00			
	630 29th Avenue	Date Purged:	12.16.04			
	Oakland, California	Purge Method:	disposable bailer			
Sampling Location:	<b>MW-6</b>	Date & Time Sampled: 12.16.04 13:00				
Top of Casing:	16.6 (ft, msl)	Sampling Method: disposable bailer				
Depth to Water:	4.56	Sample Type: TPHG/BTEX /8010 MS				
Groundwater Elevation	12.04	Preservatives: HCL				
Well Bottom	-3.40	# of Containers:	6			
Water Column:	15.44	Field Tech:	MR			
Well Casing Volume:	2.41 (WC* 0.16)	Weather Conditions:	sunny			
Casing Volumes Purged:						
Purge Rate:	2" dia well					
Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F or }^{\circ}\text{C}$ )	Turbidity (Visual)
12:35	0	7.47	1.132	15	19.4	<100
12:40	2.5	7.37	1.082	13	19.9	"
12:45	2.5	7.20	1.095	14	20.4	"
12:50	2.5	7.19	1.114	8	20.9	"
12:55	2.5	7.12	1.134	3	20.6	"
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Field Notes:						

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory 630 29th Avenue Oakland, California	Job #:	70-04578.00			
Sampling Location:	<b>MW-7</b>	Date Purged:	12/16/04			
Top of Casing:	15.47 (ft, msl)	Purge Method:	disposable bailer			
Depth to Water:	5.15	Date & Time Sampled:	12/16/04 10:20			
Groundwater Elevation	10.32	Sampling Method:	disposable bailer			
Well Bottom	-4.53	Sample Type:	TPHG/BTEX /8010 MS			
Water Column:	14.85	Preservatives:	HCL			
Well Casing Volume:	2.38 (WC* 0.16)	# of Containers:	6			
Casing Volumes Purged:	4	Field Tech:	MR			
Purge Rate:	2" dia well					
Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F or } ^{\circ}\text{C}$ )	Turbidity (Visual)
9:55	0	7.26	.987	15	17.1	clear
10:00	2.5	7.23	.999	10	18.7	"
10:05	2.5	7.25	1.010	11	19.0	"
10:10	2.5	7.17	1.005	8	19.3	turkey
10:15	2.5	7.17	.980	6	19.3	muddy
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Field Notes:						

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory 630 29th Avenue Oakland, California	Job #:	70-04578.00
Sampling Location:	<b>MW-8</b>	Date Purged:	12/16/04
Top of Casing:	17.58 (ft, msl)	Purge Method:	disposable bailer
Depth to Water:	5.01	Date & Time Sampled:	12/16/04 11:10
Groundwater Elevation	11.97	Sampling Method:	disposable bailer
Well Bottom	-2.42	Sample Type:	TPHG/BTEX /8010 MS
Water Column:	14.39	Preservatives:	HCL
Well Casing Volume:	2.30 (WC* 0.16)	# of Containers:	6
Casing Volumes Purged:	4	Field Tech:	MR
Purge Rate:	2" dia well		

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature (°F or °C)	Turbidity (Visual)
10:45	0	7.02	1.222	2	15-5	clear
10:50	2.5	7.07	1.2338	0	16.4	"
10:54	2.5	6.97	1.251	4	16.9	"
10:58	2.5	6.95	1.269	6	17.1	"
11:03	2.5	6.93	1.270	6	16.7	"
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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:	12.16.04
	Oakland, California	Purge Method:	disposable bailer
Sampling Location:	<b>MW-9</b>	Date & Time Sampled:	12.16.04 12:00
Top of Casing:	17.61 (ft, msl)	Sampling Method:	disposable bailer
Depth to Water:	5.13	Sample Type:	TPHG/BTEX /8010 MS
Groundwater Elevation	11.88	Preservatives:	HCL
Well Bottom	2.61	# of Containers:	6
Water Column:	9.21	Field Tech:	MR
Well Casing Volume:	1.48 (WC* 0.16)	Weather Conditions:	sunny
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F or }^{\circ}\text{C}$ )	Turbidity (Visual)
11:30	0.5	6.57	6.43	21	16.6	clear
11:35	1.5	6.29	8.12	40	17.6	"
11:40	1.5	6.29	9.36	39	17.7	"
11:45	1.5	6.25	10.63	43	17.9	"
11:49	1.5	6.30	10.84	40	17.5	"
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Field Notes:						

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory 630 29th Avenue Oakland, California	Job #:	70-04578.00
Sampling Location:	<b>MW-10</b>	Date Purged:	12.16.04
Top of Casing:	16.92 (ft, msl)	Sampling Method:	disposable bailer
Depth to Water:	4.45	Sample Type:	TPHG/BTEX /8010 MS
Groundwater Elevation	12.47	Preservatives:	HCL
Well Bottom	7.92	# of Containers:	6
Water Column:	4.55	Field Tech:	MR
Well Casing Volume:	0.13 (WC* 0.16)	Weather Conditions:	
Casing Volumes Purged:	4	Purge Rate:	2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F}$ or $^{\circ}\text{C}$ )	Turbidity (Visual)
13 : 20	0	7.21	.636	-2	16.2	clear
13 : 23	0.75	7.21	.637	8	17.0	"
13 : 26	0.75	7.14	.636	5	17.0	"
13 : 29	0.75	7.11	.635	5	17.3	"
13 : 32	0.75	7.10	.638	3	17.5	"
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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:	12.16.04				
	Oakland, California	Purge Method:	disposable bailer				
Sampling Location:	<b>MW-11</b>	Date & Time Sampled:	12.16.04 7:45				
Top of Casing:	14.87 (ft, msl)	Sampling Method:	disposable bailer				
Depth to Water:	4.69	Sample Type:	TPHG/BTEX /8010 MS				
Groundwater Elevation	10.18	Preservatives:	HCL				
Well Bottom	-0.13	# of Containers:	6				
Water Column:	10.31	Field Tech:	MR				
Well Casing Volume:	1.65 (WC* 0.16)	Weather Conditions:	sunny				
Casing Volumes Purged:	4						
Purge Rate:	2" dia well						
Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F}$ or $^{\circ}\text{C}$ )	Turbidity (Visual)	
9:20	0	7.08	1.586	0	16.4	clear	
9:24	1.75	7.00	1.599	3	18.6	"	
9:29	1.75	6.97	1.598	3	19.2	"	
9:33	1.75	6.99	1.637	3	19.4	"	
9:38	1.75	6.98	1.670	4	19.6	"	
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Field Notes:							

**FIELD SAMPLING DATA SHEET**

Job Location:	Former Lemoine Sausage Factory 630 29th Avenue Oakland, California	Job #:	70-04578.00
Sampling Location:	<b>MW-12</b>	Date Purged:	12-16-04
Top of Casing:	14.05 (ft, msl)	Sampling Method:	disposable bailer
Depth to Water:	4.34	Sample Type:	TPHG/BTEX /8010 MS
Groundwater Elevation	9.71	Preservatives:	HCL
Well Bottom	-0.95	# of Containers:	6
Water Column:	10.66	Field Tech:	MR
Well Casing Volume:	i.71 (WC* 0.16)	Weather Conditions:	Rainy
Casing Volumes Purged:	4		
Purge Rate:	2" dia well		

