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AUG 15 2002

August 12, 2002

Mr. Barney M. Chan
Alameda County Environmental
Health Care Service Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577


Clayton Project No. 70-97066.00

Subject: Second Quarter 2002 Activities Report for 630 29th Avenue, Oakland,
California

Dear Mr. Chan:

Clayton Group Services, Inc. is pleased to present the enclosed report on behalf of Bank of America. The report documents the Second Quarter 2002 groundwater monitoring, the installation of two offsite groundwater monitoring wells, and the implementation of remedial measures performed at the above-referenced property. If you have any questions, please contact me at (925) 426-2600.

Sincerely,


Jon A. Rosso, P.E.
Director,
Environmental Risk Management and
Remediation
San Francisco Regional Office

JAR/wbc

cc: Donna Profitt Bank of America
Rita Repko Clayton

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AUG 15 2002

**Second Quarter 2002 Groundwater
Monitoring, Groundwater Monitoring Well
Installation and Remediation Activities Report
at
Former Lemoine Sausage Facility
Oakland, California**

Clayton Project No. 70-97066.00

August 12, 2002

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1. INTRODUCTION

Clayton Group Services, Inc. (Clayton), has prepared this report to document the Second Quarter 2002 groundwater monitoring, the installation of two offsite groundwater monitoring wells and the implementation of remediation measures at the former Lemoine Sausage facility located at 630 - 29th Avenue in Oakland, California (Figure 1). The well installations and remedial measures were performed in accordance with the "Workplan to Install Two Offsite Groundwater Monitoring Wells and Implement Remediation Measures" dated April 4, 2002 (the workplan). Mr. Barney Chan of the Alameda County Health Care Services Agency (ACHCSA) approved the workplan.

1.1. SITE HISTORY

A single 1,000-gallon gasoline UST and associated plumbing/piping were formerly located beneath the sidewalk of 7th Street and adjacent (east) of the subject property building. The associated fuel dispenser was located in a "cubby hole" near the building's roll-up door. The UST and associated piping were removed on November 21, 1996 and confirmation soil samples were collected. A petroleum hydrocarbon sheen was noted on top of groundwater and petroleum hydrocarbons were detected in the confirmation soil samples collected at the time of the UST removal.

Subsequent groundwater investigations were performed and eight groundwater monitoring wells have been installed into the first encountered water bearing zone to test groundwater conditions at the site. The locations of the monitoring wells were selected to define the vertical and lateral extent of petroleum hydrocarbons within groundwater at the site. First encountered water beneath the site occurs in predominantly low permeability clayey and sandy silt, at depths ranging from 3.5 to 8.5 feet below street grade.

In addition, during the testing for 1,2-DCA, several non-gasoline related halogenated volatile organic compounds (VOCs) were detected in the groundwater samples from wells located in the southern portion of the site. The source of non-gasoline related VOCs has not been discerned, and are mostly likely due to an off-site source.

2. SCOPE OF WORK

The scope of work performed during the Second Quarter included, quarterly groundwater monitoring, the installation of two offsite groundwater monitoring wells to define the extent of petroleum hydrocarbon impacts in the shallow groundwater near the subject property, and the implementation of remedial measures.

The scope of work consisted of the following components:

- Perform quarterly groundwater monitoring.
- Perform underground utility clearance.

- Core concrete and asphalt pavement in proposed well locations.
- Advance two soil borings.
- Construct two 2-inch diameter groundwater monitoring wells (MW-12 and MW-13).
- Develop new groundwater monitoring wells.
- Survey monitoring well top of casing elevations relative to mean sea level.
- Excavated the former UST pit to groundwater and place bionutrients and oxygen release compounds into the exposed groundwater.
- Inject hydrogen peroxide into well points located within the onsite building.
- Prepare this report.

2.1. PREFIELD ACTIVITIES

To complete the above scope of work the following permits were obtained prior to monitoring well installation:

- A temporary encroachment permit from the City of Oakland for the monitoring well installations in city streets.
- An excavation permit was obtained from the City of Oakland for the monitoring well installations in city streets.
- Monitoring well construction permits were obtained from Alameda County Public Works Department.

Copies of permits are presented in Appendix A.

Clayton contacted Underground Service Alert (USA) 48 hours prior to drilling activities, to report our proposed drilling schedule and request the location of publicly owned utilities to be marked in the vicinity of the boring locations. USA issued work ticket number 227372. Vickers Concrete Sawing, Inc. was contracted to core holes through concrete and asphalt pavement in 29th Avenue and Chapman Street.

2.2. INSTALL SOIL BORINGS AND SAMPLING

Two soil borings were installed and completed as groundwater monitoring wells (MW-12 and MW-13) at the location shown in Figure 2. The monitoring wells were strategically located to obtain information offsite stratigraphy, groundwater flow characteristics, groundwater quality, and the lateral extent of impacted groundwater within the uppermost water-bearing zone in the vicinity of the subject property. Gregg Drilling, Inc. of Martinez, California performed borehole drilling and monitoring well installation. A limited access Rhino drilling rig equipped with 8-inch diameter hollow stem augers was used to advanced borings to final depth of 15 feet below ground surface (bgs).

Soil samples examined for soil classification and VOC field screening were obtained with a California split-spoon sampler. At least one soil sample drive was performed per five-foot interval of borehole. Samples were retained in three 2-inch diameter by 6-inch long brass

tubes lining the inside of the split-spoon sampler. Recovered soil samples were examined for soil properties and described on field boring logs in general conformance with the Unified Soil Classification System. Additional field observations and drilling information were also recorded on the boring logs. Soil boring and well construction logs are provided in Appendix B.

Soil samples were field-screened for the presence of VOCs with a portable photoionization detector (PID) meter. The headspace testing procedure was initiated by removing the soils from the sample tubes and placing the samples into labeled, sealed Ziplock™ plastic bags. After sufficient time elapsed for the build-up of VOC vapors inside the plastic bags, the headspace was measured by puncturing the plastic bag with the probe tip of the PID meter. The headspace testing results were recorded onto boring logs. Based on PID field screening and visual observation of soil cores; two soil samples from each well were retained for chemical analyses.

Soil samples were submitted to the State of California certified Curtis and Tompkins Laboratories of Berkeley, California for analyses. The samples were analyzed by one or more of the following United States Environmental Protection Agency (USEPA) approved analytical methods:

- USEPA Method 8015M for Total Petroleum Hydrocarbons as Gasoline (TPH-g)
- USEPA Method 8020 for Aromatic Hydrocarbons (Benzene, Toluene, Ethylbenzene, and total Xylenes [BTEX]), and
- USEPA Method 8010 for Halogenated Volatile Organic Compounds (VOCs).
- USEPA Method 8260 for Fuel Oxygenates.

Certified analytical data sheets and chain-of-custody documentation for the soil analytical results are presented in Appendix C.

Drilling equipment was steam cleaned prior to drilling each boring. Soil cuttings generated during field activities were placed into labeled, Department of Transport (DOT)-approved, 55-gallon drums for temporary storage onsite. The drums were labeled with the project name, project number, boring number, and date of generation.

2.3. MONITORING WELL CONSTRUCTION

Monitoring wells (MW-12 and MW-13) were constructed with nominal 2-inch diameter, schedule-40 polyvinyl chloride (PVC) blank casing pipe and slotted pipe connected by flush-threaded joints. Monitoring wells MW-12 and MW-13 were constructed with 10-feet of 0.010-inch slotted screen. A PVC bottom cap was placed on the downhole end of each well casing. The well screens were positioned at appropriate depths to effectively monitor groundwater quality within the first encountered water-bearing zone within each borehole.

Upon placing the well casing within the borehole, the annular space around the well screen was packed with prewashed filter pack material consisting of Lonestar 2/12 sand. The filter pack sand was poured continuously at a slow rate into the annulus between the well casing

and hollow stem auger to prevent bridging and particle size segregation. As the filter pack was poured into the annulus, the hollow stem augers were simultaneously removed from the borehole as the height of the filter pack gradually rose upward. The top of the filter pack was positioned 1-foot above the top of the well screen.

A one-foot thick bentonite pellet seal was placed above the filter pack and consisted of 3/8-inch bentonite pellets. The bentonite pellets were allowed to completely hydrate and swell to form an effective seal. Upon placement bentonite seal, the annulus was filled to about one-foot bgs with a neat cement grout. A locking PVC cap was placed to secure the top of each wellhead. All wellheads were completed below grade and housed within a traffic-rated Christy box set in concrete. Monitoring well construction details are shown along with the boring logs and presented in Appendix B.

2.4. WELL DEVELOPMENT

The monitoring wells were developed using a combination of surging and bailing. The wells were developed to remove fine-grained materials inside the filter pack and casing, and to stabilize the filter pack around the well screen. Well development was accomplished by the repeated insertion and withdrawal of a 2-inch diameter vented surge block inside each well casing. Following surging, groundwater was then removed from the well casing using a bailer. Surging and bailing activities continued until a minimum of ten (10) well casing volumes of water had been removed from each well casing or the well purged dry. Monitoring well development logs are presented in Appendix D.

Well development equipment was cleaned with an Alconox solution and rinsed with water after each use. Well development purge water generated during field activities was placed into 55-gallon drums pending appropriate disposal.

2.5. WELLHEAD SURVEYING

Wellhead locations and elevations were surveyed by Virgil Chavez Land Surveying of Vallejo, California. Wellhead elevations (top of PVC well casing) were surveyed with respect to a small V-notch cut into the top of the north side of each PVC casing. The wellhead lateral co-ordinate and elevations were measured using a global positioning system (GPS) and referenced to a benchmark located the corner of Peterson Street and East 7th Street. The monitoring well survey data is provided in Appendix B.

3. FINDINGS

The findings of the investigation are presented in the following sections.

3.1. GEOLOGY

Soil types encountered during this investigation were consistent with previous findings. Near surface soil within boreholes MW-12 and MW-13 (located in the streets) were asphalt or concrete surface cover underlain by 2 to 3 feet of mixed clays, silts and gravel base rock.

Below surficial cover, clayey silt and clay soils with varying gravel content were the predominant soil type encountered in boreholes. Thin layers of clayey sand were interdispersed through the silt and clay.

Groundwater was encountered at approximately 12.5 feet bgs in each borehole.

3.2. SOIL ANALYTICAL RESULTS

Two soil samples from each borehole were submitted for laboratory analyses. From each borehole, one soil sample was collected from the unsaturated vadose soils and one soil sample was from the lower saturated soil.

Soil analytical results are summarized below:

Location	Depth (feet, bgs)	TPH-g (mg/kg)	BTEX (mg/kg)	Fuel Oxygenates (mg/kg)	Chlorinated VOCs (mg/kg)
MW-12	6.5	<0.95	ND for all BTEX	ND for all Fuel Oxygenates	ND for all VOCs
MW-12	14.5	<1.1	ND for all BTEX	ND for all Fuel Oxygenates	TCE at 0.0079
MW-13	7	<1	ND for all BTEX	ND for all Fuel Oxygenates	ND for all VOCs
MW-13	14.5	120	ND for all BTEX	ND for all Fuel Oxygenates	cis 1,2-DCE at 0.010

Notes: ND = not detected

4. REMEDIAL MEASURES

Clayton implemented remedial measures at the site, as described below.

4.1. PEROXIDE INJECTION

The initial TPH-g and BTEX sampling results from monitoring well MW-9 indicated that benzene concentration in groundwater exceeded the City of Oakland Tier 1 risk based corrective action level. As such, the ACHCS requested in letter dated January 28, 2002, that remedial measures be implemented in the vicinity of monitoring well MW-9.

Clayton proposed to implement remedial activities by performing a bioremediation pilot study.

Clayton prepared and presented a *Risk Assessment and Feasibility Study* (RI/FS) for the site, dated February 16, 2001. From site characterization testing performed during the RI/FS, heterotrophic bacteria that are capable of degrading petroleum hydrocarbons were identified from within the plume area. However, site characterization also indicated that oxygen and macronutrients (primarily nitrogen and orthophosphate compounds) are depleted and would required addition to promote optimum bacterial activity.

Clayton added oxygen liberating compounds and macronutrient chemicals to the subsurface via injection through former monitoring wells MW-3, MW-4 and MW-5, and temporary well casings left in place at the locations of borehole B-7 and B-8, and current monitoring wells MW-2 and MW-9; collectively termed treatment wells. Approximately 1-gallon of commercial fertilizer (Miracle Gro™) was poured into each treatment well (except MW-2 and MW-9) on May 21, 2002. To ensure that macronutrients had the opportunity to disperse through the subsurface prior to oxygenation, the macronutrients were injected approximately one-week prior to peroxide injection.

On May 28, 2002, Clayton poured 7.5% liquid hydrogen peroxide into each treatment well. The amount of hydrogen peroxide place in each treatment well ranged from 1 to 3 gallons. This quantity was below the proposed peroxide injection amount (30-gallons per treatment well) due to the soils inability to take-up significant quantities of introduced liquid in a reasonable time frame.

4.2. REPAIR SIDEWALK AND EXCAVATE FORMER TANK PIT TO PLACE OXYGEN RELEASE COMPOUNDS

The concrete sidewalk located above the former UST excavation had sagged and was in need of repair. On May 28, 2002, Clayton raised the existing sidewalk and re-excavated the former UST pit to approximately 2-feet below the water level encountered at approximately 4 feet below street grade. The excavation pit was dug to a total depth of 6 feet bgs. Approximately 350 gallons of water were purged from the pit.

One hundred and eighty pound of oxygen release compounds (ORC) was mixed into a slurry and placed with crushed rock into the excavation pit. Approximately 3-feet of crush rock was placed into the excavation. The crushed rock was cover with geotextile fabric. The remaining portion of the excavation was backfilled with Class II aggregate base rock and compacted to 90% relative density. The replacement sidewalk was constructed to the City of Oakland specification and was approximately 8-inches thick.

5. GROUNDWATER MONITORING FIELD ACTIVITIES

The following discussion describes quarterly monitoring field procedures used to obtain depth to water measurements, and collect groundwater samples. Field activities were performed on June 28, 2002. Groundwater samples were collected from ten monitoring wells (MW-1, MW-2, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, and MW-13).

5.1. GROUNDWATER LEVEL MEASUREMENTS

Depth to water was measured in each monitoring well to determine the groundwater elevation, gradient and flow direction. The depth to water in each monitoring well was measured on June 28, 2002, with an electronic water level probe. The depth to water in each monitoring well was measured from the surveyed reference elevation represented as a V-notch at the top of the well casing (TOC) to the water surface within the well casing. By subtracting the measured depth to water from the TOC elevation in each monitoring well, the groundwater elevation at each monitoring point was calculated.

5.2. 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 attached to nylon bailer twine. Water quality parameters (pH, specific conductivity, temperature, and turbidity) were measured and recorded onto field sampling data sheets. Water quality parameter measurements were made prior to purging and after removing each well casing volume of water from the monitoring well.

The purge volume from each monitoring well was determined from multiplying the nominal cross-sectional area of the well casing by the water column within each well casing. The water column height in each well was determined from subtracting the groundwater elevation from the well casing bottom elevation (known from well construction details).

Field logs documenting water level measurements, well purging and sampling for the Second Quarter 2002 monitoring event are presented in Appendix E. Groundwater purged from monitoring wells during sampling was stored onsite in sealed USDOT approved 55-gallon drums, labeled with identifying information, manifested and removed from the site by a licensed hauler.

5.3. GROUNDWATER SAMPLING

Prior to collecting a groundwater sample from each monitoring well, the well was allowed to recharge to 80-percent of the pre-purged well casing water volume. Groundwater samples for laboratory analyses were retrieved using either a peristaltic pump with polytubing or a disposable bailer. The groundwater retrieved for analyses was transferred into appropriately sized and preserved laboratory supplied containers. Sample containers were sealed, labeled with identifying information, logged onto the chain-of-custody, and temporarily stored in a chilled ice-chest while awaiting transportation to the laboratory.

5.4. LABORATORY ANALYSES

Groundwater samples were submitted to the State of California certified Curtis and Tompkins Laboratories of Berkeley, California for laboratory analyses. The samples were analyzed by one or more of the following United States Environmental Protection Agency (USEPA) approved analytical methods:

- USEPA Method 8015M for Total Petroleum Hydrocarbons as Gasoline (TPH-g)
- USEPA Method 8020 for Aromatic Hydrocarbons (Benzene, Toluene, Ethylbenzene, and total Xylenes [BTEX]), and
- USEPA Method 8010 for Halogenated Volatile Organic Compounds (VOCs).

Certified analytical data sheets and chain-of-custody documentation for the Second Quarter 2002 groundwater-sampling event are presented in Appendix F.

6. GROUNDWATER MONITORING RESULTS

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. The effect placing of peroxide in treatment wells is to increase the pH of the groundwater. This quarters pH readings are similar to previous quarterly pH measurements indicating that the injected peroxide had dissipated and groundwater samples are representative of groundwater conditions.

6.1. GROUNDWATER FLOW CONDITIONS

A site piezometric surface (water table) map was produced by using the surveyed monitoring well coordinates and contouring the corresponding groundwater elevation data. The magnitude of the local groundwater gradient was determined using groundwater elevations from monitoring wells MW-10 and MW-11. The direction of groundwater flow is inferred to be perpendicular to the piezometric equipotential contours. For the Second Quarter 2002 monitoring event, the groundwater gradient was determined to be 0.0135 feet per foot (ft/ft) towards the west.

Historical depth to water measurements and groundwater elevation data are presented on Table 1. The Second Quarter 2002 groundwater elevation contour map with the groundwater flow direction indicated is presented on Figure 3.

6.2. PETROLEUM AND AROMATIC HYDROCARBONS

The frequency and range of petroleum hydrocarbons detected in groundwater samples are as follows:

- TPH-g was detected in 7 of 10 samples tested, and ranged in concentration from 71 micrograms per liter ($\mu\text{g/L}$) to 60,000 $\mu\text{g/L}$.

- Benzene was detected in 6 of 10 samples tested, and ranged in concentration from 7.7 µg/L to 5,800 µg/L.
- Toluene was detected in 5 of 10 samples tested, and ranged in concentration from 55 µg/L to 7,400 µg/L.
- Ethylbenzene was detected in 5 of 10 samples tested, and ranged in concentration from 21 µg/L to 1,100 µg/L.
- Total Xylenes was detected in 4 of 10 samples tested, and ranged in concentration from 9.5 µg/L to 5,400 µg/L.