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F}$ or $^{\circ}\text{C}$ )	Turbidity (Visual)
8 :35	0	6.80	1.587	13	16.2	Clear
8 :39	1.75	6.88	1.726	10	17.8	"
8 :43	1.75	6.85	1.768	11	18.3	"
8 :48	1.75	6.86	1.747	10	18.9	"
8 :52	1.75	6.92	1.721	8	19.4	"
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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:	12/16/04
	Oakland, California	Purge Method:	disposable bailer
Sampling Location:	<b>MW-13</b>	Date & Time Sampled:	12/16/04 8:25
Top of Casing:	13.39 (ft, msl)	Sampling Method:	disposable bailer
Depth to Water:	4.69	Sample Type:	TPHG/BTEX /8010 MS
Groundwater Elevation	8.70	Preservatives:	HCL
Well Bottom	-1.61	# of Containers:	6
Water Column:	10.31	Field Tech:	MR
Well Casing Volume:	1.65 (WC* 0.16)	Weather Conditions:	sunny
Casing Volumes Purged:	4		
Purge Rate:			2" dia well

Time	Volume Removed (gal)	pH	Specific Conductivity ( $\mu\text{mhos}/\text{cm}$ )	Redox Potential (mVolts)	Temperature ( $^{\circ}\text{F}$ or $^{\circ}\text{C}$ )	Turbidity (Visual)
8:05	0	6.41	.813	43	18.2	clear
8:08	1.75	6.56	.758	26	19.2	"
8:12	1.75	6.64	.777	22	20.0	"
8:16	1.75	6.63	.806	20	19.8	"
8:20	1.75	6.65	.848	21	20.5	"
:						
:						
:						
:						
:						
:						

Field Notes:

**APPENDIX B**

**FOURTH 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

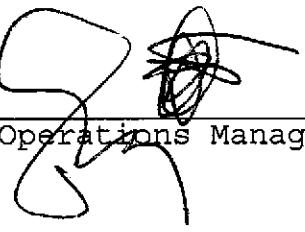
Date: 29-DEC-04  
Lab Job Number: 176713  
Project ID: 70-04578.00  
Location: Sausage Factory

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.

NELAP # 01107CA

Page 1 of 39

**CASE NARRATIVE**

Laboratory number: 176713  
Client: Clayton Group Services  
Project: 70-04578.00  
Location: Sausage Factory  
Request Date: 12/16/04  
Samples Received: 12/16/04

This hardcopy data package contains sample and QC results for nine water samples, requested for the above referenced project on 12/16/04. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

High surrogate recoveries were observed for trifluorotoluene (FID) in the MS/MSD for batch 97612 and the LCS for batch 97638, due to interference from coeluting hydrocarbon peaks; the corresponding bromofluorobenzene (FID) surrogate recoveries were within limits. No other analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.



176713

## **CHAIN OF CUSTODY**

Page 1 of 1

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**

**Collected by:**

Mr. Lin

Date/Time 12.11.64

***Relinquished by:***

745

Date/Time 12:16 PM Nov

***Relinquished by:***

— 1 —

**Date/Time**

***Method of Shipment:***

**Collector's Signature:**

M. B.

Date/Time 12.16.24

*Received by:*

25

Date/Time : 2/16/04 1425

Received by

1

*Date/Time* \_\_\_\_\_

**Sample Condition on Rcont:**

Received  On ice  
 Cold  Ambient  Intact

## Electronic Submittal Information

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

### SUCCESSFUL EDF CHECK - NO ERRORS

<u>ORGANIZATION NAME:</u>	Curtis & Tompkins, Ltd.
<u>USER NAME:</u>	CTBERK
<u>DATE CHECKED:</u>	12/29/2004 5:25:04 PM
<u>GLOBAL ID:</u>	NOT SELECTED
<u>FILE uploaded:</u>	176713_edf.zip

No errors were found in your EDF upload file.

If you want to submit this file to the SWRCB, choose the "Upload EDD" option in the above menu and follow the instructions.

When you complete the submittal process, you will be given a confirmation number for your submittal.

Because you have not chosen a facility, field point names have not been checked.

Logged in as CTBERK (LABORATORY)

[CONTACT SITE ADMINISTRATOR](#)



Curtis &amp; Tompkins, Ltd.

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	12/16/04
Units:	ug/L	Received:	12/16/04

Field ID: MW-01 Diln Fac: 5.000  
Type: SAMPLE Batch#: 97638  
Lab ID: 176713-001 Analyzed: 12/20/04

Analyst	Result	RL	Analysis
Gasoline C7-C12	1,800	250	EPA 8015B
Benzene	260	2.5	EPA 8021B
Toluene	89	2.5	EPA 8021B
Ethylbenzene	32	2.5	EPA 8021B
m,p-Xylenes	72	2.5	EPA 8021B
o-Xylene	47	2.5	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	135	70-141	EPA 8015B
Bromofluorobenzene (FID)	115	80-143	EPA 8015B
Trifluorotoluene (PID)	110	59-133	EPA 8021B
Bromofluorobenzene (PID)	103	76-128	EPA 8021B

Field ID: MW-06 Diln Fac: 1.000  
Type: SAMPLE Batch#: 97612  
Lab ID: 176713-002 Analyzed: 12/17/04

Analyst	Result	RL	Analysis
Gasoline C7-C12	240	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)	121	70-141	EPA 8015B
Bromofluorobenzene (FID)	103	80-143	EPA 8015B
Trifluorotoluene (PID)	111	59-133	EPA 8021B
Bromofluorobenzene (PID)	104	76-128	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
Z= Sample exhibits unknown single peak or peaks  
ND= Not Detected  
RL= Reporting Limit  
Page 1 of 6

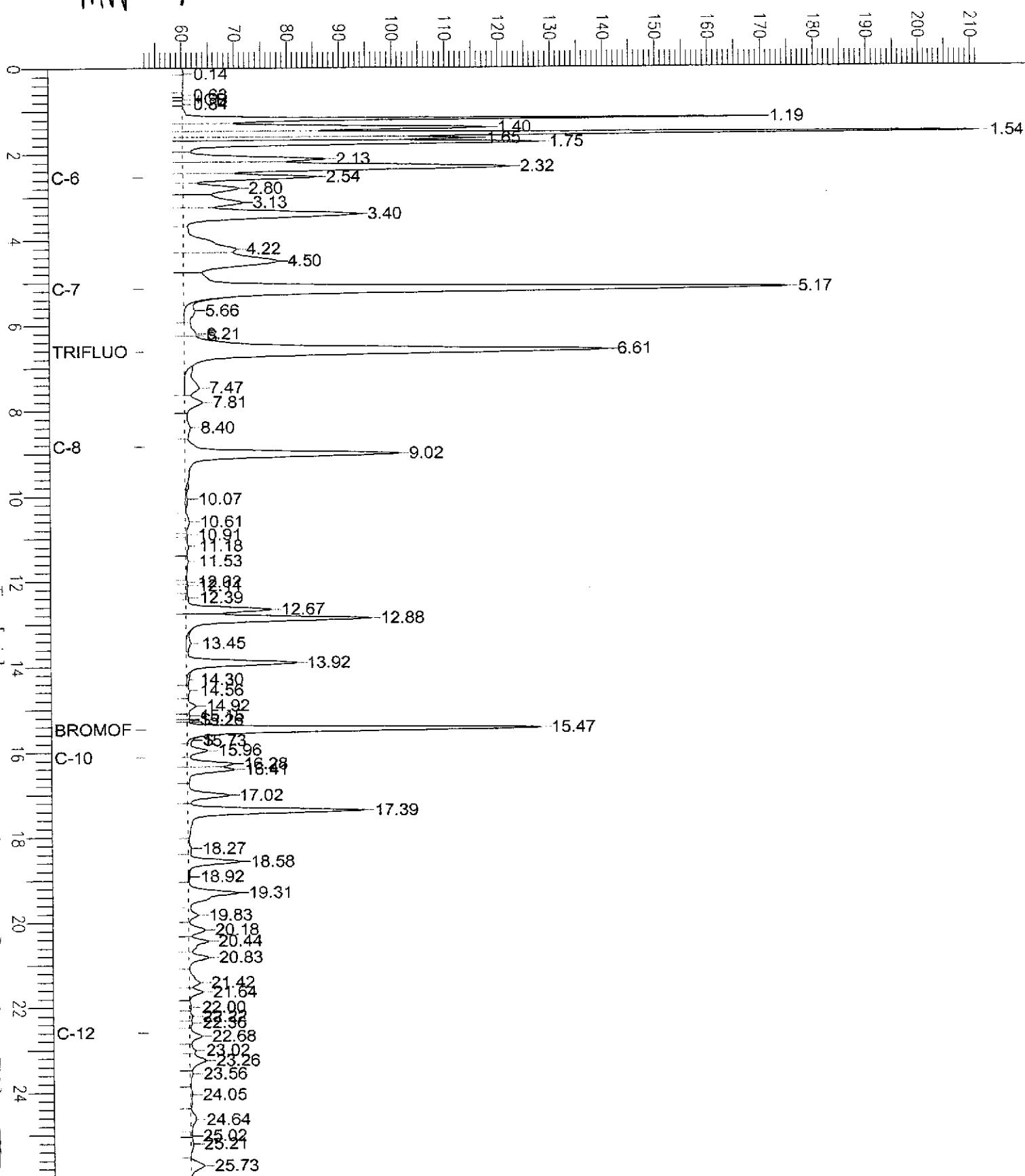
# GC04 TVH 'J' Data File FID

Sample Name : 176713-001,97638  
 fileName : G:\GC04\DATA\355J009.raw  
 method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.00 min  
 Scale Factor: 1.0 Plot Offset: 53 mV

Sample #: d1.0 Page 1 of 1  
 Date : 12/21/04 11:03 AM  
 Time of Injection: 12/20/04 05:10 PM  
 Low Point : 52.64 mV High Point : 211.80 mV  
 Plot Scale: 159.2 mV

MW-01

Response [mV]

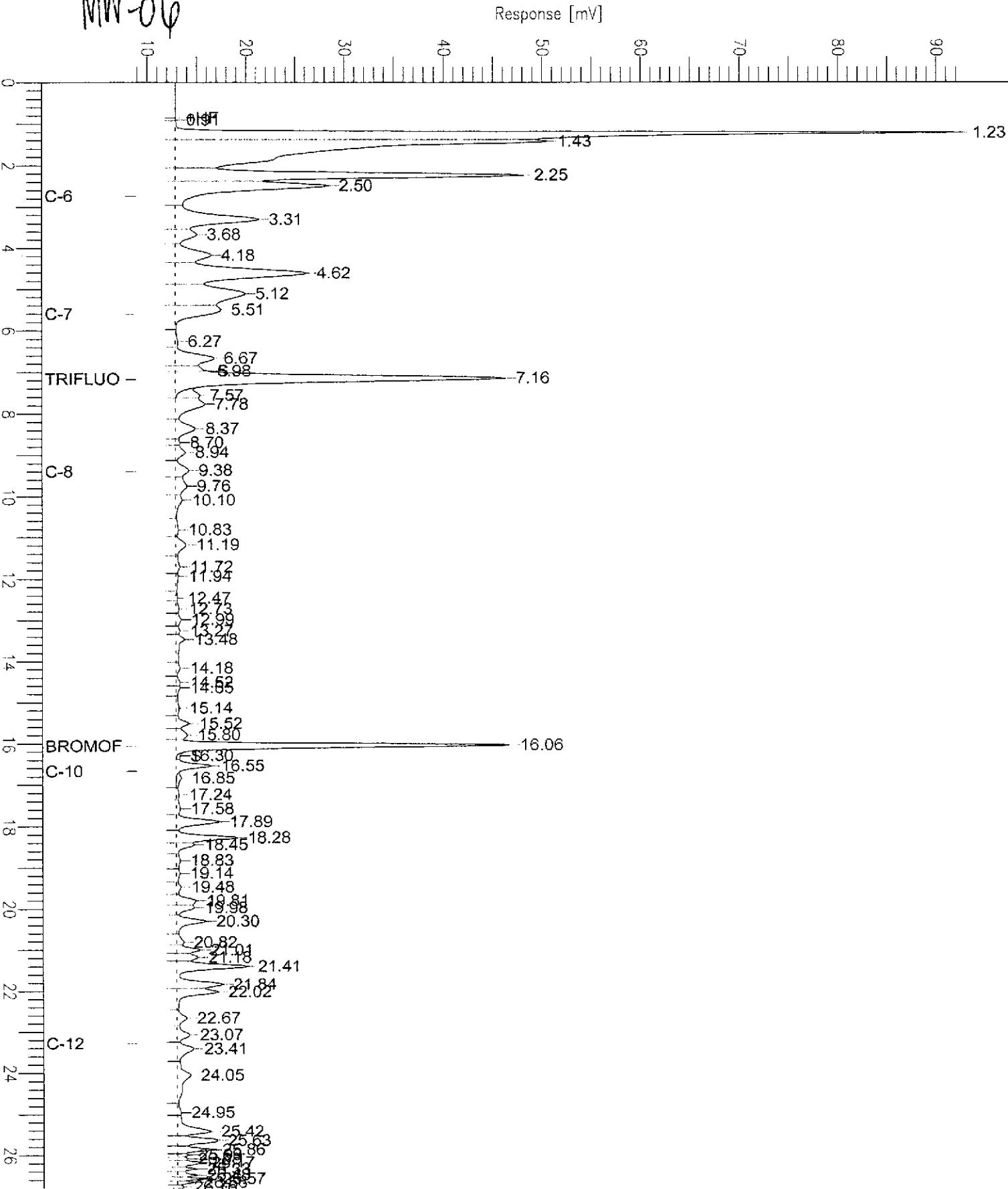


# GC19 TVH 'X' Data File (FID)

Sample Name : 176713-002,97612, tvh+btxe  
 fileName : G:\GC19\DATA\352X018.raw  
 method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: a1.0 Page 1 of 1  
 Date : 12/20/04 09:26 AM  
 Time of Injection: 12/17/04 10:33 PM  
 Low Point : 8.86 mV High Point : 92.64 mV  
 Plot Scale: 83.8 mV