A summary of petroleum hydrocarbons detected in groundwater samples is presented on Table 2. The concentrations of TPH-g and benzene detected in groundwater samples collected from monitoring wells for the Second Quarter 2002 monitoring event are presented in Figures 4a and 4b, respectively.

6.3. 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 3 of 10 samples tested, and ranged in concentration from 0.6 µg/L to 8.8 µg/L.
- Trichloroethene (TCE) was detected in 4 of 10 samples tested, and ranged in concentration from 0.6 µg/L to 170 µg/L.
- Cis 1,2-Dichloroethene (cis 1,2-DCE) was detected in 3 of 10 samples tested, and ranged in concentration from 42 µg/L to 900 µg/L.
- Trans 1,2-Dichloroethene (trans 1,2-DCE) was detected in 3 of 10 samples tested, and ranged in concentration from 14 µg/L to 54 µg/L.
- Vinyl Chloride (VC) was detected in 3 of 10 samples tested, and ranged in concentration from 0.9 µg/L to 80 µg/L.

The concentrations of TCE (contoured) and cis-1,2 DCE detected in groundwater samples collected from monitoring wells for the Second Quarter 2002 monitoring event are presented in Figures 5. TCE is contoured as TCE is the most likely the source VOC; 1,2-DCE is a degradation product of TCE.

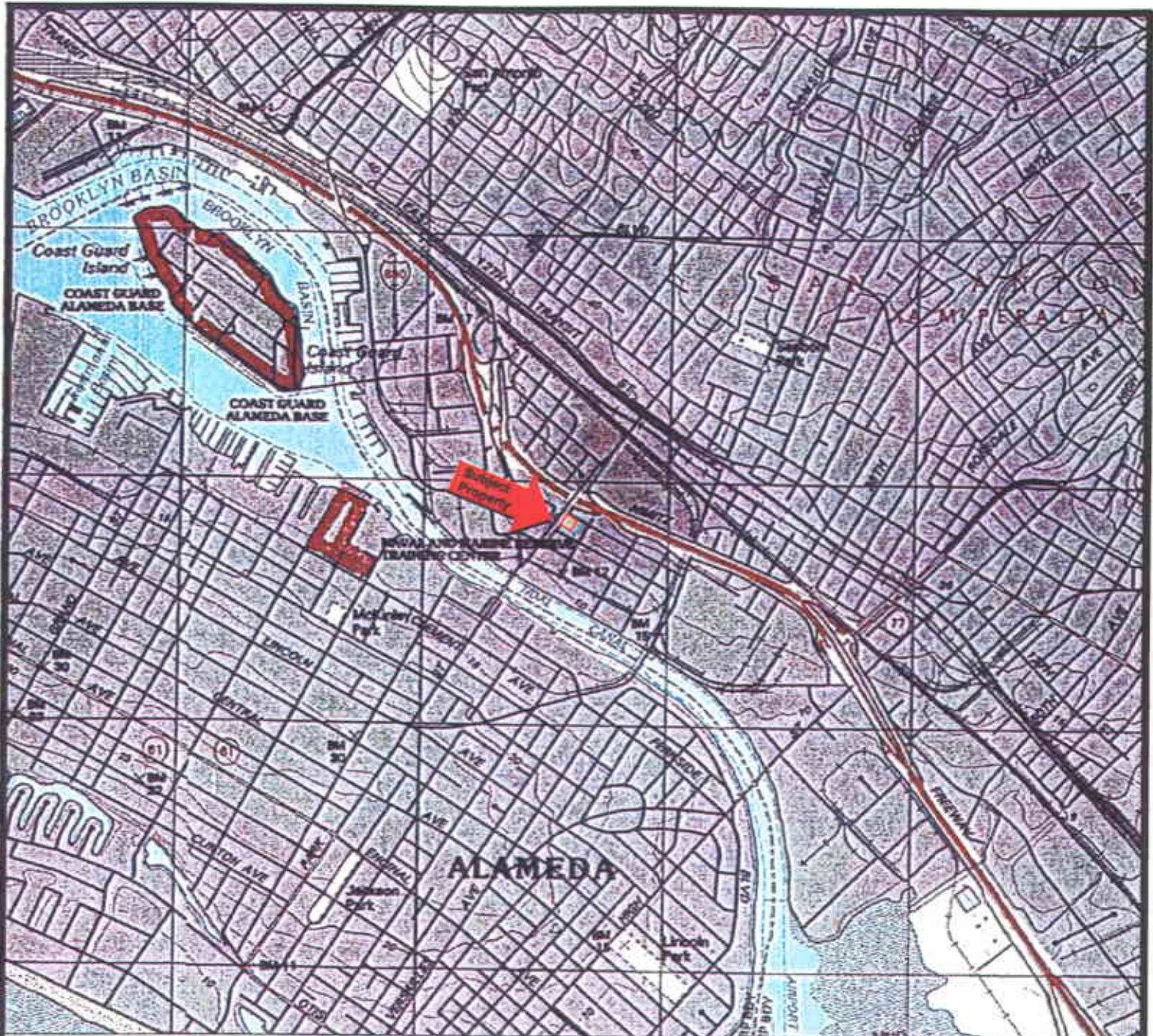
7. CONCLUSIONS

Soil and groundwater conditions encountered during the installation of the new monitoring wells MW-12, and MW-13 are similar to subsurface conditions found near the site. Monitoring wells MW-12, and MW-13 were incorporated into the Second Quarter 2002 groundwater monitoring event. The groundwater gradient was found to be 0.0135 ft/ft to the west, which is consistent with past results.

Initial peroxide injection (although limited in volume) appears to have lowered TPH-g and benzene concentrations in the vicinity of the treatment wells, the long term benefit of the peroxide injection requires monitoring. The soil beneath the site appears to have low permeability, as such, Clayton is recommending that small quantities of peroxide injection occur after each groundwater monitoring event. Injection of small quantities of peroxide within the center of the plume may act to reduce overall hydrocarbon concentrations over time and maximize remedial effort. The effect of placing macronutrients and ORC in the re-excavated UST pit is not readily apparent for this quarterly monitoring event.

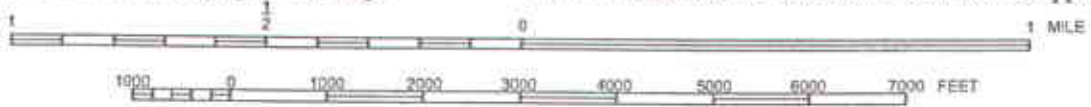
The petroleum hydrocarbon analytical results from MW-13 extend the hydrocarbon groundwater plume to the southwest. Given that the historical groundwater flow direction for the site has consistently been to the west, the more southerly extension of the hydrocarbon plume indicates that a second hydrocarbon source may be present between the site and/or downgradient of the location of monitoring well MW-13.

The VOC analytical data from MW-12 and MW-13 allow for a better definition of VOCs present in groundwater. TCE is most likely the source VOCs with cis-1,2-DCE, trans-1,2-DCE and VC as degradation products of TCE. The analytical data would indicate that the source of TCE is located between the site and the locations of monitoring wells MW-12 and MW-13.



Map Source: TOPO! © 2000 National Geographic Holdings

Note: Boundaries and Location Information is Approximate



Portion of the 7.5-Minute Series Oakland East, California
 Quadrangle Topographic Map (Datum: NAD 27)
 United States Department of the Interior
 Geological Survey
 1997

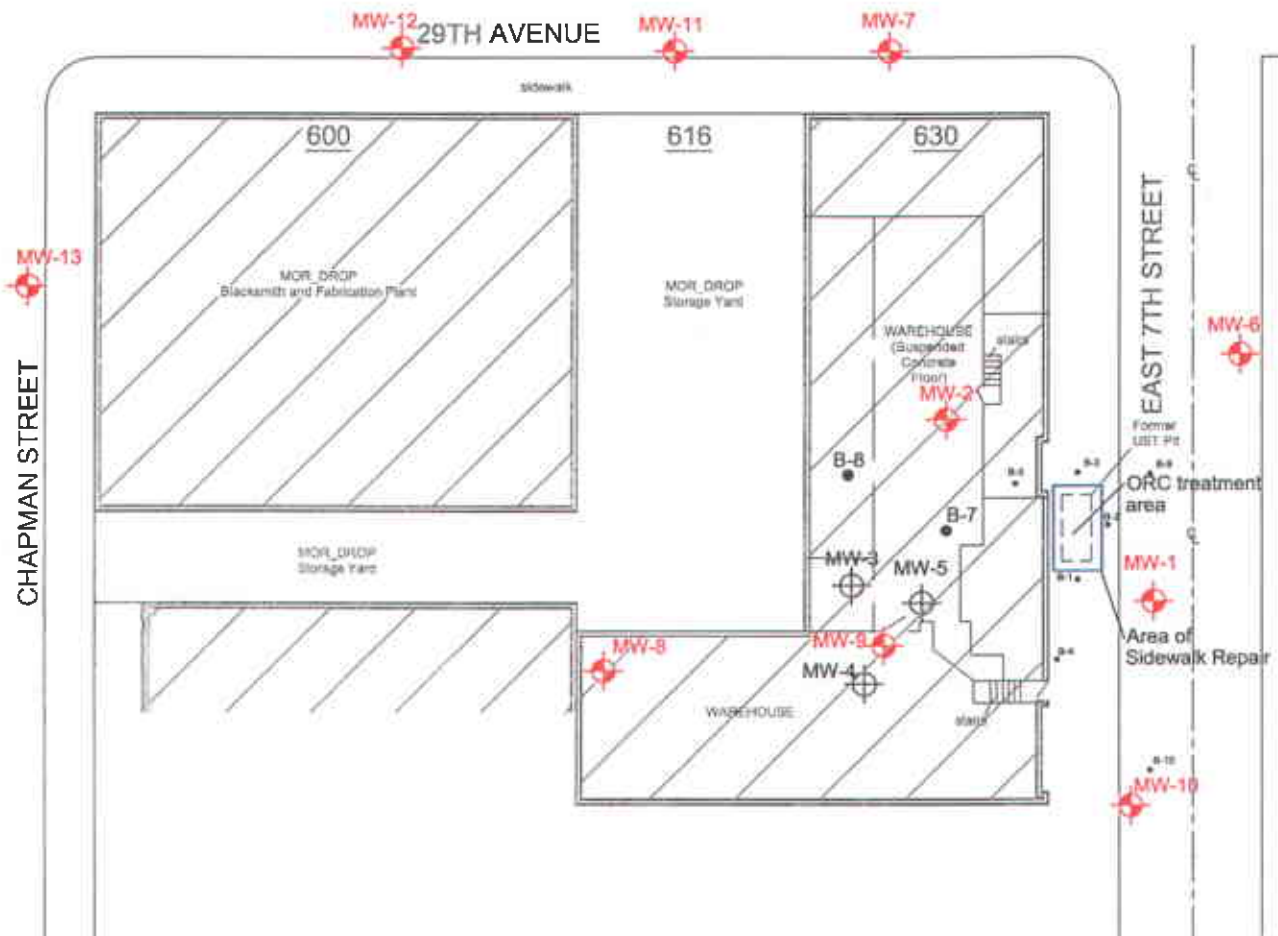


PROPERTY LOCATION MAP
 Former Lemoine Sausage Factory
 630 29th Avenue
 Oakland, California
 Clayton Project No. 70-97066.00

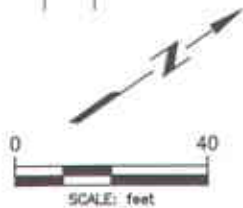
Figure

1





 BUILDING STRUCTURE



Treatment Wells

B-7 ● Soil Boring Injection Point

MW-3  Treatment Wells

LEGEND

MW-1  Existing Monitoring Well Location

SITE PLAN SHOWING GROUNDWATER MONITORING WELL AND TREATMENT WELL LOCATIONS

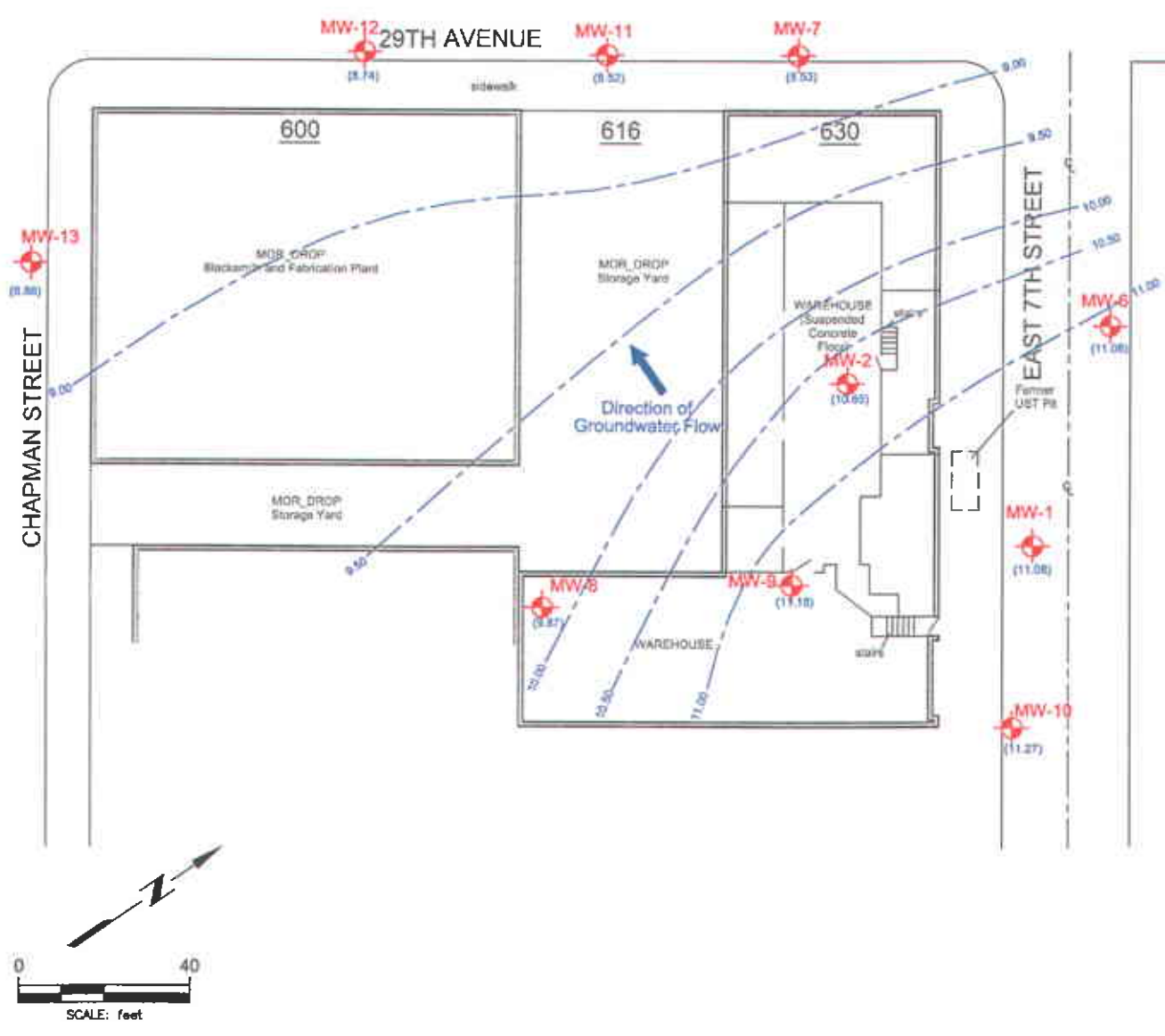
FORMER LEMOINE SAUSAGE FACTORY
 630 29TH AVENUE
 OAKLAND, CALIFORNIA
 Clayton Project No. 70-97066.00

Figure

2

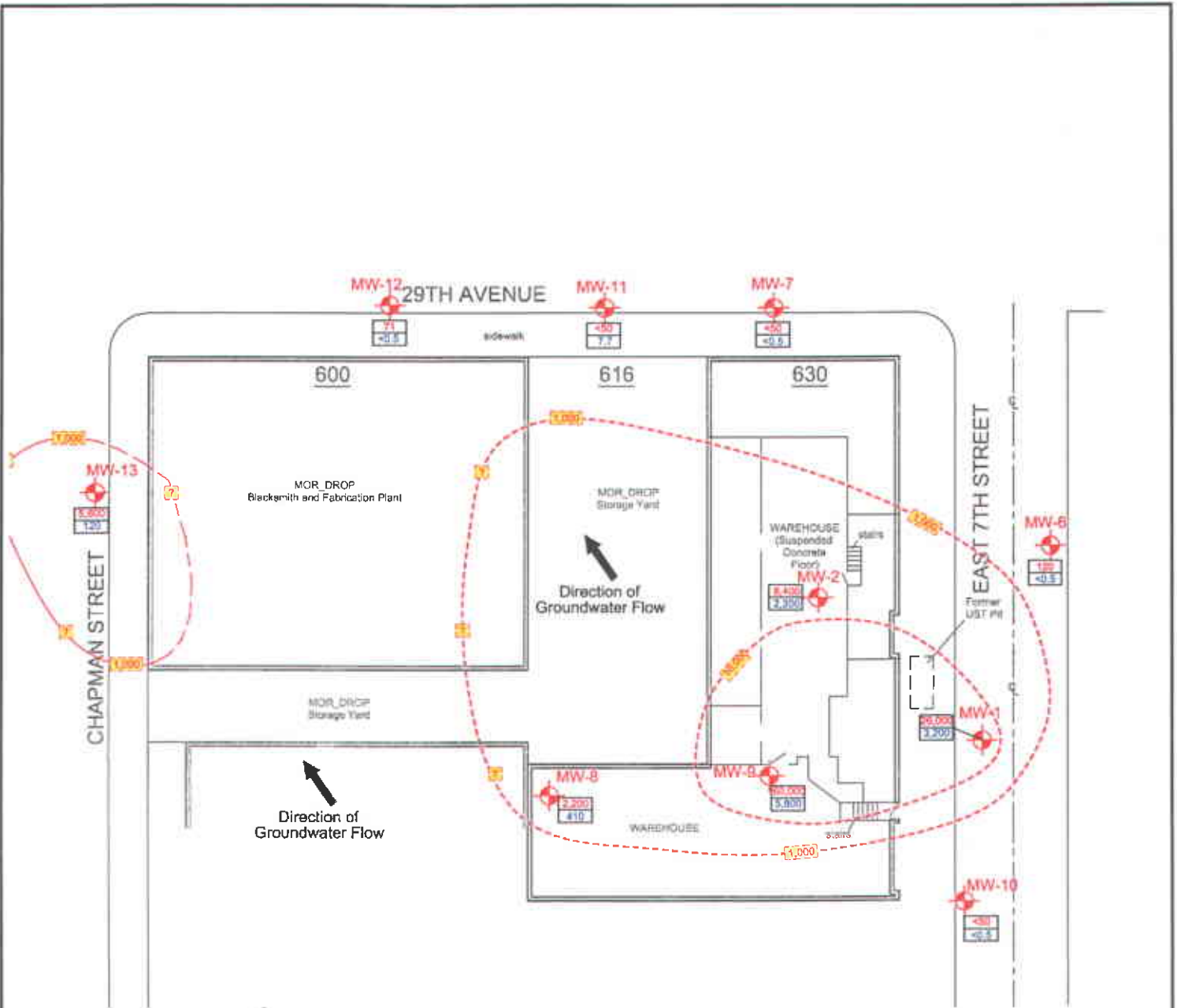
8/1/02
 sitemap.dwg





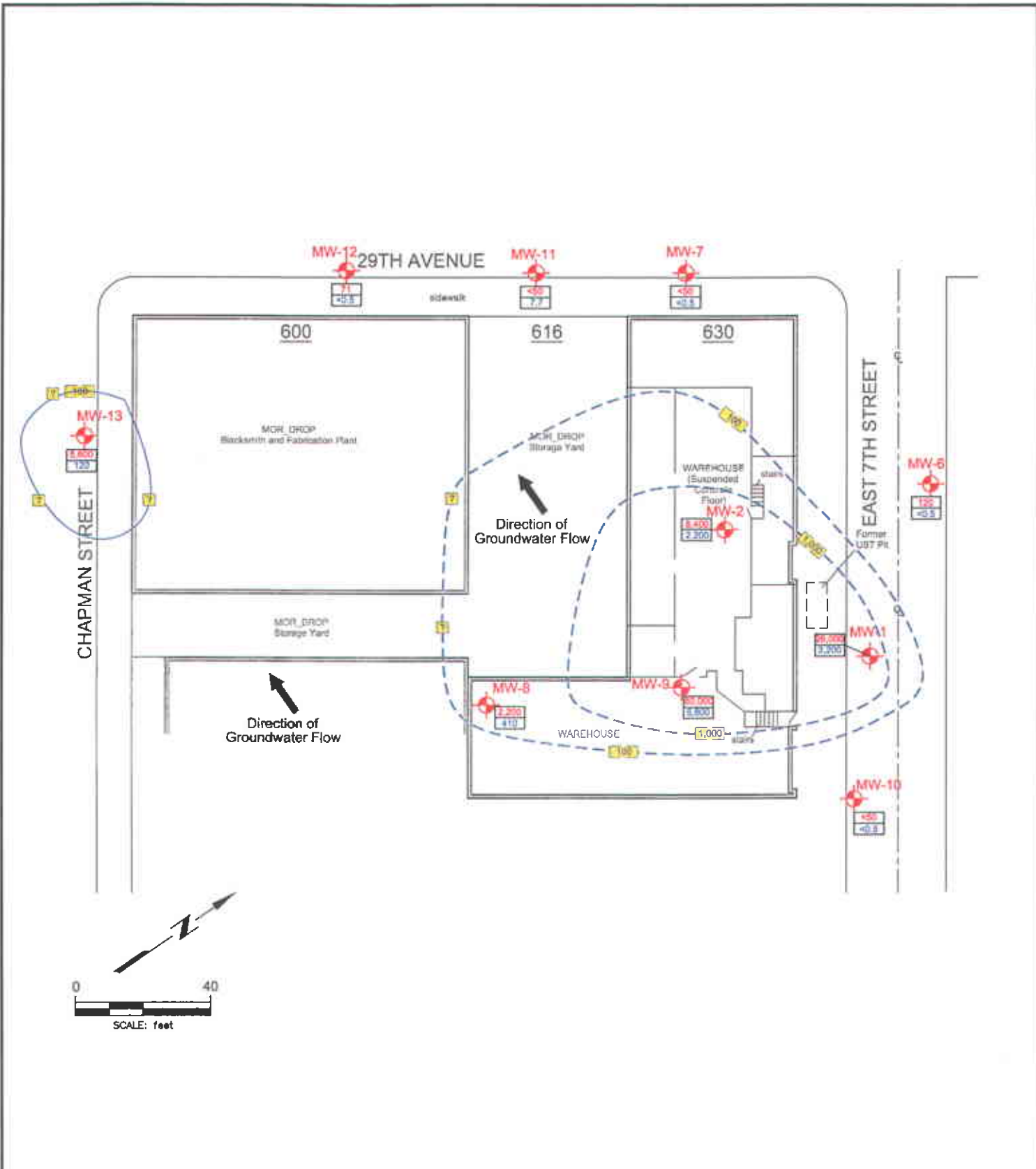
Note:
 Water table elevation contours are approximate.
 ** Groundwater elevation not used in contouring.

<p>LEGEND</p> <p>MW-1 Existing Monitoring Well Location (10.65) Groundwater Elevation in Feet above Mean Sea Level</p> <p>10.00 Groundwater Surface Contour and Elevation</p>	<p>GROUNDWATER ELEVATION CONTOUR MAP (June 28, 2002)</p> <p>FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00</p>	<p>Figure</p> <p>3</p> <p>8/1/02 sitemap.dwg</p>	
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Note:
Isoconcentration contours are approximate.

LEGEND		TPH as Gasoline CONCENTRATIONS IN GROUNDWATER June, 2002 FORMER LEMOINE SAUSAGE FACTORY 630 29TH AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00	Figure 4a 8/9/02 Q2ND_02.dwg	
Existing Monitoring Well Location TPH-G Concentration (micrograms per liter) Benzene Concentration (micrograms per liter) Isoconcentration Contour (micrograms per liter)				



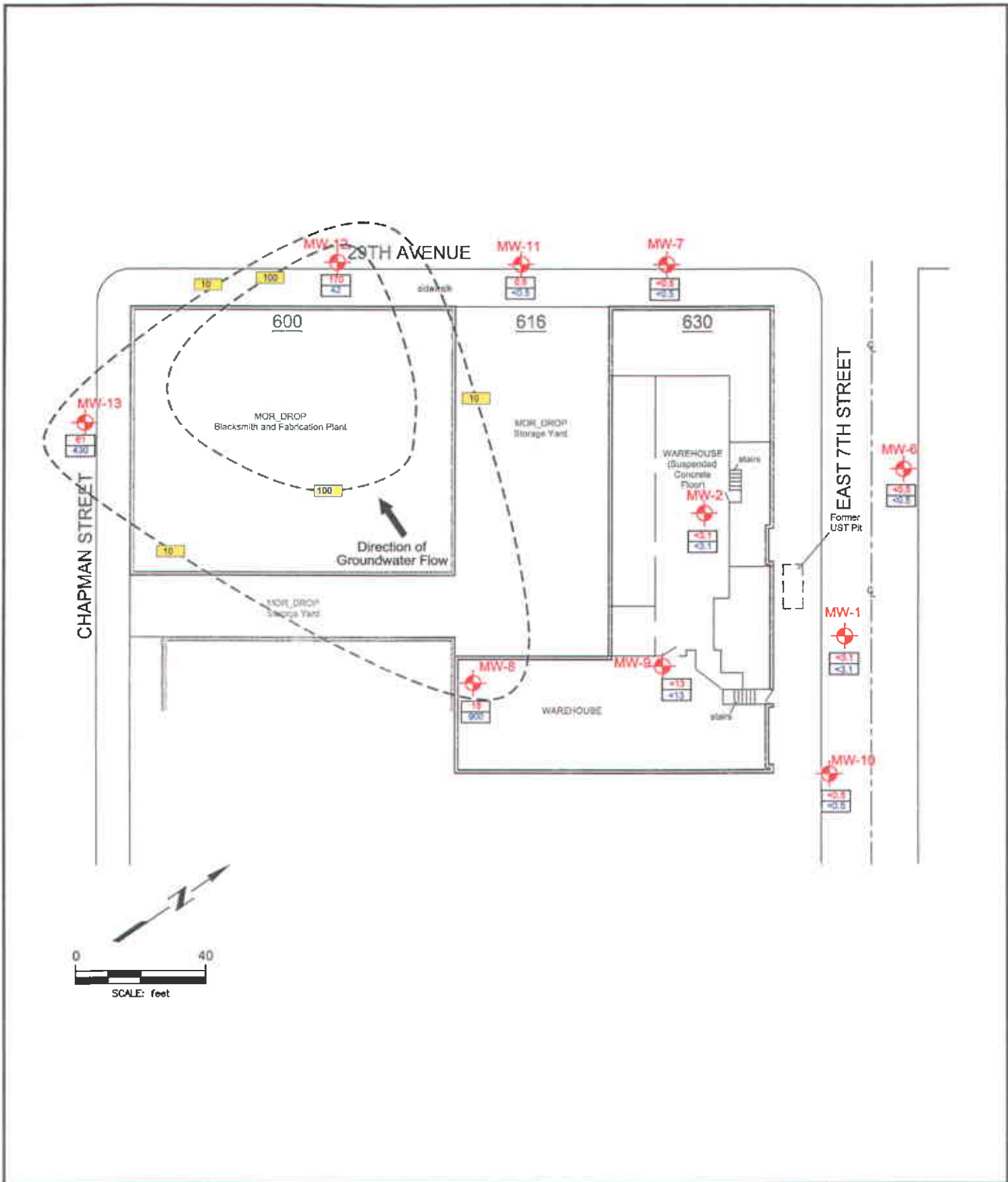
Note:
 Isoconcentration contours are approximate.

LEGEND	
MW-1	Existing Monitoring Well Location
	TPH-G Concentration (micrograms per liter)
	Benzene Concentration (micrograms per liter)
	Isoconcentration Contour (micrograms per liter)

BENZENE
 CONCENTRATIONS IN GROUNDWATER
 June, 2002
 FORMER LEMOINE SAUSAGE FACTORY
 630 29TH AVENUE
 OAKLAND, CALIFORNIA
 Clayton Project No. 70-97066 00

Figure
4b
 8/9/02
 Q2ND_02.dwg





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

TCE and cis-1,2 DCE
 CONCENTRATIONS IN GROUNDWATER
 June, 2002
 FORMER LEMOINE SAUSAGE FACTORY
 630 29TH AVENUE
 OAKLAND, CALIFORNIA
 Clayton Project No. 70-97066.00

Figure
5
 8/9/02
 Q2ND_02.dwg



Table 1

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

Well Identification	Date Measured	Top of Casing Elevation (ft,msl)	Depth to Water (feet)	Groundwater Elevation (ft,msl)
MW-1	6/28/2002	16.69	5.61	11.08
	3/25/2002		2.77	13.92
	12/3/2001		4.17	12.52
	9/25/2001		6.76	9.93
	6/20/2001		5.85	10.84
	3/21/2001		4.29	12.40
	12/19/2000		5.50	11.19
	9/22/2000		6.30	10.39
	6/15/2000		4.82	11.87
	2/8/1999		3.60	13.09
MW-2	6/28/2002	20.79	9.21	10.65
	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
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	

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-5	Removed from monitoring program in October 2001			
	9/25/2001	21.12	10.34	10.78
	6/20/2001		9.90	11.22
	3/21/2001		8.68	12.44
	12/19/2000		9.99	11.13
	9/22/2000		9.99	11.13
	6/15/2000		10.36	10.76
	2/8/1999		7.62	13.50
MW-6	6/28/2002	16.60	5.83	10.77
	3/25/2002		3.93	12.67
	12/3/2001		4.72	11.88
	9/25/2001		6.68	9.92
	6/20/2001		6.13	10.47
	3/21/2001		4.70	11.90
	12/19/2000		5.93	10.67
	9/22/2000		6.54	10.06
	6/15/2000		5.47	11.13
MW-7	6/28/2002	15.47	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
MW-8	6/28/2002	17.58	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)
MW-9	6/28/2002	17.61	6.43	11.18
	3/25/2002		4.98	12.63
	12/3/2001		5.79	11.82
MW-10	6/28/2002	16.92	5.65	11.27
	3/25/2002		3.00	13.92
	12/3/2001		4.22	12.70
MW-11	6/28/2002	14.87	6.35	8.52
	3/25/2002		4.68	10.19
	12/3/2001		5.67	9.20
MW-12	6/28/2002	14.05	6.13	8.74
MW-13	6/28/2002	13.39	6.21	8.66

Notes:

1. All top of casing elevations referenced to mean sea level (msl) and measured with reference to the benchmark located at Peterson Street and East 7th Street.

Table 2

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

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2 DCE	trans-1,2-DCE	VC
MW-1	6/28/2002	26,000	NA	3,200	640	1,800	2,900	<3.1	<3.1	<3.1	<3.1	<3.1
	3/25/2002	11,000	NA	3,200	73	1,200	1,860	<5	<5	<5	<5	<5
	12/3/2001	15,000	NA	2,800	310	1,200	1,660	<3.1	<3.1	<3.1	<3.1	<3.1
	9/26/2001	16,000	NA	1,100	< 10	130	320	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
	6/21/2001	12,000	NA	2,000	180	880	1,180	3.0	<0.5	<0.5	<0.5	<0.5
	3/21/2000	21,000	NA	3,200	290	1,700	2,600	<2.5	<2.5	<2.5	<2.5	<2.5
	12/19/2000	25,000	NA	3,200	480	1,900	3,300	<2.5	<2.5	<2.5	<2.5	<2.5
	9/22/2000	25,000	<500	3,100	470	1,800	3,600	NA	NA	NA	NA	NA
	6/15/2000	29,000	NA	3,900	1,900	<100	4,200	<5.0	<5.0	<5.0	<5.0	<5.0
	2/8/1999	48,000	NA	3,900	970	6,300	4,300	<30	NA	NA	NA	NA
MW-2	6/28/2002	8,400	NA	2,200	21	680	220	8.8	<3.1	<3.1	<3.1	<3.1
	3/25/2002	21,000	NA	11,000	1,000	3,700	2,790	<17	<17	<17	<17	<17
	12/3/2001	45,000	NA	13,000	950	5,100	2,930	14	<7.1	<7.1	<7.1	<7.1
	9/26/2001	26,000	NA	12,000	590	3,900	1,960	11	< 10	< 10	< 10	< 10
	6/21/2001	30,000	NA	8,600	440	2,600	1,230	5.6	<0.5	<0.5	<0.5	<0.5
	3/23/2001	34,000	NA	10,000	410	3,200	1,220	14	<13	<13	<13	<13
	12/19/2000	43,000	NA	9,800	810	4,000	2,430	21	<13	<13	<13	<13
	9/22/2000	24,000	<500	10,000	370	2,700	1,200	NA	NA	NA	NA	NA
	6/29/2000	31,000	NA	11,000	4,400	930	250	25	<5.0	<5.0	<5.0	<5.0
	2/8/1999	41,000	NA	11,000	650	4,900	1,720	60	NA	NA	NA	NA
MW-3	Removed from sampling program in October 2001											
	9/26/2001	59,000	NA	12,000	780	13,000	3,680	990	< 8.3	< 8.3	< 8.3	< 8.3
	6/21/2001	34,000	NA	5,900	340	6,200	1,550	120	2.4	0.8	<0.5	<0.5
	3/22/2001	1,300	NA	98	51	67	104	2.3	<0.5	<0.5	<0.5	<0.5
	12/19/2000	50,000	NA	1,200	510	1,600	1,810	350	<8.3	<8.3	<8.3	<8.3
	9/22/2000	83,000	<1,000	16,000	1,300	20,000	7,000	NA	NA	NA	NA	NA
	6/29/2000	39,000	NA	7,800	8,000	630	3,400	600	<5.0	<5.0	<5.0	<5.0
2/8/1999	35,000	NA	1,200	1,400	3,400	4,900	<30	NA	NA	NA	NA	

Table 2

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

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-4	Removed from sampling program in October 2001											
	9/26/2001	17,000	NA	7,900	440	< 50	581	1.9	< 0.5	8.1	< 0.5	< 0.5
	6/21/2001	11,000	NA	2,300	570	26	641	1.4	<0.5	3.3	<0.5	<0.5
	3/22/2001	5,600	NA	1,100	310	13	303	<0.5	<0.5	1.6	<0.5	<0.5
	12/19/2000	2,200	NA	200	100	2.9	81.4	<0.5	<0.5	<0.5	<0.5	<0.5
	9/22/2000	12,000	<500	2,800	1,100	82	1,300	NA	NA	NA	NA	NA
	6/15/2000	2,300	NA	230	10	<5	94	0.88	<0.5	2.1	<0.5	<0.5
	2/8/1999	15,000	NA	670	780	90	940	<30	NA	NA	NA	NA
MW-5	Removed from sampling program in October 2001											
	9/26/2001	5,100	NA	2,400	< 10	1,200	460	22	< 3.6	< 3.6	< 3.6	< 3.6
	6/21/2001	18,000	NA	3,400	350	2,300	1,020	21	<0.5* ³	<0.5	<0.5	<0.5
	3/22/2001	6,200	NA	1,500	310	360	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	420	3,100	1,600	NA	NA	NA	NA	NA
	6/29/2000	3,900	NA	1,500	330	28	260	36	<0.5	<0.5	<0.5	<0.5
	2/8/1999	4,900	NA	780	230	440	370	<0.5	<0.5	<0.5	<0.5	<0.5
MW-6	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	5.7	8	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* ⁵	< 0.5	< 0.5	< 0.5	< 0.5
	9/25/2001	760	NA	<0.5	<0.5	<0.5	2.9	<0.5* ⁴	< 0.5	< 0.5	< 0.5	< 0.5
	6/21/2001	420	NA	<0.5	0.59	<0.5	1.00	0.9	<0.5	<0.5	<0.5	<0.5
	3/21/2001	820	NA	<0.5	1.4	<0.5	0.52	<0.5* ²	<0.5	<0.5	<0.5	<0.5
	12/19/2000	320	NA	<0.5	<0.5	<0.5	<0.5	<0.5* ¹	<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	2.1	2.2	4.8	0.78	<0.5	<0.5	<0.5	<0.5