MW-06



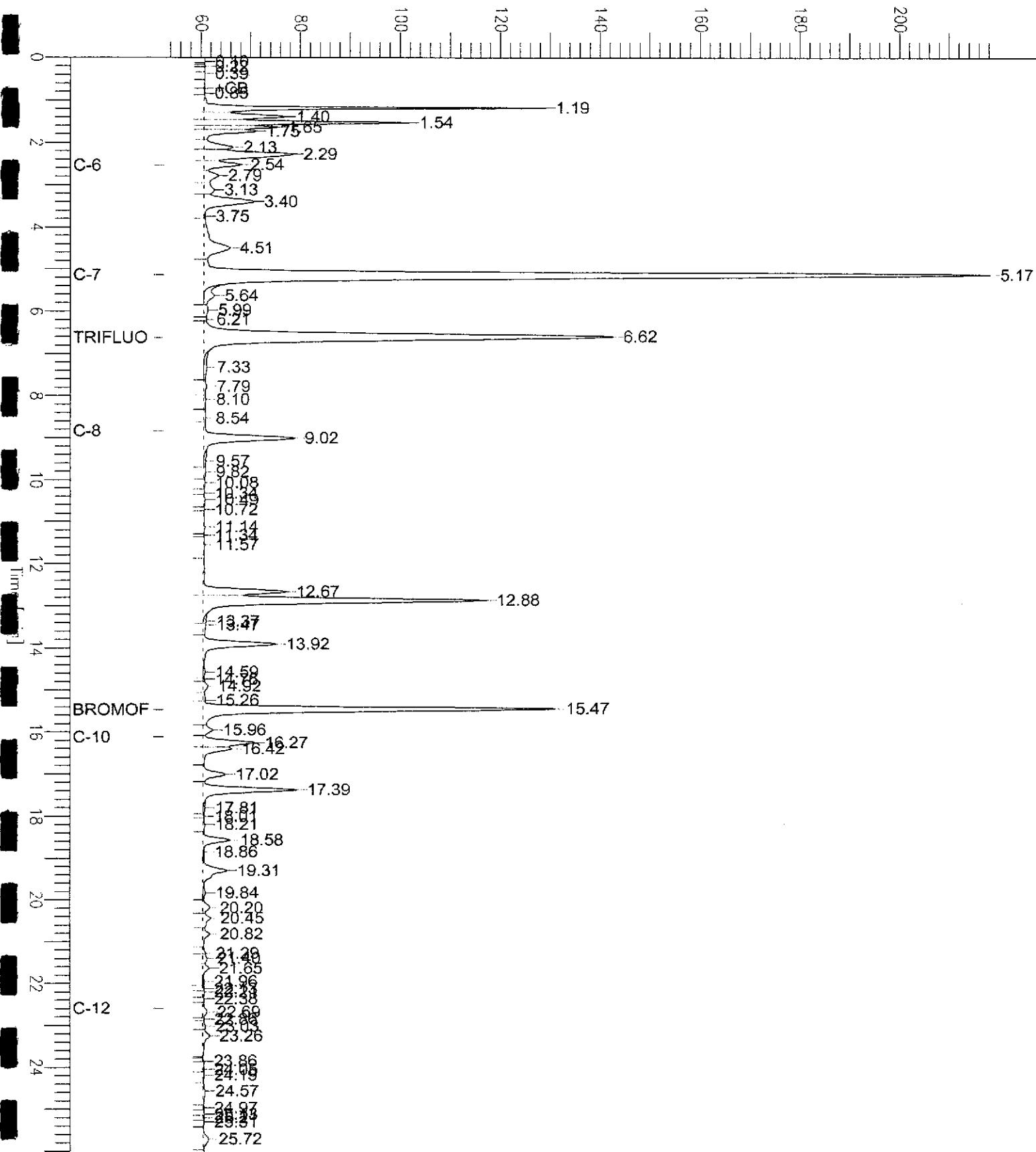
# GC04 TVH 'J' Data File FID

Sample Name : 176713-005\_97638  
 fileName : G:\GC04\DATA\355J017.raw  
 method : TVHBTEXE  
 Start Time : 0.00 min End Time : 26.00 min  
 Scale Factor: 1.0 Plot Offset: 53 mV

Sample #: d1.0 Page 1 of 1  
 Date : 12/20/04 10:22 PM  
 Time of Injection: 12/20/04 09:56 PM  
 Low Point : 52.63 mV High Point : 218.26 mV  
 Plot Scale: 165.6 mV

MW-09

Response [mV]





Curtis &amp; Tompkins, Ltd.

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	12/16/04
Units:	ug/L	Received:	12/16/04

Field ID: MW-11 Diln Fac: 1.000  
Type: SAMPLE Batch#: 97612  
Lab ID: 176713-007 Analyzed: 12/18/04

Analyte	Result	RI	Analyst
Gasoline C7-C12	ND	50	EPA 8015B
Benzene	1.3	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m, p-Xylenes	0.59	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	GC	RT (min)	Analyst
Trifluorotoluene (FID)	104	70-141	EPA 8015B
Bromofluorobenzene (FID)	99	80-143	EPA 8015B
Trifluorotoluene (PID)	100	59-133	EPA 8021B
Bromofluorobenzene (PID)	99	76-128	EPA 8021B

Field ID: MW-12 Diln Fac: 1.000  
Type: SAMPLE Batch#: 97612  
Lab ID: 176713-008 Analyzed: 12/18/04

Analyte	Result	RI	Analyst
Gasoline C7-C12	110 Y Z	50	EPA 8015B
Benzene	0.94	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	GC	RT (min)	Analyst
Trifluorotoluene (FID)	94	70-141	EPA 8015B
Bromofluorobenzene (FID)	87	80-143	EPA 8015B
Trifluorotoluene (PID)	95	59-133	EPA 8021B
Bromofluorobenzene (PID)	88	76-128	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%  
Y= Sample exhibits chromatographic pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

ND= Not Detected

RL= Reporting Limit

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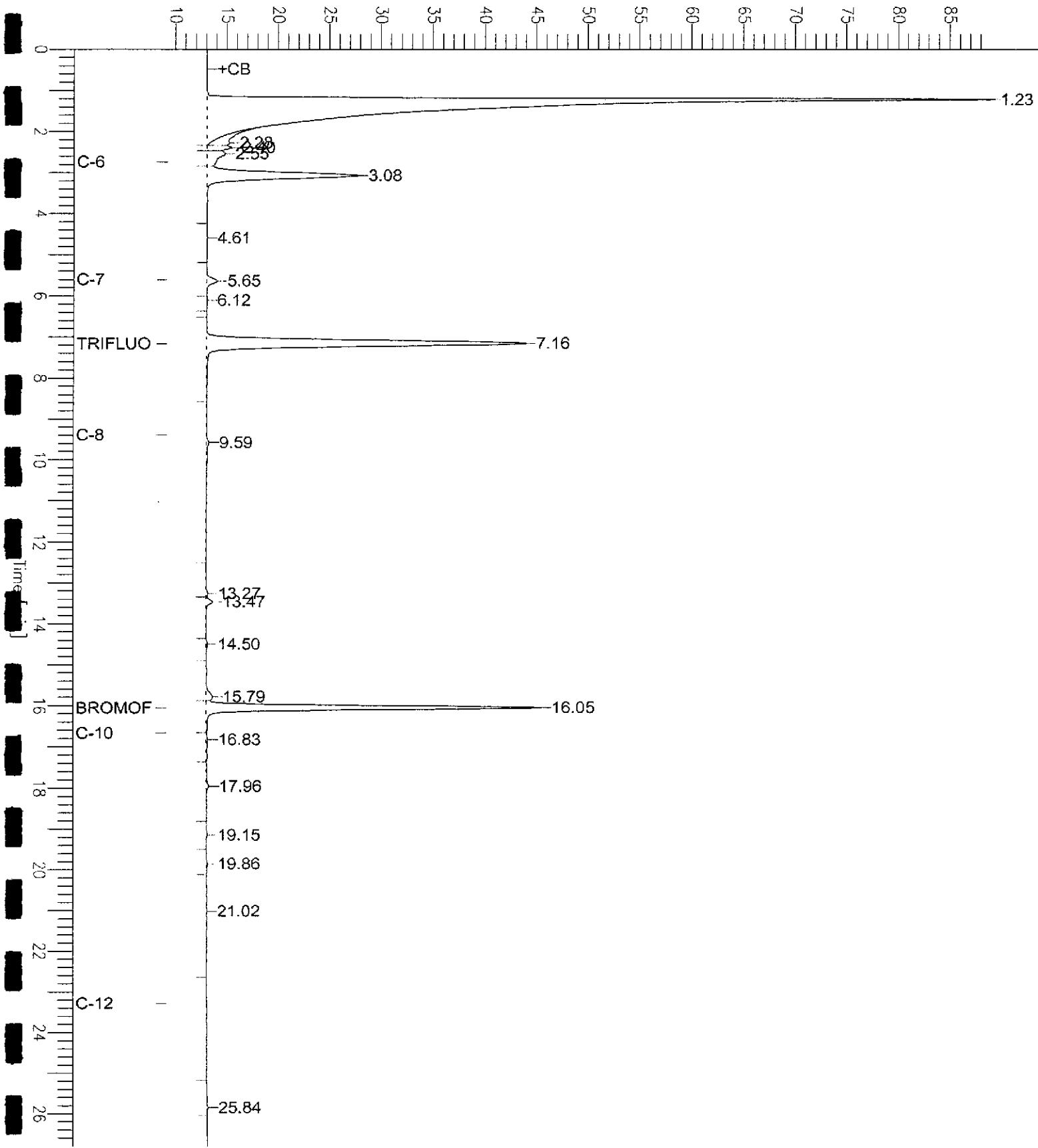
# GC19 TVH 'X' Data File (FID)