Table 2

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

Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-7	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	<0.5	0.75	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	
MW-8	6/28/2002	2,200	NA	410	40	<1.0	<1.0	4.9	18	900	54	80
	3/25/2002	990	NA	280	1.4	7.2	6.8	3.6	10	790	33	49
	12/3/2001	1,200	NA	190	2.7	14	11.3	<2.5	100	650	44	31
	9/25/2001	1,500	NA	170	1.6	4.3	2.7	5.0	36	820	59	53
	6/21/2001	2,400	NA	490	29	<2.5	<2.5	4.9	28	910	48	75
	3/21/2001	3,500	NA	530	21	<2.5	<2.5	<3.6	32	760	39	58
	12/19/2000	2,700	NA	410	4.8	<2.5	<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	8.9	<5	8.7	<13	210	1,100	73	25	
MW-9	6/28/2002	60,000	NA	5,800	1,100	7,400	5,400	<13	<13	<13	<13	<13
	3/25/2002	71,000	NA	15,000	1,900	17,000	8,000	<31	<31	<31	<31	<31
	12/3/2001	90,000	NA	15,000	2,200	15,000	9,100	<10	<10	<10	<10	<10
MW-10	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	0.53	3.6	2.27	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2001	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2

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

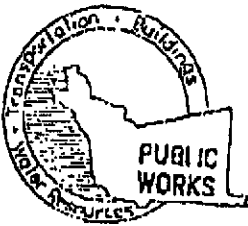
Sample Location	Date Sampled	TPHG	MTBE	Benzene	Ethyl benzene	Toluene	Total Xylenes	1,2-DCA	TCE	cis-1,2-DCE	trans-1,2-DCE	VC
MW-11	6/28/2002	<50	NA	7.7	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
	3/25/2002	130	NA	11	3.3	20	14.5	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2001	1,600	NA	470	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-12	6/28/2002	71	NA	<0.5	<0.5	<0.5	<0.5	<0.5	170	42	47	0.9
MW-13	6/28/2002	5,600	NA	120	130	55	9.5	<0.5	61 ^{*6}	430	14	4.4

Table 2

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

Notes:

- | | | |
|---|------------------------------------|--|
| 1. All results in micrograms per liter ($\mu\text{g/L}$). | 5. MTBE = methyl tert-butyl ether. | * ¹ 1,1-DCA detected at 1.1 $\mu\text{g/L}$. |
| 2. NA = Not Analyzed. | 6. TCE = Trichloroethene. | * ² 1,1-DCA detected at 0.9 $\mu\text{g/L}$. |
| 3. 1,2-DCA = 1,2-dichloroethane. | 7. DCE = Dichloroethene. | * ³ Freon -11 detected at 0.6 $\mu\text{g/L}$. |
| 4. TPHG = Total Petroleum Hydrocarbons as Gasoline. | 8. VC= Vinyl Chloride. | * ⁴ 1,1-DCA detected at 0.9 $\mu\text{g/L}$. |
| | | * ⁵ 1,1-DCA detected at 0.7 $\mu\text{g/L}$. |
| | | * ⁶ 1,1-DCE detected at 4.7 $\mu\text{g/L}$. |



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1919

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 630 29th Avenue
Oakland CA 94601

PERMIT NUMBER W02-0501
WELL NUMBER _____
APN _____

CLIENT
Name Bank of America
Address 4820 Folsom Blvd Phone 714-734-2069
City Folsom CA Zip 92620

PERMIT CONDITIONS
Circled Permit Requirements Apply

APPLICANT
Name Clayton Group Services
Address 6720 Kell Center Pkwy #216 Fax 925-426-0106
City Pleasanton Phone 925-426-2600 Zip 94566

- A. GENERAL
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
 3. Permit is void if project not begun within 90 days of approval date.

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input type="checkbox"/>

- B. WATER SUPPLY WELLS
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

- D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted earnings.

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

- E. CATHODIC
Fill hole anode zone with concrete placed by tremie.
- F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

DRILLER'S NAME Gregg Drilling

G. SPECIAL CONDITIONS HI Attached.

DRILLER'S LICENSE NO 485165

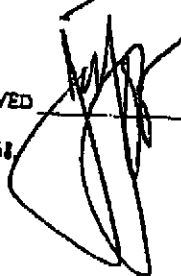
WELL PROJECTS

Drill Hole Diameter	<u>8</u> in	Maximum	
Casing Diameter	<u>2</u> in	Depth	<u>15</u> ft
Surface Seal Depth	<u>11</u> ft	Owner's Well Number	<u>MW-12</u>

GEOTECHNICAL PROJECTS

Number of Borings		Maximum	
Hole Diameter		Depth	

ESTIMATED STARTING DATE 5-16-02
ESTIMATED COMPLETION DATE 5-16-02

APPROVED  DATE 5-9-02

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 71-68

APPLICANT'S SIGNATURE Warren Chamberlain DATE 4-15-02

PLEASE PRINT NAME WARREN CHAMBERLAIN Rev. 5-13-00



EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL
ENGINEERING

PAGE 2 of 2

On Chapman St

PERMIT NUMBER X0200492		SITE ADDRESS/LOCATION 630 29th AVENUE
APPROX. START DATE 5-16-02	APPROX. END DATE 5-23-02	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS A-HAZ 726 269		CITY BUSINESS TAX # ON FILE

ATTENTION:

- 1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # 227379
- 2- 48 hours prior to starting work, you **MUST CALL (510) 238-3651** to schedule an inspection.
- 3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

- I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).
- I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than ones during any three-year period. (Sec. 7044 Business and Professions Code).
- I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).
- I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # WC 9386999 Company Name AON RISK SERVICES INC

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Warren B. Chamberlain Signature of Permittee Agent for Contractor Owner Date 5-13-02

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ISSUED BY <u>9</u>		DATE ISSUED <u>5/13/02</u>	



EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2

PERMIT NUMBER X0200493		SITE ADDRESS/LOCATION 630 29th AVENUE
APPROX. START DATE 5-16-02	APPROX. END DATE 5-23-02	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS A-Haz 726 269		CITY BUSINESS TAX # ON FILE

ATTENTION:

- 1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. Underground Service Alert (USA) # 227372
- 2- 48 hours prior to starting work, you **MUST CALL (510) 238-3651** to schedule an inspection.
- 3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

- I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).
- I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).
- I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License Law).
- I am exempt under Sec. _____, B&PC for this reason _____

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # WC 9386 999 Company Name ADV RISK SERVICES INC.

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.


Signature of Permittee Walter B. Blomberg Agent for Contractor Owner Date 5-14-02

DATE STREET LAST RESURFACED 4/96	SPECIAL PAVING DETAIL REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
ISSUED BY 		DATE ISSUED 5/14/02	

SIDEWALK/DRIVEWAY/
CURB/GUTTER PERMIT

90SF
1 S/W underdrain

PAGE 2 of 2

PERMIT NUMBER	CGS020 L17
SITE ADDRESS/LOCATION	630 29th AVENUE
ATTENTION:	CONTRACTOR'S LICENSE # AND CLASS A-1142 726269
<p>1) State law requires that the contractor/owner call <i>Underground Service Alert (USA)</i> two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444. UNDERGROUND SERVICE ALERT (USA) #: <u>227372</u></p> <p>2) Prior to starting work, YOU MUST CALL TO SCHEDULE AN INSPECTION. For inspection of driveway approaches on unimproved streets, phone (510) 482-7853. For all other work, phone (510) 777-8395</p> <p>3) City improvements (such as parking meters, sign posts, etc.) shall not be removed by permittee. For more information, contact an Inspector at (510) 434-5100.</p> <p>I agree to comply with all local ordinances and state laws relating to work under this permit. Inspections to be done was required by Oakland Municipal Code Section 6-1.13, issuance of a permit as required by Section 6-1.12, and construction requirements per section 6-1.18: <i>If all of the private construction and/or repair work of any sidewalk and/or driveway cannot be completed within thirty (30) days from the date of the permit and in accordance with the terms of this Article, the Director of Public Works may notify the holder of the permit to complete said work within two (2) days and if not so completed the Director of Public Works is hereby authorized to have the same done at the expense of the owner of the parcel of property fronting upon the sidewalk and/or driveway upon which work was completed. (As amended by Ordinance No. 9753 C.M.S. passed April 10, 1979).</i></p> <p>Permits on unimproved streets for asphaltic concrete driveway or access bridges are temporary. Upon construction of standard improvements or upon notice by the Director of Public Works these temporary facilities must be removed from the public street area.</p> <p>The permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street, sidewalk, curb and gutter construction and maintenance and all public safety facilities required by law. The permittee shall and by all acceptance of the permit agrees to, defend, indemnify and safe and hold harmless the City, its officers and employees from and against all suits, claims or actions brought by any person for or on account of any bodily injury, disease or illness or damage to persons and/or property sustained in or arising out of the construction of the work performed under the permit or consequence of permittee's failure to perform the obligations with respect to street, sidewalk, curb and gutter construction and maintenance and all public safety facilities required by law (Oakland Municipal Code Section 6-1.172).</p> <p>I certify that I have read this permit and agree to its requirements and state that the information given is true and correct and make this statement under penalty of law.</p> <p><u>Warren B. Chantula</u> _____ 5/2/02 Signature of Permittee Date</p>	
ISSUED BY	DATE ISSUED
	u

APPENDIX B

BORING LOGS, WELL CONSTRUCTION DETAILS

AND WELL SURVEY REPORT



LOG OF BORING MW-12

(Page 1 of 1)

Former Lemoine Sausage Factory
Groundwater Evaluation
630 29th Avenue
Oakland, CA

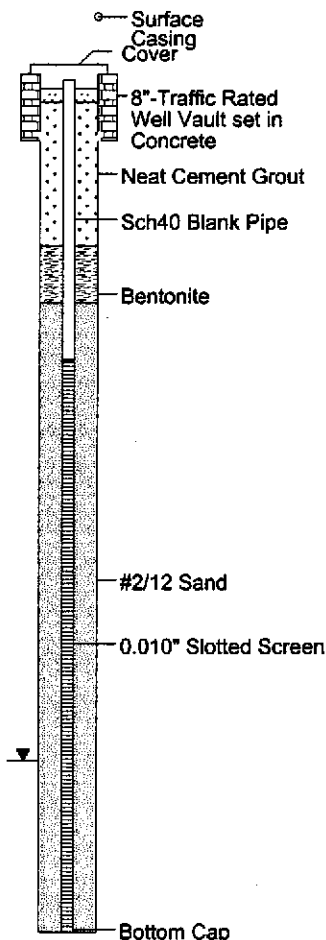
Date Started : 5-16-02
Date Completed : 5-16-02
Hole Diameter : 8 in.
Drilling Method : H.S.A.
Sampling Method : Split Spoon

Driller : Gregg Drilling
Logged By : M. Krzeminski
Top of Well Casing : XX.YY feet, msl
Survey By : V. Chavez

Clayton Project No.: 70-97066.01

Depth in Feet	Surf. Elev. 15	Samples	USCS	GRAPHIC	DESCRIPTION
0	15		CC		Concrete and baserock
			CL		CLAY (0,0,0,100) dark brown, stiff, dry.
			ML		Clayey SILT (0,0,80,20), light brown, stiff, dry
			GM		Silty Clayey GRAVEL (70,0,15,15), orange brown, loose, dry.
5	10				Clayey SILT (0,0,90,10) greenish grey, dry.
					light brown
10	5		ML		trace fine sand
					moist
15	0				
20					

Well: MW-12
Elev.: 15



05-20-2002 s:\est\boring_logs\p97066\MW-12.BOR

Notes:



LOG OF BORING MW-13

(Page 1 of 1)

Former Lemoine Sausage Factory
Groundwater Evaluation
630 29th Avenue
Oakland, CA

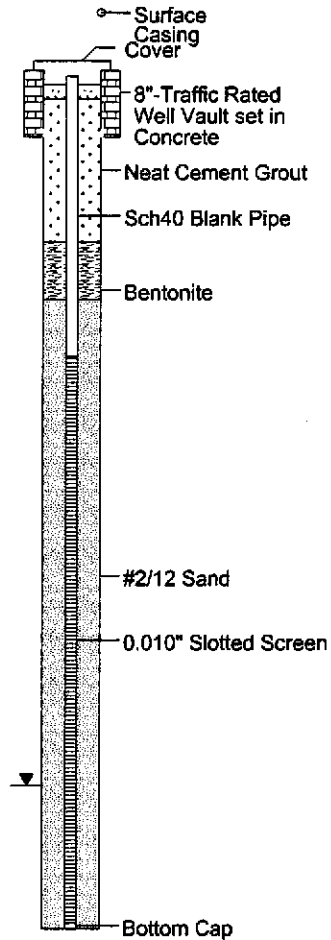
Date Started : 5-16-02
Date Completed : 5-16-02
Hole Diameter : 8 in.
Drilling Method : H.S.A.
Sampling Method : Split Spoon

Driller : Gregg Drilling
Logged By : M. Krzeminski
Top of Well Casing : XX.YY feet, msl
Survey By : V. Chavez

Clayton Project No.: 70-97066.01

Depth in Feet	Surf. Elev. 15	Samples	USCS	GRAPHIC	DESCRIPTION
0	15		AC		Asphalt and baserock
			CL		Silty CLAY (0,0,20,80) dark brown, stiff, dry.
5	10		ML		Clayey SILT (0,0,90,10), light brown - greenish grey, stiff, dry.
			CL		CLAY (0,0,5,95), greyish green- yellow orange, loose, dry, damp, hydrocarbon odor.
10	5		SC		Clayey SAND (5,80,0,15) greenish grey- yellowish orange, saturated, hydrocarbon odor.
15	0				
20					

Well: MW-13
Elev.: 15



05-20-2002 s:\ees\boring_logs\p97066\MW-13.BOR

Notes:

June 5, 2002
Project No.: 1605-01A

Warren B. Chamberlain
Clayton Group Services
6920 Koll Center Parkway
Suite 216
Pleasanton, CA 94566

Subject: Monitoring Well Survey
Former Lemoine Sausage Factory
630-29th Avenue
Oakland, CA

Dear Warren:

This is to confirm that we have proceeded at your request to survey the ground water monitoring wells located at the above referenced location. The survey was completed on June 3, 2002. The benchmark for this survey was a cut square in the easterly curb return at the northerly corner of Peterson and East 7th Street. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone III (NAD83).
Benchmark Elevation 17.91 feet (NGVD 29).

<u>Latitude</u>	<u>Longitude</u>	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	<u>Desc.</u>
37.7741354	-122.2339973	2108984.95	6060527.13	14.34	RIM MW-12
				14.05	TOC MW-12
				13.62	RIM MW-13
37.7738757	-122.2339864	2108890.35	6060528.53	13.39	TOC MW-13

Sincerely,

Virgil D. Chavez, PLS 6323

APPENDIX C

**SOIL LABORATORY ANALYTICAL DATA REPORT AND CHAIN-
OF-CUSTODY DOCUMENTS**



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

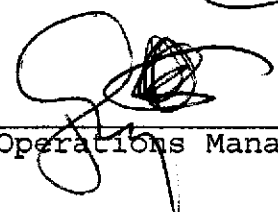
Prepared for:

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

Date: 31-MAY-02
Lab Job Number: 158638
Project ID: 70-97066.01
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.

Total Volatile Hydrocarbons

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B (M)
Matrix:	Soil	Sampled:	05/16/02
Units:	mg/Kg	Received:	05/16/02
Basis:	as received		

Field ID:	MW-13@7'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	72336
Lab ID:	158638-002	Analyzed:	05/17/02

Analyte	Result	RL
Gasoline C7-C12	ND	1.0
Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	58-144
Bromofluorobenzene (FID)	109	60-146

Field ID:	MW-13@14.5'	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	72379
Lab ID:	158638-004	Analyzed:	05/18/02

Analyte	Result	RL
Gasoline C7-C12	120	5.0
Surrogate	%REC	Limits
Trifluorotoluene (FID)	120	58-144
Bromofluorobenzene (FID)	138	60-146

Field ID:	MW-12@6.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	72336
Lab ID:	158638-006	Analyzed:	05/17/02

Analyte	Result	RL
Gasoline C7-C12	ND	0.95
Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	58-144
Bromofluorobenzene (FID)	115	60-146

Total Volatile Hydrocarbons

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B (M)
Matrix:	Soil	Sampled:	05/16/02
Units:	mg/Kg	Received:	05/16/02
Basis:	as received		

Field ID:	MW-12@14.5'	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	72336
Lab ID:	158638-008	Analyzed:	05/17/02

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	58-144
Bromofluorobenzene (FID)	110	60-146

Type:	BLANK	Batch#:	72336
Lab ID:	QC178579	Analyzed:	05/17/02
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	94	58-144
Bromofluorobenzene (FID)	105	60-146

Type:	BLANK	Batch#:	72379
Lab ID:	QC178720	Analyzed:	05/18/02
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	92	58-144
Bromofluorobenzene (FID)	94	60-146

GC04 TVH 'J' Data File FID

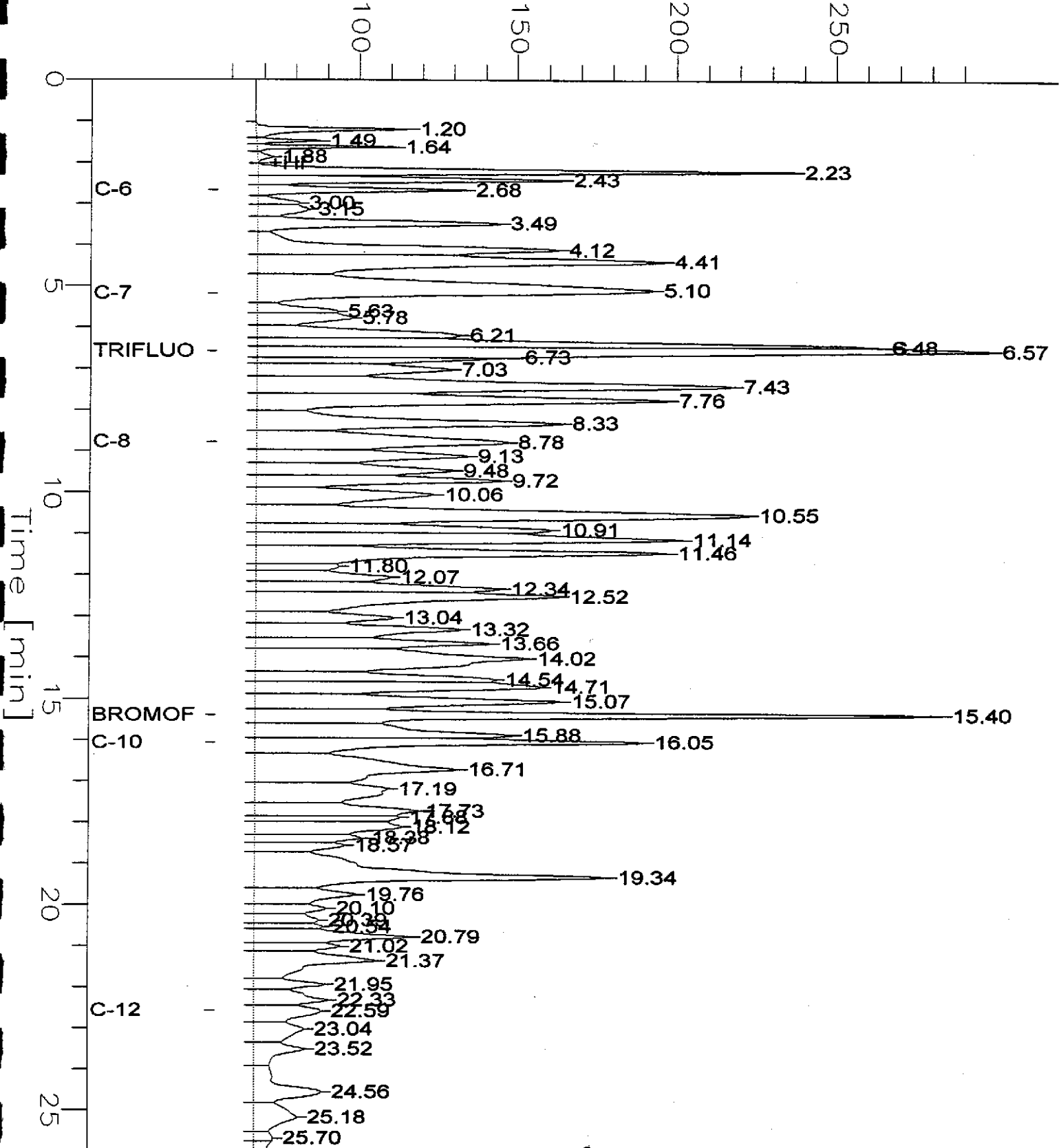
Sample Name : 158638-004,72379
FileName : G:\GC04\DATA\138J005.raw
Method : TVHBTXE
Start Time : 0.00 min
Scale Factor : 1.0

End Time : 26.00 min
Plot Offset : 56 mV

Sample #: a
Date : 5/20/02 09:45 AM
Time of Injection: 5/18/02 01:51 PM
Low Point : 55.52 mV
Plot Scale: 243.8 mV
High Point : 299.29 mV

MW-13 @ 14.5'

Response [mV]



Chromatogram

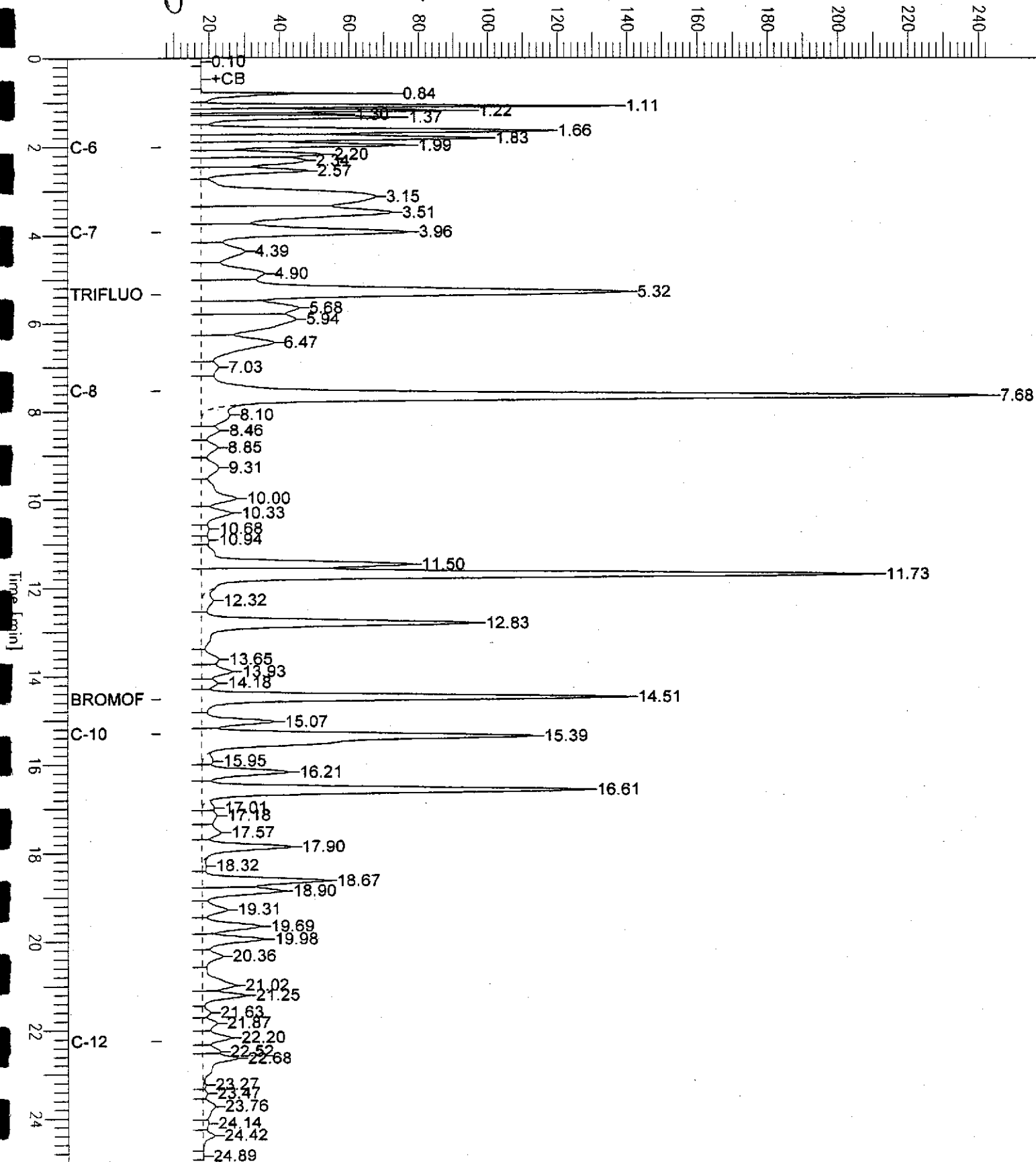
Sample Name : CCV/LCS, QC178580, 72336, 02WS0791, 5/5000
FileName : G:\GC05\DATA\136G016.raw
Method : TVHBTXE
Start Time : 0.00 min
Scale Factor: 1.0

Sample # :
Date : 5/17/02 12:37 PM
Time of Injection: 5/17/02 12:19 AM
Low Point : 6.42 mV
Plot Scale: 236.6 mV

Page 1 of 1

Gasoline Standard

Response [mV]



Total Volatile Hydrocarbons

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B(M)
Type:	LCS	Basis:	as received
Lab ID:	QC178580	Diln Fac:	1.000
Matrix:	Soil	Batch#:	72336
Units:	mg/Kg	Analyzed:	05/17/02

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	8.945	89	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	58-144
Bromofluorobenzene (FID)	109	60-146

Total Volatile Hydrocarbons

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B (M)
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	72379
Basis:	as received	Analyzed:	05/18/02

Type: BS Lab ID: QC178721

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	9.676	97	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	58-144
Bromofluorobenzene (FID)	97	60-146

Type: BSD Lab ID: QC178724

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.00	9.318	93	78-120	4	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	58-144
Bromofluorobenzene (FID)	97	60-146



Total Volatile Hydrocarbons

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	158632-002	Batch#:	72336
Matrix:	Soil	Sampled:	05/14/02
Units:	mg/Kg	Received:	05/16/02
Basis:	as received	Analyzed:	05/17/02

Type: MS Lab ID: QC178581

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1323	10.64	9.726	90	44-133
Surrogate	%REC	Limits			
Trifluorotoluene (FID)	110	58-144			
Bromofluorobenzene (FID)	114	60-146			

Type: MSD Lab ID: QC178582

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.31	9.356	89	44-133	1	31
Surrogate	%REC	Limits				
Trifluorotoluene (FID)	107	58-144				
Bromofluorobenzene (FID)	109	60-146				

RPD= Relative Percent Difference

Purgeable Halocarbons by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-13@7'	Diln Fac:	0.9615
Lab ID:	158638-002	Batch#:	72352
Matrix:	Soil	Sampled:	05/16/02
Units:	ug/Kg	Received:	05/16/02
Basis:	as received	Analyzed:	05/17/02

Analyte	Result	RI
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.8
1,1-Dichloroethane	ND	4.8
cis-1,2-Dichloroethene	ND	4.8
Chloroform	ND	4.8
1,1,1-Trichloroethane	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
cis-1,3-Dichloropropene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
Tetrachloroethene	ND	4.8
Dibromochloromethane	ND	4.8
Chlorobenzene	ND	4.8
Bromoform	ND	9.6
1,1,2,2-Tetrachloroethane	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	122	75-128
Toluene-d8	104	80-111
Bromofluorobenzene	102	77-126

Purgeable Halocarbons by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-13@14.5'	Diln Fac:	1.042
Lab ID:	158638-004	Batch#:	72352
Matrix:	Soil	Sampled:	05/16/02
Units:	ug/Kg	Received:	05/16/02
Basis:	as received	Analyzed:	05/17/02

Analyte	Result	RI
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.2
Freon 113	ND	5.2
1,1-Dichloroethene	ND	5.2
Methylene Chloride	ND	21
trans-1,2-Dichloroethene	ND	5.2
1,1-Dichloroethane	ND	5.2
cis-1,2-Dichloroethene	10	5.2
Chloroform	ND	5.2
1,1,1-Trichloroethane	ND	5.2
Carbon Tetrachloride	ND	5.2
1,2-Dichloroethane	ND	5.2
Trichloroethene	ND	5.2
1,2-Dichloropropane	ND	5.2
Bromodichloromethane	ND	5.2
cis-1,3-Dichloropropene	ND	5.2
trans-1,3-Dichloropropene	ND	5.2
1,1,2-Trichloroethane	ND	5.2
Tetrachloroethene	ND	5.2
Dibromochloromethane	ND	5.2
Chlorobenzene	ND	5.2
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.2
1,3-Dichlorobenzene	ND	5.2
1,4-Dichlorobenzene	ND	5.2
1,2-Dichlorobenzene	ND	5.2

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	120	75-128
Toluene-d8	107	80-111
Bromofluorobenzene	102	77-126

ND= Not Detected

RL= Reporting Limit

Purgeable Halocarbons by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-12@6.5'	Diln Fac:	1.020
Lab ID:	158638-006	Batch#:	72352
Matrix:	Soil	Sampled:	05/16/02
Units:	ug/Kg	Received:	05/16/02
Basis:	as received	Analyzed:	05/17/02

Analyte	Result	RL
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.1
Freon 113	ND	5.1
1,1-Dichloroethene	ND	5.1
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.1
1,1-Dichloroethane	ND	5.1
cis-1,2-Dichloroethene	ND	5.1
Chloroform	ND	5.1
1,1,1-Trichloroethane	ND	5.1
Carbon Tetrachloride	ND	5.1
1,2-Dichloroethane	ND	5.1
Trichloroethene	ND	5.1
1,2-Dichloropropane	ND	5.1
Bromodichloromethane	ND	5.1
cis-1,3-Dichloropropene	ND	5.1
trans-1,3-Dichloropropene	ND	5.1
1,1,2-Trichloroethane	ND	5.1
Tetrachloroethene	ND	5.1
Dibromochloromethane	ND	5.1
Chlorobenzene	ND	5.1
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.1
1,3-Dichlorobenzene	ND	5.1
1,4-Dichlorobenzene	ND	5.1
1,2-Dichlorobenzene	ND	5.1

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	118	75-128
Toluene-d8	100	80-111
Bromofluorobenzene	99	77-126

Purgeable Halocarbons by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	MW-12@14.5'	Diln Fac:	0.9434
Lab ID:	158638-008	Batch#:	72352
Matrix:	Soil	Sampled:	05/16/02
Units:	ug/Kg	Received:	05/16/02
Basis:	as received	Analyzed:	05/17/02

Analyte	Result	RI
Chloromethane	ND	9.4
Vinyl Chloride	ND	9.4
Bromomethane	ND	9.4
Chloroethane	ND	9.4
Trichlorofluoromethane	ND	4.7
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
trans-1,2-Dichloroethene	ND	4.7
1,1-Dichloroethane	ND	4.7
cis-1,2-Dichloroethene	ND	4.7
Chloroform	ND	4.7
1,1,1-Trichloroethane	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Trichloroethene	7.9	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
cis-1,3-Dichloropropene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
Tetrachloroethene	ND	4.7
Dibromochloromethane	ND	4.7
Chlorobenzene	ND	4.7
Bromoform	ND	9.4
1,1,2,2-Tetrachloroethane	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	117	75-128
Toluene-d8	99	80-111
Bromofluorobenzene	98	77-126

ND= Not Detected
 RL= Reporting Limit

Purgeable Halocarbons by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC178714	Diln Fac:	1.000
Matrix:	Soil	Batch#:	72352
Units:	ug/Kg	Analyzed:	05/17/02

Analyte	Result	RI
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	10
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	120	75-128
Toluene-d8	103	80-111
Bromofluorobenzene	99	77-126

Gasoline Oxygenates by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Matrix:	Soil	Sampled:	05/16/02
Units:	ug/Kg	Received:	05/16/02
Basis:	as received	Analyzed:	05/17/02
Batch#:	72352		

Field ID:	MW-12@14.5'	Lab ID:	158638-008
Type:	SAMPLE	Diln Fac:	0.9434

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	107	63-133
1,2-Dichloroethane-d4	117	75-128
Toluene-d8	99	80-111
Bromofluorobenzene	98	77-126

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC178635		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	NA	
MTBE	ND	5.0
Isopropyl Ether (DIPE)	NA	
Ethyl tert-Butyl Ether (ETBE)	NA	
Methyl tert-Amyl Ether (TAME)	NA	

Surrogate	%REC	Limits
Dibromofluoromethane	104	63-133
1,2-Dichloroethane-d4	116	75-128
Toluene-d8	100	80-111
Bromofluorobenzene	100	77-126

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC178714		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	109	63-133
1,2-Dichloroethane-d4	120	75-128
Toluene-d8	103	80-111
Bromofluorobenzene	99	77-126

Gasoline Oxygenates by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC178634	Diln Fac:	1.000
Matrix:	Soil	Batch#:	72352
Units:	ug/Kg	Analyzed:	05/17/02

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	47.17	94	63-121

Surrogate	%REC	Limits
Dibromofluoromethane	99	63-133
1,2-Dichloroethane-d4	107	75-128
Toluene-d8	103	80-111
Bromofluorobenzene	101	77-126

Gasoline Oxygenates by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.020
MSS Lab ID:	158651-006	Batch#:	72352
Matrix:	Soil	Sampled:	05/15/02
Units:	ug/Kg	Received:	05/17/02
Basis:	as received	Analyzed:	05/21/02

Type: MS Lab ID: QC178715

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.5300	51.02	40.48	79	53-131
Surrogate	%REC	Limits			
Dibromofluoromethane	103	63-133			
1,2-Dichloroethane-d4	104	75-128			
Toluene-d8	104	80-111			
Bromofluorobenzene	95	77-126			

Type: MSD Lab ID: QC178716

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	51.02	38.52	75	53-131	5	30
Surrogate	%REC	Limits				
Dibromofluoromethane	98	63-133				
1,2-Dichloroethane-d4	99	75-128				
Toluene-d8	103	80-111				
Bromofluorobenzene	96	77-126				

Purgeable Aromatics by GC/MS

Lab #:	158638	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.01	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.020
MSS Lab ID:	158651-006	Batch#:	72352
Matrix:	Soil	Sampled:	05/15/02
Units:	ug/Kg	Received:	05/17/02
Basis:	as received	Analyzed:	05/21/02

Type: MS Lab ID: QC178715

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.3100	51.02	40.59	80	55-125
Toluene	<0.3600	51.02	42.42	83	48-131
Chlorobenzene	<0.4600	51.02	37.83	74	42-128

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	75-128
Toluene-d8	104	80-111
Bromofluorobenzene	95	77-126

Type: MSD Lab ID: QC178716

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	51.02	43.72	86	55-125	7	20
Toluene	51.02	45.96	90	48-131	8	20
Chlorobenzene	51.02	41.06	80	42-128	8	23

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	75-128
Toluene-d8	103	80-111
Bromofluorobenzene	96	77-126

CHAIN OF CUSTODY FORM

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C&T
LOGIN #

158638

Analyses

Sampler: Mike Krzeminski

Report To: Warren Chamberlain

Company: Clayton

Telephone: 925-426-2600

Fax: 925-426-0106

Project No: 70-97066.01

Project Name: Gunsage Factory

Project P.O.:

Turnaround Time: Stun.