Sample Name : 176713-007,97612, tvh+btxe  
fileName : G:\GC19\DATA\352X023.raw  
method : TVHBTXE  
Start Time : 0.00 min End Time : 26.80 min  
Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: a1.0 Page 1 of 1  
Date : 12/18/04 01:52 AM  
Time of Injection: 12/18/04 01:25 AM  
Low Point : 9.22 mV High Point : 88.92 mV  
Plot Scale: 79.7 mV

MW-11

Response [mV]



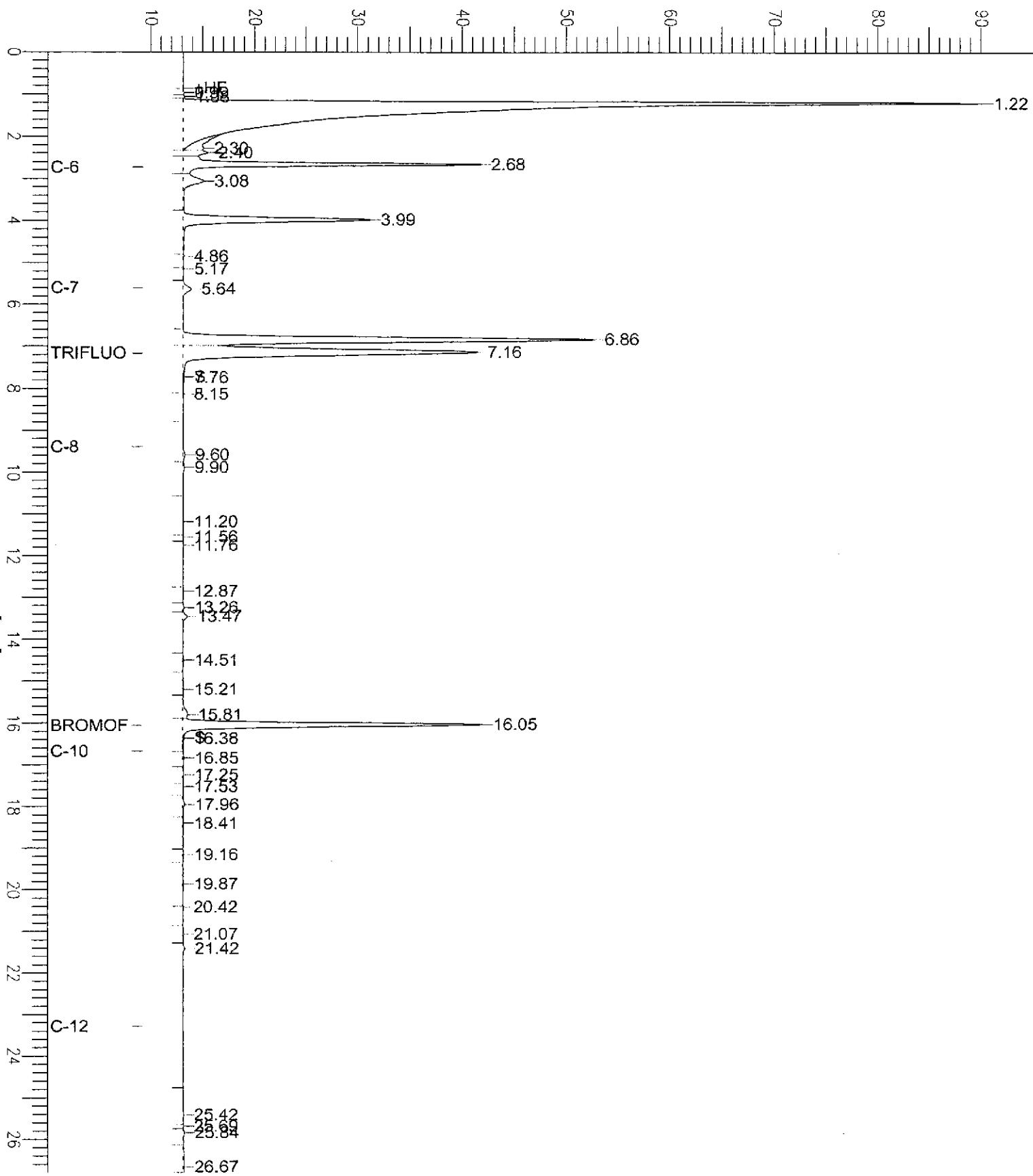
# GC19 TVH 'X' Data File (FID)

Sample Name : 176713-008,97612, tvh+btxe  
 fileName : G:\GC19\DATA\352X024.raw  
 method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: a1.0 Page 1 of 1  
 Date : 12/20/04 09:26 AM  
 Time of Injection: 12/18/04 01:59 AM  
 Low Point : 9.24 mV High Point : 90.24 mV  
 Plot Scale: 81.0 mV

MW-12

Response [mV]





Curtis &amp; Tompkins, Ltd.