Laboratory Number	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative				Field Notes	8015M - TPHg	8000 - Aromatics + BTEX	8010 - Halogenated OC's	8260 - Fuel Oxygenates
			Soil	Water	Waste		HCL	H2SO	HNO3	ICE					
	MW-13@3'	5/16 8:00	X			1					Hold				
	MW-13@7'	5/16 10:00	X			1					Hold	X	X	X	X
	MW-13@14.5'	5/16 10:05	X			1					Hold				
	MW-13@14.5'	5/16 10:10	X			1					Hold	X	X	X	X
	MW-14@3'	5/16 8:10	X			1					Hold				
	MW-14@6.5'	5/16 10:25	X			1					Hold	X	X	X	X
	MW-14@10.5'	5/16 11:30	X			1					Hold				
	MW-14@14.5'	5/16 11:35	X			1					Hold	X	X	X	X

1
2
3
4
5
6
7
8

Notes: Received On Ice
 Cold Ambient Intact

Preservation Correct?
 Yes No N/A

RELINQUISHED BY: Mike Krzeminski 5/16 2:00
DATE/TIME

RECEIVED BY: [Signature] 5/16/02 1400
DATE/TIME

DATE/TIME DATE/TIME

DATE/TIME DATE/TIME

Signature

APPENDIX D
WELL DEVELOPMENT LOGS

JOB #: 70-97066.01

SAMPLING DATA SHEET

JOB LOCATION: Sausage factory

DATE PURGED: 6-20

PURGE METHOD: pump

SAMPLING LOCATION: MW-12

DATE & TIME SAMPLED: 6-20 09:50

SAMPLING METHOD: Surge Block

DEPTH TO WATER: 6.15'

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 15.00'

PRESERVATIVES: -

WELL CASING VOLUME: 8.85' x 0.16 = 1.4 gal

OF CONTAINERS: -

CASING VOLUMES PURGED: 9

FIELD TECH: mk

PURGE RATE: 0.27 gal/min

WEATHER CONDITIONS: overcast

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (µmhos/cm) (^{at 1000})	PH	TEMPERATURE (°f)	TURBIDITY (ntu)
09:53	0	3.38	6.91	64.5	Clear
09:55	1.5	3.09	6.79	65.5	"
09:57	1.5	3.06	6.88	64.7	Slightly Turbid - Light Br
09:59	1.5	3.02	6.76	64.9	"
Surge for 3 minutes -		DTW = 11.2'			
10:05	1.5	1.58	7.05	63.3	Turbid - Brown
10:07	1.5	1.68	7.02	63.6	"
10:09	1.5	1.71	6.94	64.0	"
pumped dry @ 10:09		DTW = 10.9 @ 10:22	Surge for 3 min		
10:25	1.5	1.47	6.98	63.8	Slightly Turbid - LB
10:27	1.5	1.49	7.02	65.1	
pumped dry @ 10:28		DTW = 12.3' @ 10:37	Surge for 3 min		
10:42	1.5	1.44	7.05	63.8	Turbid - Brown
pumped dry at 10:43					

NOTES:

SAMPLING DATA SHEET

JOB #: 70-97066-01

JOB LOCATION: Sunshine Fact.

DATE PURGED: 6-20

PURGE METHOD: pump & dump

SAMPLING LOCATION: MW-13

DATE & TIME SAMPLED: 6-20 10:55

SAMPLING METHOD: surge block

DEPTH TO WATER: 6.10'

SAMPLE TYPE: GRAB COMPOSITE -

WELL BOTTOM DEPTH: 14.4'

PRESERVATIVES: -

WELL CASING VOLUME: 8.3 x 0.16 = 1.3 gal

OF CONTAINERS: -

CASING VOLUMES PURGED: 10

FIELD TECH: mlc

PURGE RATE: 0.24 gal/min

WEATHER CONDITIONS: overcast

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (µmhos/cm)	PH	TEMPERATURE (°F)	TURBIDITY (ntu)
10:57	0	0.74	7.12	70.0	Clear
10:59	1.3	0.79	7.01	71.7	ll
11:00	1.3	0.77	6.72	71.2	Slightly Turbid - LB
11:02	1.3	0.74	6.64	69.7	ll
Surge for 3 minutes DTW = 9.5' @ 11:06					
11:09	1.3	0.76	6.43	68.5	Turbid - Brown
11:11	1.3	0.67	6.52	69.1	ll
11:13	1.3	0.66	6.51	69.1	ll
Pumped 0.7 @ 11:14 - DTW = 10.0' @ 11:25 - Surge for 3 minutes					
11:30	1.3	0.67	7.05	69.8	Slightly Turbid - LB
11:32	1.3	0.65	7.03	69.3	Turbid - Brown
Pumped 0.7 @ 11:33 DTW = 11.4' Surge for 3 minutes					
11:42	1.3	0.61	6.82	69.2	Turbid - Brown
11:50	1.3	0.63	6.80	70.0	ll

NOTES:

APPENDIX E

SECOND QUARTER 2002

GROUNDWATER FIELD MEASUREMENTS AND NOTES

SAMPLING DATA SHEET

JOB LOCATION: Sewage Fact.

DATE PURGED: 6-28-02

PURGE METHOD: peristaltic pump

SAMPLING LOCATION: MW-2

DATE & TIME SAMPLED: 6-28-02 11:50

SAMPLING METHOD: peristaltic pump

DEPTH TO WATER: 5.61

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 8.35

PRESERVATIVES: HCL

WELL CASING VOLUME: 2.74 x (.01) = .0274

OF CONTAINERS: 6 16 vol

CASING VOLUMES PURGED: 4

FIELD TECH: mk

PURGE RATE:

WEATHER CONDITIONS: Overcast

TIME (24 hr)	VOLUME REMOVED (gallons)	ELECTRICAL CONDUCTIVITY (μ mhos/cm) ^{25°C}	PH	TEMPERATURE (°C)	TURBIDITY (ntu)
11:40	300 mL	7.62 7.62	7.08	21.5	0.53

NOTES:

SAMPLING DATA SHEET

JOB #: 70-97064.00

JOB LOCATION: Sawage, Fact.

DATE PURGED: 6-28-02

PURGE METHOD: Peristaltic pump

DATE & TIME SAMPLED: 6-26 12:15

SAMPLING LOCATION: MW-2

SAMPLING METHOD: Peristaltic pump

DEPTH TO WATER: 10-65

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 19.5

PRESERVATIVES: HCL

WELL CASING VOLUME: $9.85 \times (0.01) = 0.885$

OF CONTAINERS: 2 vials

CASING VOLUMES PURGED: 1

FIELD TECH: MK

PURGE RATE:

WEATHER CONDITIONS: overcast

TIME (24 hr)	VOLUME REMOVED (gal) ml	ELECTRICAL CONDUCTIVITY (μ mhos/cm) $\times 10^6$	PH	TEMPERATURE ($^{\circ}$ F) $^{\circ}$ C	TURBIDITY (ntu)
12:05	300 mL	69.7	6.65	17.8	0.55

NOTES:

SAMPLING DATA SHEET

JOB #: 97066.00

JOB LOCATION: Sausage Fact.

DATE PURGED: 6-28-08

PURGE METHOD: submersible pump

DATE & TIME SAMPLED: 6-28 14:55

SAMPLING LOCATION: MW-6

SAMPLING METHOD: boiler

DEPTH TO WATER: 5.83

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 20.1'

PRESERVATIVES: HCL

WELL CASING VOLUME: $14.27 \times (0.14) = 2.283$

OF CONTAINERS: 6 VOAs

CASING VOLUMES PURGED: 4

FIELD TECH: MLC

PURGE RATE:

WEATHER CONDITIONS: ~~overcast~~ sunny

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY ($\mu\text{mhos/cm}$) $\times 1000$	PH	TEMPERATURE 72 °C	TURBIDITY (ntu)
14:44	0	21.6	7.08	21.4	5.33
14:46	2.3	13.26	7.04	21.0	0.46
14:48	2.3	6.88	7.06	21.6	0.38
14:49	2.3	14.11	6.96	21.3	0.24
14:51	2.3	14.58	7.02	21.3	0.07

NOTES:

JOB #: 70-97066-01

SAMPLING DATA SHEET

JOB LOCATION: Sausage Fact.

DATE PURGED: 6-16-02

PURGE METHOD: Submersible pump

DATE & TIME SAMPLED: 6-14 16:30

SAMPLING LOCATION: MW-7

SAMPLING METHOD: Butler

DEPTH TO WATER: 6.94

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 20.0

PRESERVATIVES: HCL

WELL CASING VOLUME: $13.06 \times (0.16) = 2.08$

OF CONTAINERS: 6 VOA

CASING VOLUMES PURGED: 4

FIELD TECH: MK

PURGE RATE:

WEATHER CONDITIONS: ~~Overcast~~ sunny

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY ($\mu\text{mhos/cm}$) ^{x10³}	PH	TEMPERATURE (°F) °C	TURBIDITY (ntu)
16:10	0	10.26	7.19	20.0	3.84
16:13	2.0	9.83	7.15	19.8	0.07
16:15	2.0	10.04	7.18	19.7	0.05
16:16	2.0	9.90	7.21	19.1	0.05
16:18	2.0	9.80	7.23	19.0	0.06

NOTES:

SAMPLING DATA SHEET

JOB #: 70-97046.00

JOB LOCATION: Sausage Fact.

DATE PURGED: 6-18-02

SAMPLING LOCATION: mv-8

PURGE METHOD: Boiler

DEPTH TO WATER: 7.71

DATE & TIME SAMPLED: 6-18 12:55

WELL BOTTOM DEPTH: 30.0'

SAMPLING METHOD: Boiler

WELL CASING VOLUME: 12.24 x (0.14) = 1.94

SAMPLE TYPE: GRAB COMPOSITE

CASING VOLUMES PURGED: 4

PRESERVATIVES: HCL

OF CONTAINERS: 6 Vials

FIELD TECH: MLW

PURGE RATE:

WEATHER CONDITIONS: Overcast

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (µmhos/cm) <small>(at 60°)</small>	PH	TEMPERATURE (°F) <small>60°</small>	TURBIDITY (ntu)
12:27	0	13.54	7.14	16.3	0.02
12:32	2.0	13.50	7.08	15.4	0.05
12:37	2.0	13.30	7.00	15.9	0.04
12:42	2.0	13.64	7.02	16.1	0.31
12:48	2.0	14.00	7.03	16.1	0.83

NOTES:

SAMPLING DATA SHEET

JOB #: 70-97016.00

JOB LOCATION: Savage Sect.

DATE PURGED: 6-26-02

PURGE METHOD: Bailer

DATE & TIME SAMPLED: 6-28 13:30

SAMPLING LOCATION: MW-4

SAMPLING METHOD: Bailer

DEPTH TO WATER: 6.43

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 15.0'

PRESERVATIVES: HCL

WELL CASING VOLUME: 8.57 * (0.16) = 1.39

OF CONTAINERS: 6 VOA's

CASING VOLUMES PURGED: 4

FIELD TECH: MP

PURGE RATE:

WEATHER CONDITIONS: overcast

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY ($\mu\text{mhos/cm}$) ($\times 1000$)	PH	TEMPERATURE °C	TURBIDITY (ntu)
13:00	0	58.6	6.84	17.2	0.03
13:03	1.4	68.4	6.86	16.3	1.75
13:06	1.4	80.2	6.75	16.3	3.07
13:10	1.4	110.8	6.74	16.4	3.61
13:18	1.4	124.5	6.74	16.8	7.21

NOTES: Bailed Dry @ 13:10
11 4 @ 13:18

SAMPLING DATA SHEET

JOB #: 70-97066.60

JOB LOCATION: Sewage Pct.

DATE PURGED: 6-28-02

PURGE METHOD: submersible pump

DATE & TIME SAMPLED: 6-28 14:25

SAMPLING LOCATION: MW-10

SAMPLING METHOD: Bailer

DEPTH TO WATER: 5.45

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 8.75'

PRESERVATIVES: HCL

WELL CASING VOLUME: 3.10 x (0.16) = .496

OF CONTAINERS: 6 1/2

CASING VOLUMES PURGED: 4

FIELD TECH: MK

PURGE RATE:

WEATHER CONDITIONS: overcast

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (μmhos/cm)	PH	TEMPERATURE	TURBIDITY (ntu)
14:11	0	10.23	7.24	7.2 24.9	5.06
14:12	0.5	5.60	7.32	25.0	3.26
14:14	0.5	9.52	7.28	25.1	1.89
14:17	0.5	5.97	7.24	24.8	1.76
14:20	0.5	4.87	7.24	24.7	0.54

NOTES:

SAMPLING DATA SHEET

JOB LOCATION: Swage Sect.

DATE PURGED: 6-28-02

PURGE METHOD: Submersible Pump

DATE & TIME SAMPLED: 6-28 16:01

SAMPLING LOCATION: MW-11

SAMPLING METHOD: Boiler

DEPTH TO WATER: 6.35

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 15.2'

PRESERVATIVES: HCL

WELL CASING VOLUME: $8.85 \times (0.16) = 1.41$

OF CONTAINERS: 6 VOA'S

CASING VOLUMES PURGED: 4

FIELD TECH: ML

PURGE RATE:

WEATHER CONDITIONS: ~~Overcast~~ Sunny

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (μ mhos/cm ^(25°C))	PH	TEMPERATURE (°C)	TURBIDITY (ntu)
15:41	0	11.21	7.00	19.7	0.08
15:44	1.4	15.60	7.05	19.2	0.07
15:46	1.4	19.42	7.04	19.5	1.82
15:51	1.4	18.73	7.01	19.3	2.23
15:56	1.4	9.97	7.05	19.6	4.21

NOTES: Pumped Dry @ 15:47
 " " @ 15:52
 " " @ 15:56

SAMPLING DATA SHEET

JOB #: 70-97066.00

JOB LOCATION: Sausage Fact.

DATE PURGED: 6-28-00

PURGE METHOD: Submersible Pump

DATE & TIME SAMPLED: 6-28 15:35

SAMPLING LOCATION: MW-1A

SAMPLING METHOD: Bailor

DEPTH TO WATER: 6.13

SAMPLE TYPE: GRAB COMPOSITE

WELL BOTTOM DEPTH: 15.0

PRESERVATIVES: HCL

WELL CASING VOLUME: $8.87 \times (0.105) = 1.91$

OF CONTAINERS: 6 Vials

CASING VOLUMES PURGED: 4

FIELD TECH: MK

PURGE RATE:

WEATHER CONDITIONS: ~~Overcast~~ Sunny

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (μ mhos/cm) ^(x100)	PH	TEMPERATURE (μ E) °C	TURBIDITY (ntu)
15:18	0	28.0	6.79	20.6	0.89
15:20	1.4	25.7	6.92	19.5	0.10
15:23	1.4	26.2	6.94	19.3	0.02
15:25	1.4	26.2	6.98	18.8	0.03
15:27	1.4	26.1	6.96	18.3	0.02

NOTES:

JOB#: 97086.00

SAMPLING DATA SHEET

JOB LOCATION: Sewage Fact.

DATE PURGED: 6-25-02

PURGE METHOD: Submersible pump

SAMPLING LOCATION: MW-13

DATE & TIME SAMPLED: 6-26 11:30

SAMPLING METHOD: Guiler

DEPTH TO WATER: 6.21

SAMPLE TYPE: X GRAB COMPOSITE

WELL BOTTOM DEPTH: 14.3

PRESERVATIVES: HCL

WELL CASING VOLUME: 8.04 x (6.16) = 1.29

OF CONTAINERS: 6 VOA'S

CASING VOLUMES PURGED: 4

FIELD TECH: RAK

PURGE RATE:

WEATHER CONDITIONS: Overcast

TIME (24 hr)	VOLUME REMOVED (gal)	ELECTRICAL CONDUCTIVITY (μ mhos/cm) ^(25°C)	PH	TEMPERATURE (°C)	TURBIDITY (ntu)
11:02	0	10.1 10.1	6.81	18.9	2.01
11:06	1.3	5.90 5.90	6.30	14.4	1.33
11:09	1.3	9.19 9.19	7.04	19.4	0.05
11:12	1.3	8.94 8.94	7.08	19.1	0.07
11:14	1.3	8.94 8.94	7.09	19.3	0.05

NOTES:

APPENDIX F

SECOND QUARTER 2002

GROUNDWATER LABORATORY ANALYTICAL DATA REPORT

AND CHAIN-OF-CUSTODY DOCUMENTS



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

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

Date: 08-JUL-02
Lab Job Number: 159447
Project ID: 70-97066.00
Location: Sausage Factory

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

Reviewed by: Tracy Bobbitt
Project Manager

Reviewed by: [Signature]
Operations Manager

This package may be reproduced only in its entirety.

Laboratory Numbers: **159447**
Client: **Clayton Group Services**
Project #: **70-97066.00**
Location: **Sausage Factory**

Sampled Date: **06/28/02**
Received Date: **07/01/02**

CASE NARRATIVE

This hardcopy data package contains samples and QC results for ten water samples, which were received from the site referenced above on July 01, 2002. The samples were received cold and intact.

TVH/BTXE:

High Trifluorotoluene surrogate recoveries were observed for samples MW-08 02Q2 (CT# 159447-005) and MW-13 02Q2 (CT# 159447-010) as a result of hydrocarbons coeluting with the surrogate peaks. In some cases the surrogates exceeded the instrument's linear range as denoted by the "b" flag. No other analytical problems were encountered.

VOCs (EPA 8260B):

No analytical problems were encountered.



Curtis & Tompkins Laboratories Analytical Report

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/28/02
Units:	ug/L	Received:	07/01/02

Field ID:	MW-01 02Q2	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	73484
Lab ID:	159447-001	Analyzed:	07/03/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	26,000	500	8015B (M)
Benzene	3,200	5.0	EPA 8021B
Toluene	1,800	5.0	EPA 8021B
Ethylbenzene	640	5.0	EPA 8021B
m,p-Xylenes	1,700	5.0	EPA 8021B
o-Xylene	1,200	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	107	68-145	8015B (M)
Bromofluorobenzene (FID)	90	66-143	8015B (M)
Trifluorotoluene (PID)	110	53-143	EPA 8021B
Bromofluorobenzene (PID)	93	52-142	EPA 8021B

Field ID:	MW-02 02Q2	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	73484
Lab ID:	159447-002	Analyzed:	07/03/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	8,400	500	8015B (M)
Benzene	2,200	5.0	EPA 8021B
Toluene	680	5.0	EPA 8021B
Ethylbenzene	21	5.0	EPA 8021B
m,p-Xylenes	30	5.0	EPA 8021B
o-Xylene	190	5.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	68-145	8015B (M)
Bromofluorobenzene (FID)	93	66-143	8015B (M)
Trifluorotoluene (PID)	103	53-143	EPA 8021B
Bromofluorobenzene (PID)	94	52-142	EPA 8021B

*= Value outside of QC limits; see narrative

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits fuel pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

b= See narrative

ND= Not Detected

RL= Reporting Limit

LR= Response exceeds instrument's linear range

Curtis & Tompkins Laboratories Analytical Report

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/28/02
Units:	ug/L	Received:	07/01/02

Field ID:	MW-06 02Q2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	73447
Lab ID:	159447-003	Analyzed:	07/02/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	120 H Y	50	8015B (M)
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)	85	68-145	8015B (M)
Bromofluorobenzene (FID)	90	66-143	8015B (M)
Trifluorotoluene (PID)	98	53-143	EPA 8021B
Bromofluorobenzene (PID)	95	52-142	EPA 8021B

Field ID:	MW-07 02Q2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	73447
Lab ID:	159447-004	Analyzed:	07/02/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B (M)
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)	84	68-145	8015B (M)
Bromofluorobenzene (FID)	86	66-143	8015B (M)
Trifluorotoluene (PID)	96	53-143	EPA 8021B
Bromofluorobenzene (PID)	94	52-142	EPA 8021B

*= Value outside of QC limits; see narrative

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits fuel pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

b= See narrative

ND= Not Detected

RL= Reporting Limit

LR= Response exceeds instrument's linear range

Curtis & Tompkins Laboratories Analytical Report

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/28/02
Units:	ug/L	Received:	07/01/02

Field ID:	MW-08 02Q2	Lab ID:	159447-005
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	Analysis
Gasoline C7-C12	2,200 Y	50	1.000	73447	07/02/02	8015B(M)
Benzene	410	1.0	2.000	73484	07/03/02	EPA 8021B
Toluene	ND	1.0	2.000	73484	07/03/02	EPA 8021B
Ethylbenzene	40	1.0	2.000	73484	07/03/02	EPA 8021B
m,p-Xylenes	ND	1.0	2.000	73484	07/03/02	EPA 8021B
o-Xylene	ND	1.0	2.000	73484	07/03/02	EPA 8021B

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	290 *	>LR b 68-145	1.000	73447	07/02/02	8015B(M)
Bromofluorobenzene (FID)	94	66-143	1.000	73447	07/02/02	8015B(M)
Trifluorotoluene (PID)	159 *	53-143	2.000	73484	07/03/02	EPA 8021B
Bromofluorobenzene (PID)	93	52-142	2.000	73484	07/03/02	EPA 8021B

Field ID:	MW-09 02Q2	Diln Fac:	50.00
Type:	SAMPLE	Batch#:	73484
Lab ID:	159447-006	Analyzed:	07/03/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	60,000	2,500	8015B(M)
Benzene	5,800	25	EPA 8021B
Toluene	7,400	25	EPA 8021B
Ethylbenzene	1,100	25	EPA 8021B
m,p-Xylenes	4,200	25	EPA 8021B
o-Xylene	1,200	25	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	90	68-145	8015B(M)
Bromofluorobenzene (FID)	90	66-143	8015B(M)
Trifluorotoluene (PID)	95	53-143	EPA 8021B
Bromofluorobenzene (PID)	91	52-142	EPA 8021B

*= Value outside of QC limits; see narrative

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits fuel pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

b= See narrative

ND= Not Detected

RL= Reporting Limit

>LR= Response exceeds instrument's linear range

Curtis & Tompkins Laboratories Analytical Report

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/28/02
Units:	ug/L	Received:	07/01/02

Field ID:	MW-10 02Q2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	73484
Lab ID:	159447-007	Analyzed:	07/03/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B (M)
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)	83	68-145	8015B (M)
Bromofluorobenzene (FID)	93	66-143	8015B (M)
Trifluorotoluene (PID)	90	53-143	EPA 8021B
Bromofluorobenzene (PID)	91	52-142	EPA 8021B

Field ID:	MW-11 02Q2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	73447
Lab ID:	159447-008	Analyzed:	07/02/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B (M)
Benzene	7.7	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)	84	68-145	8015B (M)
Bromofluorobenzene (FID)	105	66-143	8015B (M)
Trifluorotoluene (PID)	95	53-143	EPA 8021B
Bromofluorobenzene (PID)	94	52-142	EPA 8021B

*= Value outside of QC limits; see narrative

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits fuel pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

b= See narrative

ND= Not Detected

RL= Reporting Limit

LR= Response exceeds instrument's linear range

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Curtis & Tompkins Laboratories Analytical Report

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/28/02
Units:	ug/L	Received:	07/01/02

Field ID:	MW-12 02Q2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	73447
Lab ID:	159447-009	Analyzed:	07/03/02

Analyte	Result	RL	Analysis
Gasoline C7-C12	71 Y Z	50	8015B (M)
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)	85	68-145	8015B (M)
Bromofluorobenzene (FID)	103	66-143	8015B (M)
Trifluorotoluene (PID)	100	53-143	EPA 8021B
Bromofluorobenzene (PID)	96	52-142	EPA 8021B

Field ID:	MW-13 02Q2	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	07/03/02
Lab ID:	159447-010		

Analyte	Result	RL	Batch#	Analysis
Gasoline C7-C12	5,600	50	73447	8015B (M)
Benzene	120	0.50	73484	EPA 8021B
Toluene	55 C	0.50	73484	EPA 8021B
Ethylbenzene	130	0.50	73484	EPA 8021B
m,p-Xylenes	9.5 C	0.50	73484	EPA 8021B
o-Xylene	ND	0.50	73484	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analysis
Trifluorotoluene (FID)	542 *	>LR b 68-145	73447	8015B (M)
Bromofluorobenzene (FID)	114	66-143	73447	8015B (M)
Trifluorotoluene (PID)	503 *	>LR b 53-143	73484	EPA 8021B
Bromofluorobenzene (PID)	104	52-142	73484	EPA 8021B

*= Value outside of QC limits; see narrative

C= Presence confirmed, but confirmation concentration differed by more than a factor of two

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits fuel pattern which does not resemble standard

Z= Sample exhibits unknown single peak or peaks

b= See narrative

ND= Not Detected

RL= Reporting Limit

LR= Response exceeds instrument's linear range

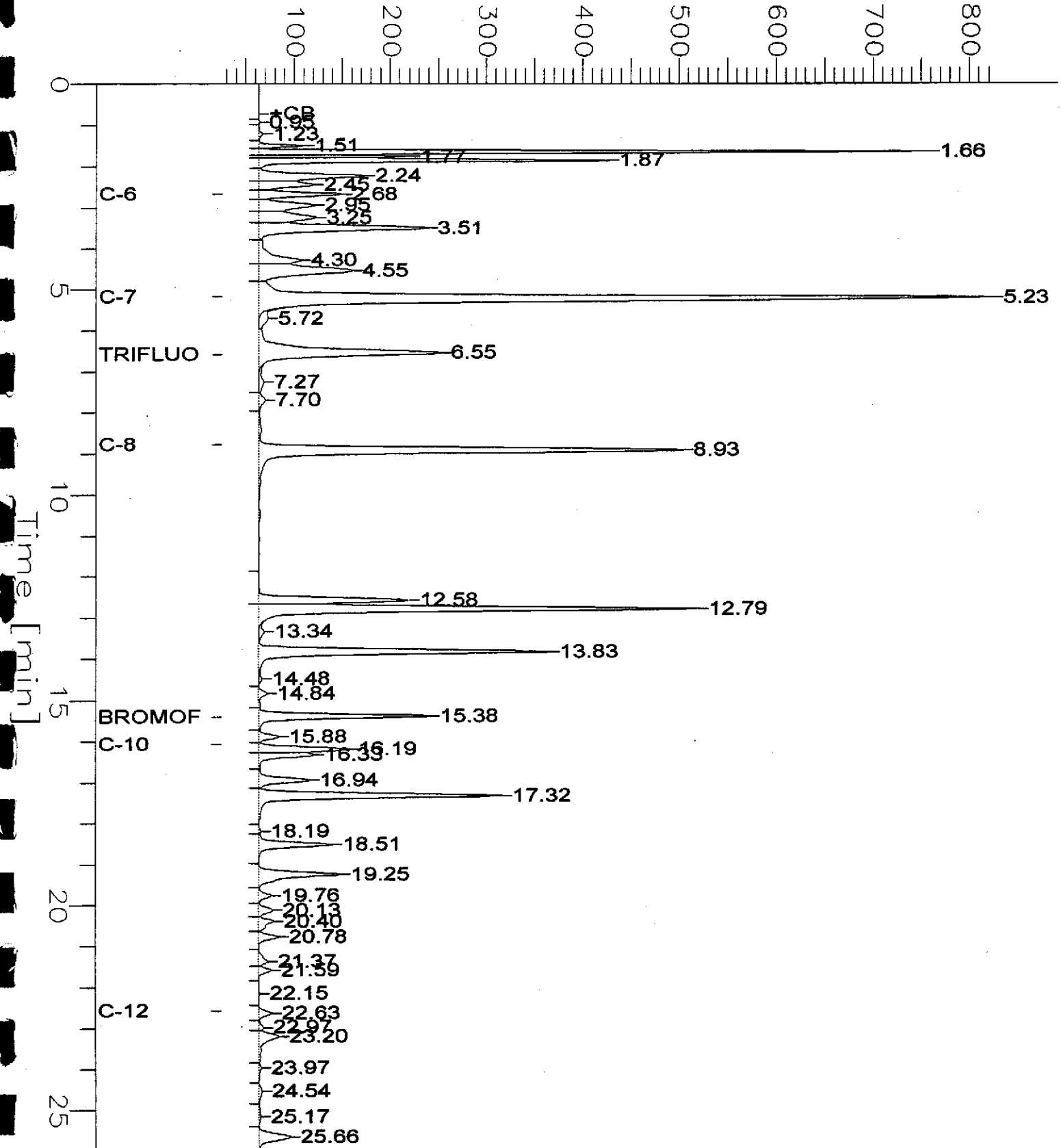
GC04 TVH 'J' Data File FID

Sample Name : 159447-001,73484 **MW-1**
 FileName : G:\GC04\DATA\184J012.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor: 1.0

End Time : 26.00 min
 Plot Offset: 25 mV

Sample #: d1
 Date : 7/3/02 07:09 PM
 Time of Injection: 7/3/02 06:42 PM
 Low Point : 25.39 mV
 Plot Scale: 799.8 mV
 High Point : 825.16 mV

Response [mV]



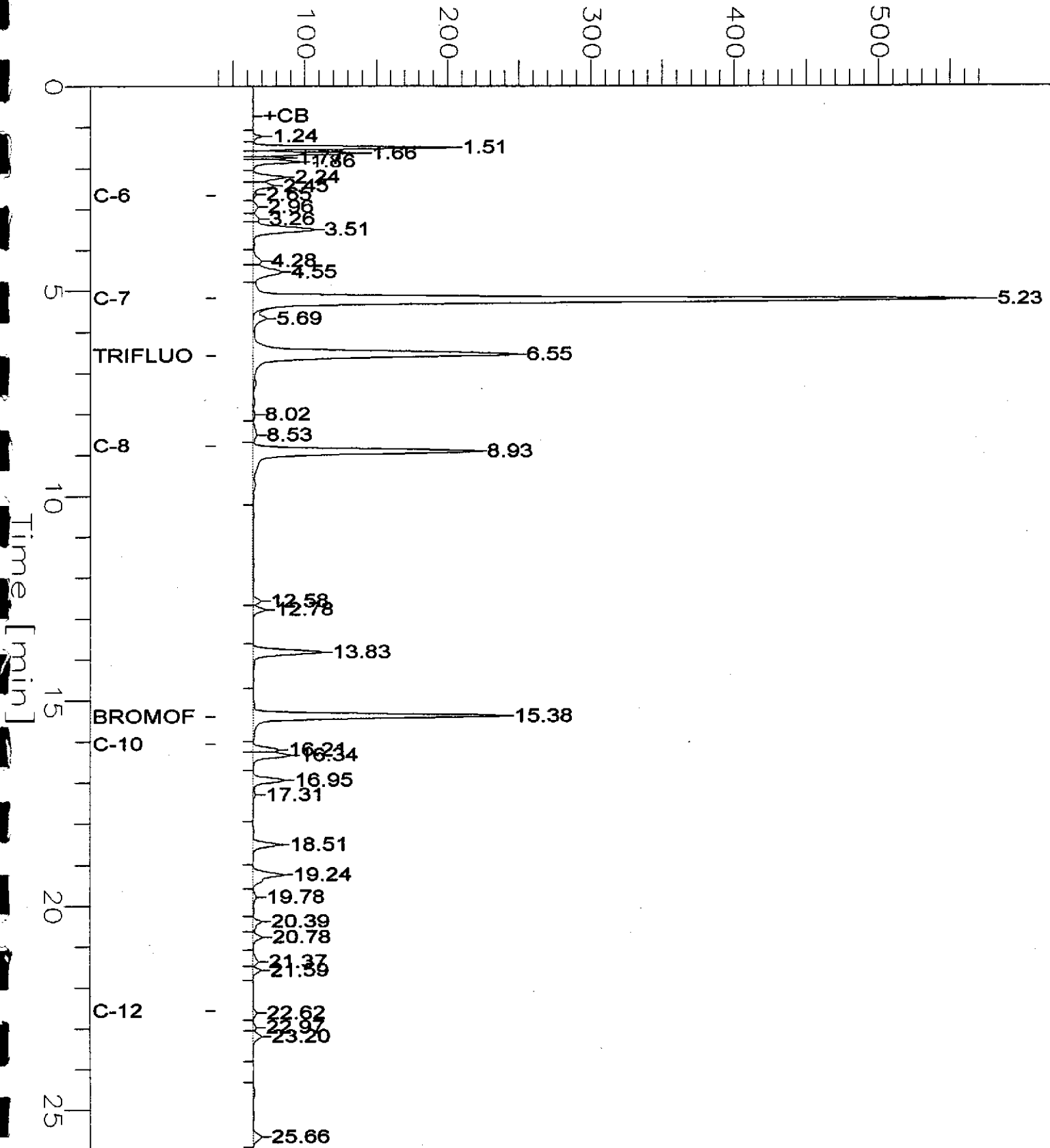
GC04 TVH 'J' Data File FID

Sample Name : 159447-002,73484 MW-2
FileName : G:\GC04\DATA\184J013.raw
Method : TVHBTXE
Start Time : 0.00 min
Scale Factor : 1.0

End Time : 26.00 min
Plot Offset : 38 mV

Sample #: d1
Date : 7/3/02 07:44 PM
Time of Injection: 7/3/02 07:18 PM
Low Point : 38.02 mV
High Point : 576.01 mV
Plot Scale : 538.0 mV

Response [mV]



GC04 TVH 'J' Data File FID

Sample Name : 159447-003,73447 **MW-6**

Sample #: b1

Page 1 of 1

FileName : G:\GC04\DATA\183J010.raw

Date : 7/2/02 05:48 PM

Method : TVHBTXE

Time of Injection: 7/2/02 05:22 PM

Start Time : 0.00 min End Time : 26.00 min

Low Point : 54.18 mV

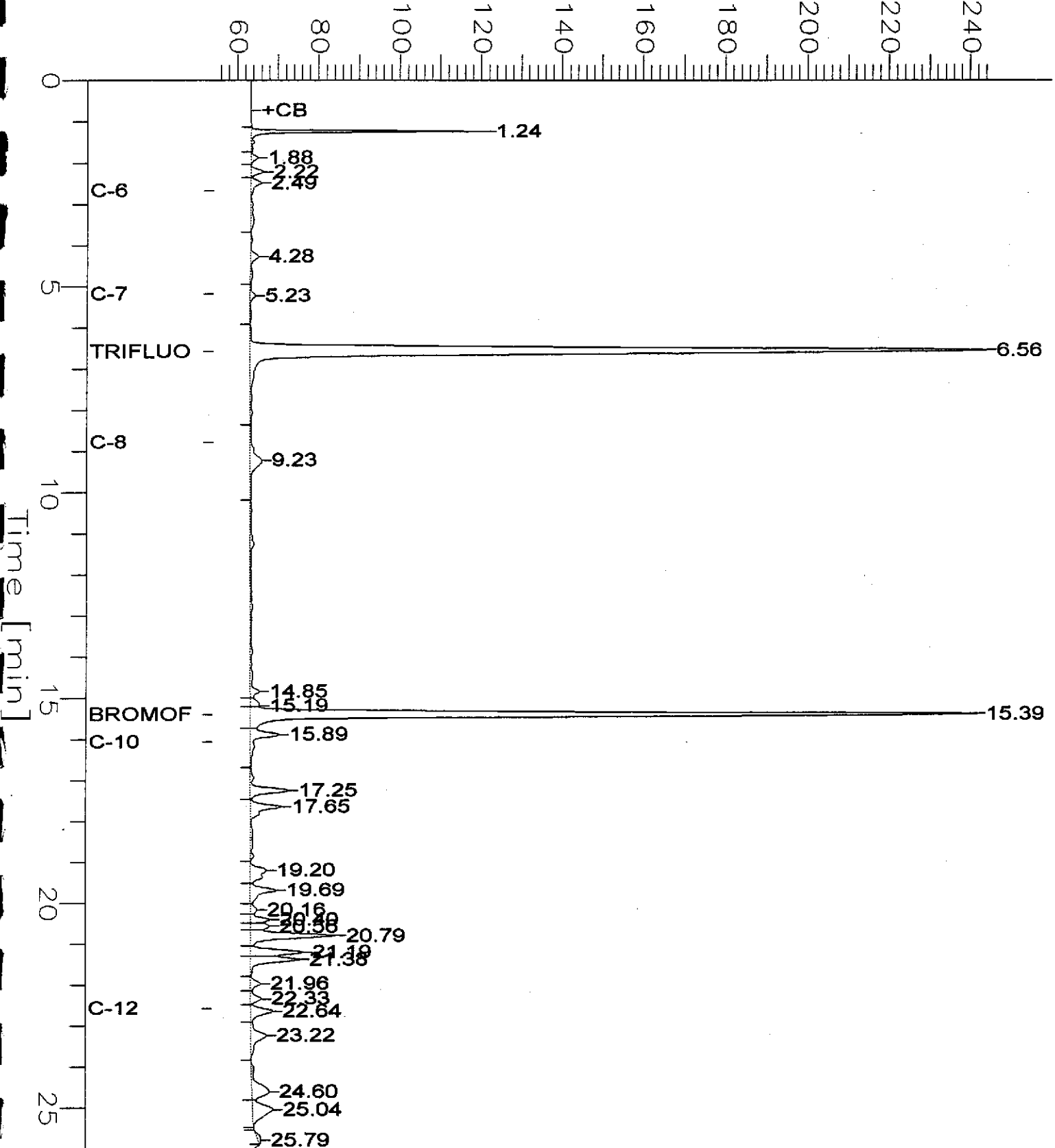
High Point : 244.10 mV

Scale Factor: 1.0

Plot Offset: 54 mV

Plot Scale: 189.9 mV

Response [mV]