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	12/16/04
Units:	ug/L	Received:	12/16/04

Field ID: MW-13 Diln Fac: 1.000  
Type: SAMPLE Batch#: 97612  
Lab ID: 176713-009 Analyzed: 12/18/04

Analyte	Result	RL	Analysis
Gasoline C7-C12	4,300	50	EPA 8015B
Benzene	61 C	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	44	0.50	EPA 8021B
m,p-Xylenes	7.3 C	0.50	EPA 8021B
o-Xylene	4.2 C	0.50	EPA 8021B

Surrogate	REC	Limits	Analysis
Trifluorotoluene (FID)	85	70-141	EPA 8015B
Bromofluorobenzene (FID)	136	80-143	EPA 8015B
Trifluorotoluene (PID)	132	59-133	EPA 8021B
Bromofluorobenzene (PID)	111	76-128	EPA 8021B

Type: BLANK Batch#: 97612  
Lab ID: QC276817 Analyzed: 12/17/04  
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)	104	70-141	EPA 8015B
Bromofluorobenzene (FID)	96	80-143	EPA 8015B
Trifluorotoluene (PID)	100	59-133	EPA 8021B
Bromofluorobenzene (PID)	96	76-128	EPA 8021B

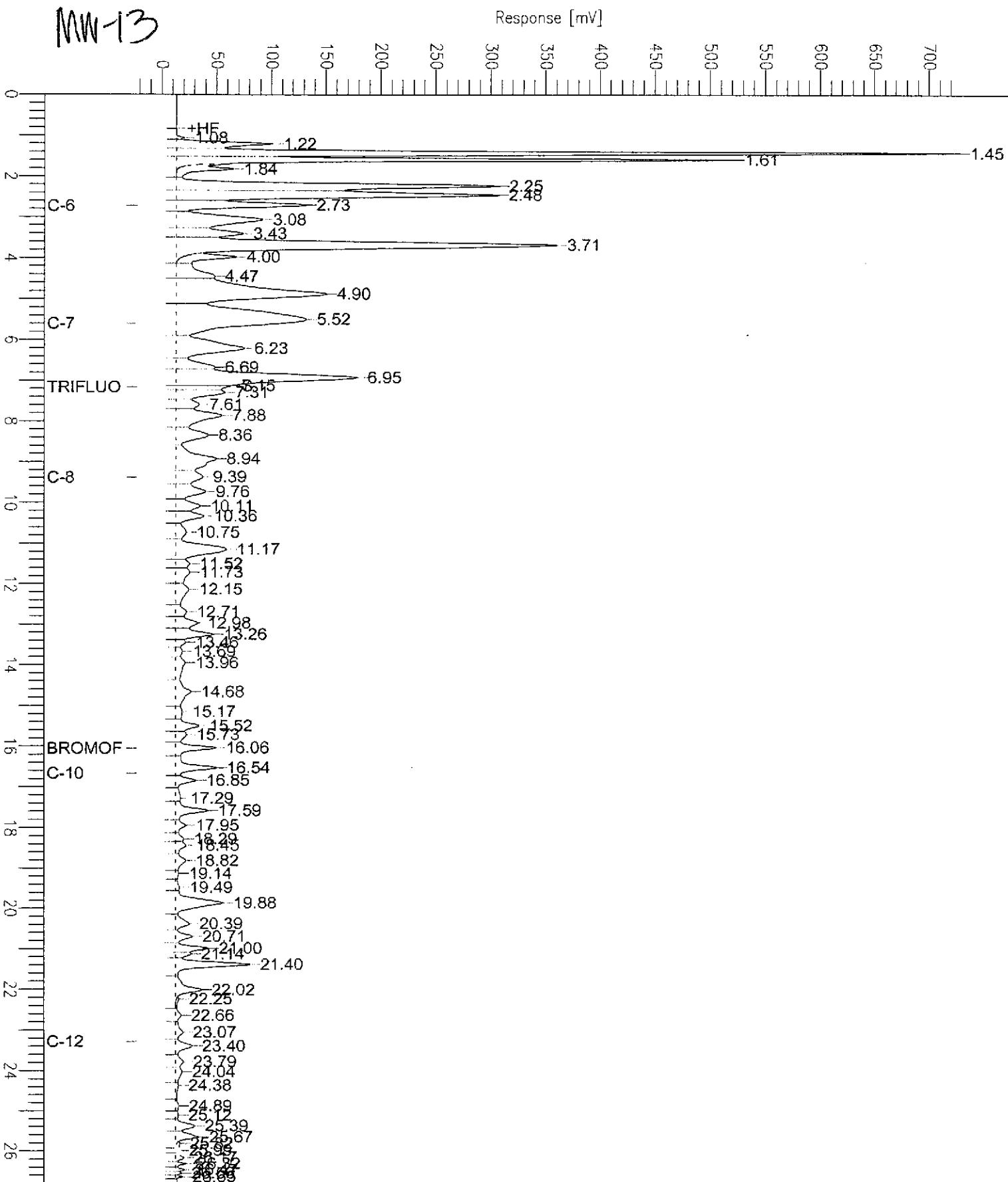
C= Presence confirmed, but RPD between columns exceeds 40%  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
Z= Sample exhibits unknown single peak or peaks  
ND= Not Detected  
RL= Reporting Limit  
Page 5 of 6

# GC19 TVH 'X' Data File (FID)

Sample Name : 176713-009,97612, tvh+btxe  
 FileName : G:\GC19\DATA\352X025.raw  
 Method : TVHBTXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: -23 mV

Sample #: a1.0 Page 1 of 1  
 Date : 12/20/04 09:26 AM  
 Time of Injection: 12/18/04 02:33 AM  
 Low Point : -22.64 mV High Point : 728.11 mV  
 Plot Scale: 750.8 mV

MW-13



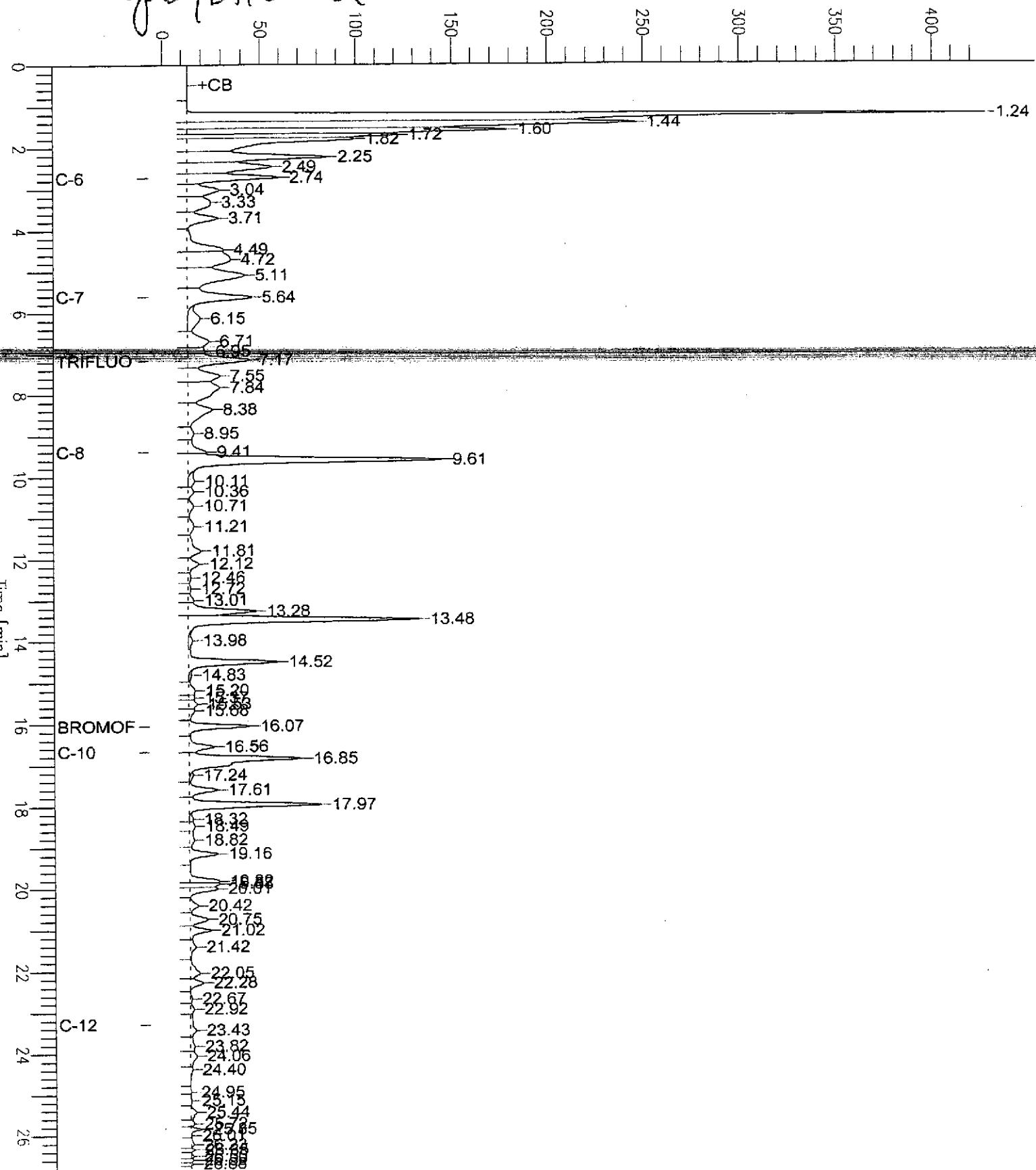
# GC19 TVH 'X' Data File (FID)

Sample Name : ccv/lcs qc276819,97612,04ws2235,5/5000  
 fileName : g:\gc19\data\352x002.raw  
 method : TVHBTEXE  
 Start Time : 0.00 min End Time : 26.80 min  
 Scale Factor: 1.0 Plot Offset: -8 mV

Sample #: Page 1 of 1  
 Date : 12/17/04 02:54 PM  
 Time of Injection: 12/17/04 09:36 AM  
 Low Point : -7.63 mV High Point : 428.06 mV  
 Plot Scale: 435.7 mV

*gas/BTEX 8d.*

Response [mV]





Curtis &amp; Tompkins, Ltd.

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00		
Matrix:	Water	Sampled:	12/16/04
Units:	ug/L	Received:	12/16/04

Type: BLANK Batch#: 97638  
Lab ID: QC276907 Analyzed: 12/20/04  
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	Minutes	Analysis
Trifluorotoluene (FID)	109	70-141	EPA 8015B
Bromofluorobenzene (FID)	110	80-143	EPA 8015B
Trifluorotoluene (PID)	98	59-133	EPA 8021B
Bromofluorobenzene (PID)	99	76-128	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%  
Y= Sample exhibits chromatographic pattern which does not resemble standard  
Z= Sample exhibits unknown single peak or peaks  
ND= Not Detected  
RL= Reporting Limit  
Page 6 of 6



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	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:	QC276818	Batch#:	97612
Matrix:	Water	Analyzed:	12/17/04
Units:	ug/L		

Analyte	Spiked	Result	SREC	Limits
Benzene	20.00	19.70	98	80-120
Toluene	20.00	21.20	106	80-120
Ethylbenzene	20.00	20.71	104	80-120
m,p-Xylenes	20.00	19.96	100	80-120
o-Xylene	20.00	19.85	99	80-120

Surrogate	SREC	Limits
Trifluorotoluene (PID)	99	59-133
Bromofluorobenzene (PID)	95	76-128



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	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:	QC276819	Batch#:	97612
Matrix:	Water	Analyzed:	12/17/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,165	108	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	70-141
Bromofluorobenzene (FID)	100	80-143

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	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:	QC276908	Batch#:	97638
Matrix:	Water	Analyzed:	12/20/04
Units:	ug/L		

Analyte	Spiked	Result	SRM	Limits
Gasoline C7-C12	2,000	2,039	102	80-120

Surrogate	SRM	Limits
Trifluorotoluene (FID)	145 *	70-141
Bromofluorobenzene (FID)	125	80-143

\*= Value outside of QC limits; see narrative



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	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:	QC276909	Batch#:	97638
Matrix:	Water	Analyzed:	12/20/04
Units:	ug/L		

Analyte	Spiked	Result	SREC	Limits
Benzene	20.00	19.25	96	80-120
Toluene	20.00	19.25	96	80-120
Ethylbenzene	20.00	19.33	97	80-120
m, p-Xylenes	20.00	19.50	98	80-120
o-Xylene	20.00	20.05	100	80-120

Surrogate	SREC	Limits
Trifluorotoluene (PID)	101	59-133
Bromofluorobenzene (PID)	103	76-128



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	97612
MSS Lab ID:	176684-008	Sampled:	12/14/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/18/04
Diln Fac:	1.000		

Type: MS Lab ID: QC276830

Analyte	MSS Result	Spiked	Result	TREC	Limits
Gasoline C7-C12	1,411	2,000	3,290	94	80-120

Surrogate	TREC	Limits
Trifluorotoluene (FID)	142 *	70-141
Bromofluorobenzene (FID)	116	80-143

Type: MSD Lab ID: QC276831

Analyte	Spiked	Result	TREC	Limits	RPD	Trim
Gasoline C7-C12	2,000	3,177	88	80-120	3	20

Surrogate	TREC	Limits
Trifluorotoluene (FID)	144 *	70-141
Bromofluorobenzene (FID)	119	80-143

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Page 1 of 1



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Curtis &amp; Tompkins Laboratories Analytical Report

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8021B
Field ID:	ZZZZZZZZZZ	Batch#:	97638
MSS Lab ID:	176705-015	Sampled:	12/15/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
Diln Fac:	1.000		

Type: MS Lab ID: QC277024

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.1300	20.00	19.34	97	80-120
Toluene	<0.07900	20.00	19.52	98	80-120
Ethylbenzene	<0.05900	20.00	18.95	95	80-120
m,p-Xylenes	<0.1000	20.00	18.90	95	80-120
o-Xylene	<0.05200	20.00	19.82	99	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	102	59-133
Bromofluorobenzene (PID)	108	76-128

Type: MSD Lab ID: QC277025

Analyte	Spiked	Result	%REC	Limits	RPD	Trim
Benzene	20.00	19.21	96	80-120	1	20
Toluene	20.00	19.43	97	80-120	0	20
Ethylbenzene	20.00	19.19	96	80-120	1	20
m,p-Xylenes	20.00	19.19	96	80-120	2	20
o-Xylene	20.00	20.05	100	80-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	101	59-133
Bromofluorobenzene (PID)	108	76-128

RPD= Relative Percent Difference

Page 1 of 1

**Purgeable Halocarbons by GC/MS**

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-01	Batch#:	97643
Lab ID:	176713-001	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
Diln Fac:	5.000		

Analyte	Result	RL
Chloromethane	ND	5.0
Vinyl Chloride	ND	2.5
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	2.5
Methylene Chloride	ND	100
trans-1,2-Dichloroethene	ND	2.5
1,1-Dichloroethane	ND	2.5
cis-1,2-Dichloroethene	ND	2.5
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	2.5
Carbon Tetrachloride	ND	2.5
1,2-Dichloroethane	ND	2.5
Trichloroethene	ND	2.5
1,2-Dichloropropene	ND	2.5
Bromodichloromethane	ND	2.5
cis-1,3-Dichloropropene	ND	2.5
trans-1,3-Dichloropropene	ND	2.5
1,1,2-Trichloroethane	ND	2.5
Tetrachloroethene	ND	2.5
Dibromochloromethane	ND	2.5
Chlorobenzene	ND	2.5
Bromoform	ND	2.5
1,1,2,2-Tetrachloroethane	ND	2.5
1,3-Dichlorobenzene	ND	2.5
1,4-Dichlorobenzene	ND	2.5
1,2-Dichlorobenzene	ND	2.5

Surrogate	REC	Limits
1,2-Dichloroethane-d4	113	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	102	80-122

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-06	Batch#:	97643
Lab ID:	176713-002	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
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	116	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected

RL= Reporting Limit

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**Purgeable Halocarbons by GC/MS**

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-07	Batch#:	97704
Lab ID:	176713-003	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/21/04
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	109	80-120
Toluene-d8	93	80-120
Bromofluorobenzene	121	80-122

ND= Not Detected

RL= Reporting Limit

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**Purgeable Halocarbons by GC/MS**

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-08	Batch#:	97643
Lab ID:	176713-004	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
Diln Fac:	16.67		

Analyte	Result	RL
Chloromethane	ND	17
Vinyl Chloride	86	8.3
Bromomethane	ND	17
Chloroethane	ND	17
Trichlorofluoromethane	ND	17
Freon 113	ND	17
1,1-Dichloroethene	ND	8.3
Methylene Chloride	ND	330
trans-1,2-Dichloroethene	60	8.3
1,1-Dichloroethane	ND	8.3
cis-1,2-Dichloroethene	1,500	8.3
Chloroform	ND	17
1,1,1-Trichloroethane	ND	8.3
Carbon Tetrachloride	ND	8.3
1,2-Dichloroethane	ND	8.3
Trichloroethene	ND	8.3
1,2-Dichloropropane	ND	8.3
Bromodichloromethane	ND	8.3
cis-1,3-Dichloropropene	ND	8.3
trans-1,3-Dichloropropene	ND	8.3
1,1,2-Trichloroethane	ND	8.3
Tetrachloroethene	ND	8.3
Dibromochloromethane	ND	8.3
Chlorobenzene	ND	8.3
Bromoform	ND	8.3
1,1,2,2-Tetrachloroethane	ND	8.3
1,3-Dichlorobenzene	ND	8.3
1,4-Dichlorobenzene	ND	8.3
1,2-Dichlorobenzene	ND	8.3

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	114	80-120
Toluene-d8	91	80-120
Bromofluorobenzene	109	80-122

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

**Purgeable Halocarbons by GC/MS**

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-09	Batch#:	97643
Lab ID:	176713-005	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
Diln Fac:	40.00		

Analyte	Result	RL
Chloromethane	ND	40
Vinyl Chloride	ND	20
Bromomethane	ND	40
Chloroethane	ND	40
Trichlorofluoromethane	ND	40
Freon 113	ND	40
1,1-Dichloroethene	ND	20
Methylene Chloride	ND	800
trans-1,2-Dichloroethene	ND	20
1,1-Dichloroethane	ND	20
cis-1,2-Dichloroethene	ND	20
Chloroform	ND	40
1,1,1-Trichloroethane	ND	20
Carbon Tetrachloride	ND	20
1,2-Dichloroethane	ND	20
Trichloroethene	ND	20
1,2-Dichloropropane	ND	20
Bromodichloromethane	ND	20
cis-1,3-Dichloropropene	ND	20
trans-1,3-Dichloropropene	ND	20
1,1,2-Trichloroethane	ND	20
Tetrachloroethene	ND	20
Dibromochloromethane	ND	20
Chlorobenzene	ND	20
Bromoform	ND	20
1,1,2,2-Tetrachloroethane	ND	20
1,3-Dichlorobenzene	ND	20
1,4-Dichlorobenzene	ND	20
1,2-Dichlorobenzene	ND	20

Surrogate	SR#	Limits
1,2-Dichloroethane-d4	107	80-120
Toluene-d8	90	80-120
Bromofluorobenzene	104	80-122

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-10	Batch#:	97643
Lab ID:	176713-006	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
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	118	80-120
Toluene-d8	93	80-120
Bromofluorobenzene	108	80-122

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Purgeable Halocarbons by GC/MS

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	97643
Lab ID:	176713-007	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
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	118	80-120
Toluene-d8	94	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected

RL= Reporting Limit

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**Purgeable Halocarbons by GC/MS**

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-12	Batch#:	97643
Lab ID:	176713-008	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/20/04
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	77	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	80	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	240	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	115	80-120
Toluene-d8	93	80-120
Bromofluorobenzene	113	80-122

ND= Not Detected

RL= Reporting Limit

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**Purgeable Halocarbons by GC/MS**

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	MW-13	Batch#:	97643
Lab ID:	176713-009	Sampled:	12/16/04
Matrix:	Water	Received:	12/16/04
Units:	ug/L	Analyzed:	12/21/04
Diln Fac:	4.000		

Analyte	Result	RL
Chloromethane	ND	4.0
Vinyl Chloride	15	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	32	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	240	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	69	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	113	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	107	80-122

ND= Not Detected

RL= Reporting Limit

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## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	176713	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:	QC276926	Batch#:	97643
Matrix:	Water	Analyzed:	12/20/04
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	Limit
1,2-Dichloroethane-d4	105	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-122

ND= Not Detected

RL= Reporting Limit

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Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	176713	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:	QC276927	Batch#:	97643
Matrix:	Water	Analyzed:	12/20/04
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	103	80-120
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-122

ND= Not Detected

RL= Reporting Limit

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## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	176713	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:	QC277133	Batch#:	97704
Matrix:	Water	Analyzed:	12/21/04
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	104	80-120
Toluene-d8	97	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected

RL= Reporting Limit

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## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	176713	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:	QC276940	Batch#:	97643
Matrix:	Water	Analyzed:	12/20/04
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.64	103	75-120
Trichloroethene	25.00	24.25	97	79-120
Chlorobenzene	25.00	25.73	103	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	80-120
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-122



Curtis &amp; Tompkins, Ltd.

## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	97704
Units:	ug/L	Analyzed:	12/21/04
Diln Fac:	1.000		

Type: BS Lab ID: QC277131

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	37.50	35.39	94	75-120
Trichloroethene	37.50	37.29	99	79-120
Chlorobenzene	37.50	37.84	101	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-122

Type: BSD Lab ID: QC277132

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	37.50	29.67	79	75-120	18	20
Trichloroethene	37.50	38.07	102	79-120	2	20
Chlorobenzene	37.50	37.27	99	80-120	2	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	80-120
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-122

RPD= Relative Percent Difference

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## Batch QC Report

## Purgeable Halocarbons by GC/MS

Lab #:	176713	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-04578.00	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	97643
MSS Lab ID:	176637-018	Sampled:	12/14/04
Matrix:	Water	Received:	12/14/04
Units:	ug/L	Analyzed:	12/20/04
Diln Fac:	1.000		

Type: MS Lab ID: QC276970

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.09700	25.00	19.52	78	67-120
Trichloroethene	<0.1400	25.00	27.33	109	69-120
Chlorobenzene	<0.04000	25.00	27.52	110	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	80-120
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-122

Type: MSD Lab ID: QC276971

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	18.01	72	67-120	8	20
Trichloroethene	25.00	26.36	105	69-120	4	20
Chlorobenzene	25.00	25.86	103	80-120	6	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	80-120
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-122