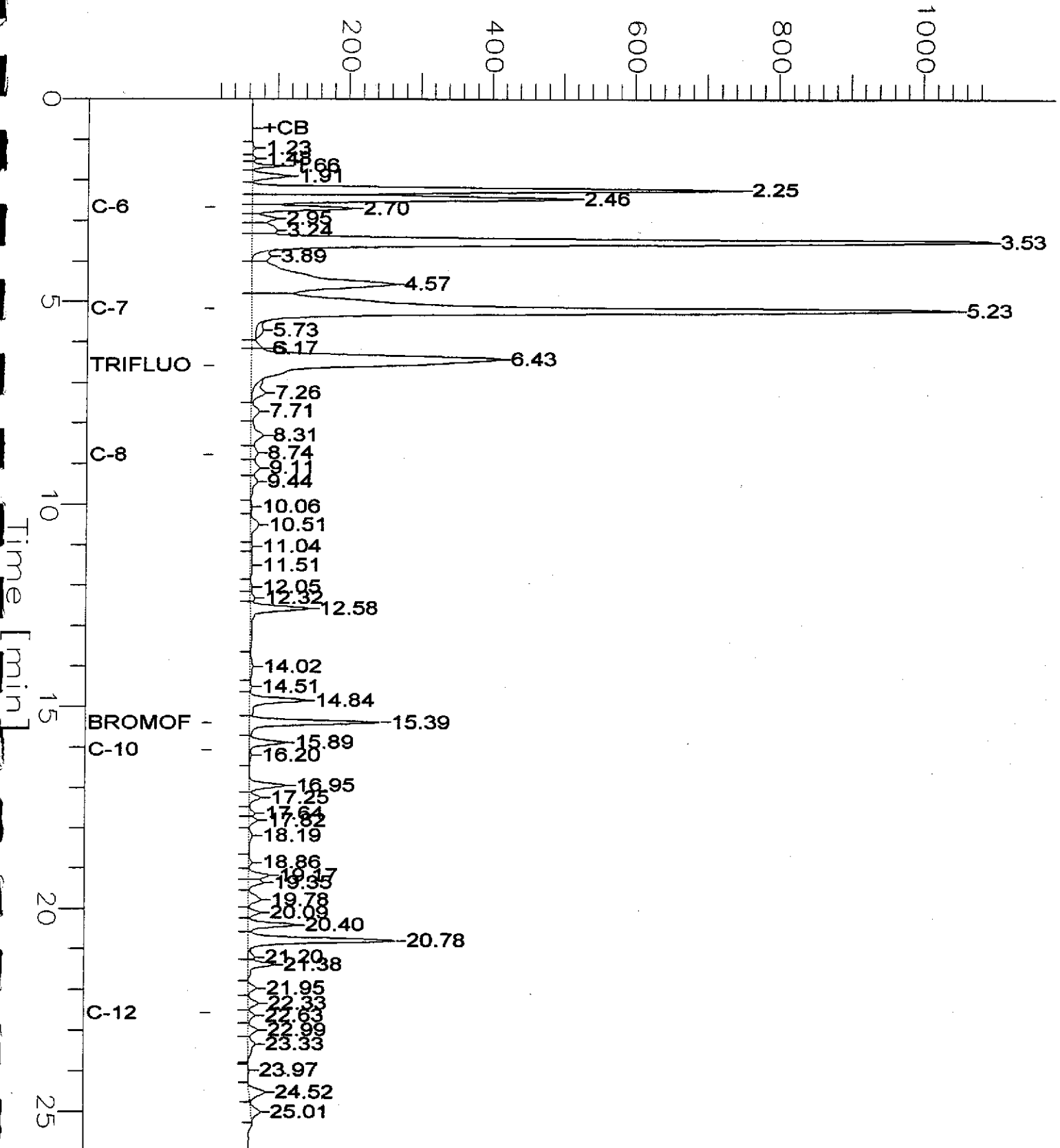


GC04 TVH 'J' Data File FID

Sample Name : 159447-005,73447 **MW-8**
 FileName : G:\GC04\DATA\183J018.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor : 1.0

Sample #: b1
 Date : 7/3/02 09:24 AM
 Time of Injection: 7/2/02 10:07 PM
 Low Point : 12.22 mV
 High Point : 1094.37 mV
 End Time : 26.00 min
 Plot Offset: 12 mV
 Plot Scale: 1082.2 mV

Response [mV]



GC04 TVH 'J' Data File FID

Sample Name : 159447-006,73484 Mw-9
FileName : G:\GC04\DATA\184J010.raw
Method : TVHBTXE
Start Time : 0.00 min
Scale Factor: 1.0

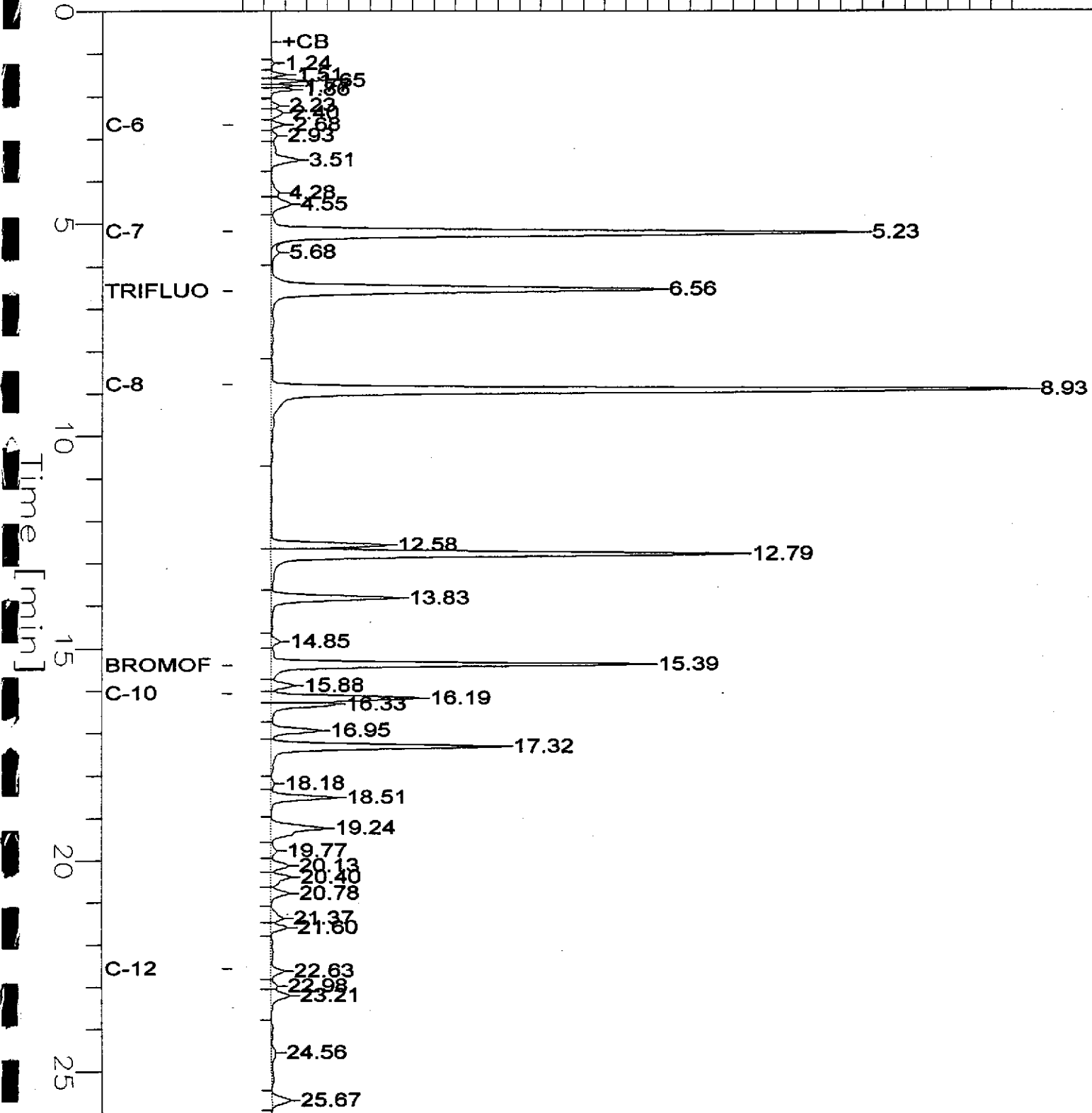
End Time : 26.00 min
Plot Offset: 46 mV

Sample #: d1
Date : 7/3/02 05:57 PM
Time of Injection: 7/3/02 05:31 PM
Low Point : 45.57 mV
Plot Scale: 373.3 mV
High Point : 418.82 mV

Page 1 of 1

Response [mV]

50 100 150 200 250 300 350 400



GC04 TVH 'J' Data File FID

Sample Name : 159447-009,73447

MW-12

Sample #: b1

Page 1 of 1

FileName : G:\GC04\DATA\183J022.raw

Date : 7/3/02 12:56 AM

Method : TVHBTXE

Time of Injection: 7/3/02 12:30 AM

Start Time : 0.00 min

End Time : 26.00 min

Low Point : 55.04 mV

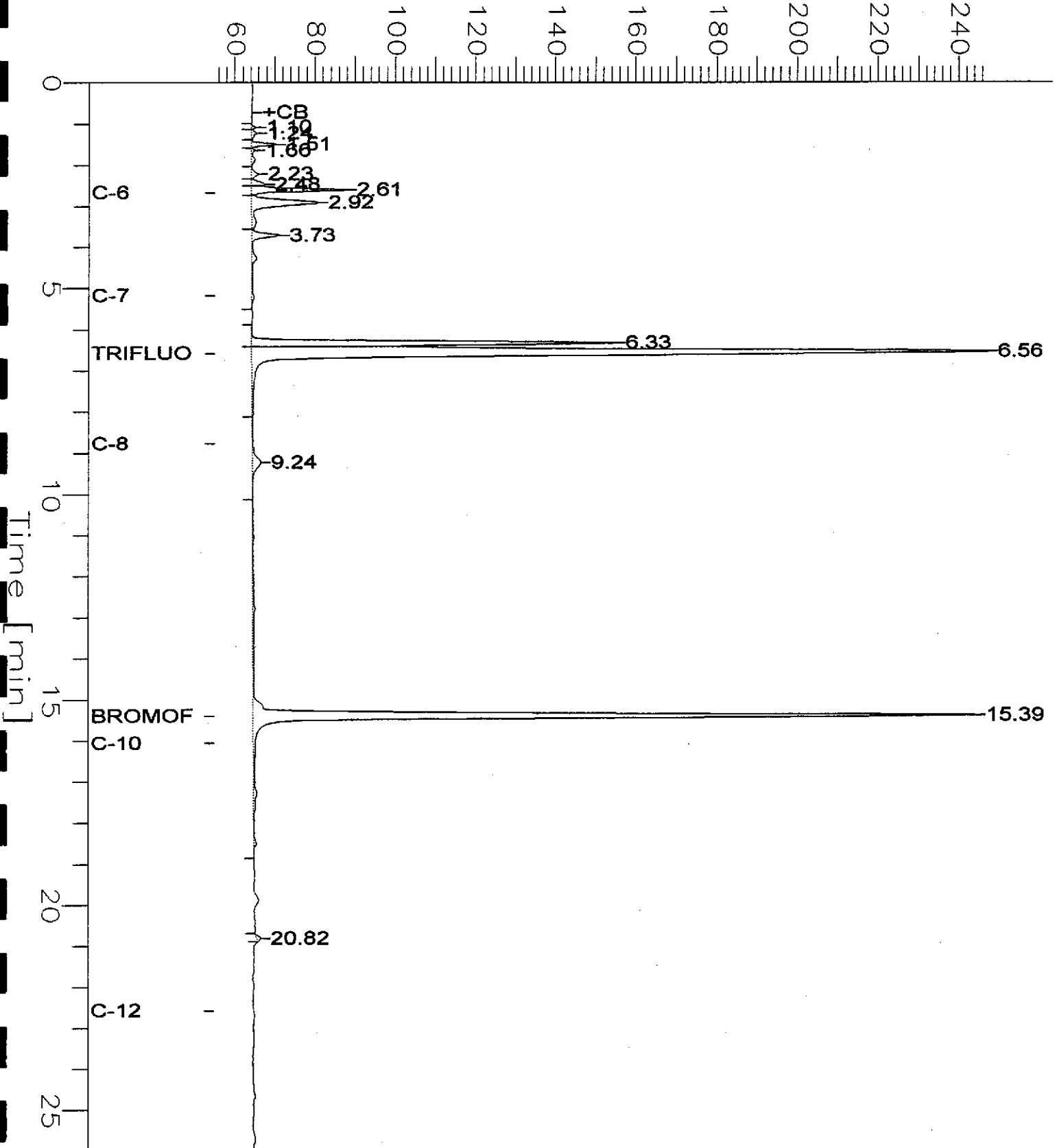
High Point : 247.34 mV

Scale Factor: 1.0

Plot Offset: 55 mV

Plot Scale: 192.3 mV

Response [mV]



GC04 TVH 'J' Data File FID

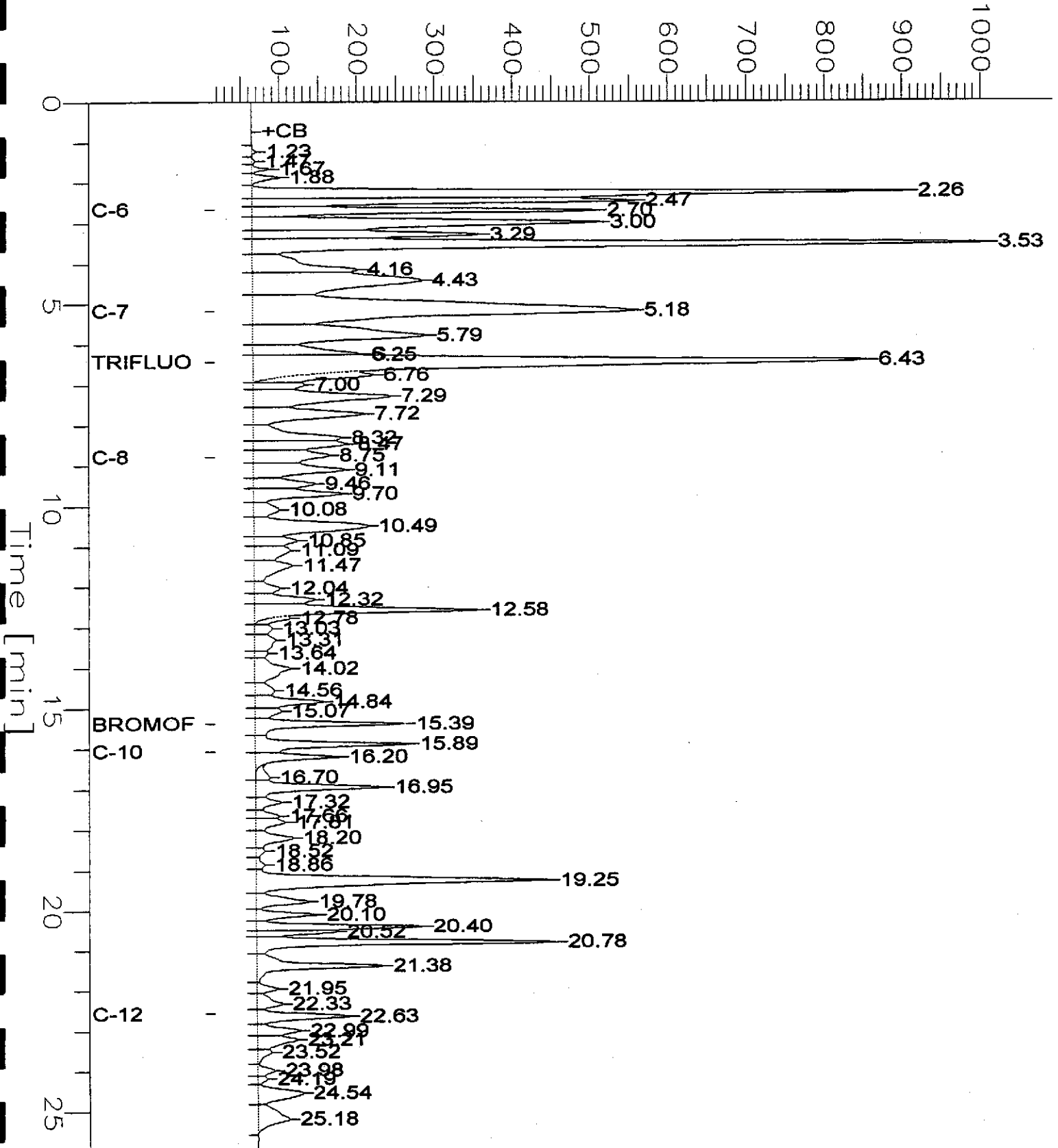
Sample Name : 159447-010,73447 **MW-13**
 FileName : G:\GC04\DATA\183J023.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor : 1.0

End Time : 26.00 min
 Plot Offset : 17 mV

Sample #: b1
 Date : 7/3/02 09:31 AM
 Time of Injection: 7/3/02 01:06 AM
 Low Point : 16.99 mV
 Plot Scale : 993.0 mV
 High Point : 1009.99 mV

Page 1 of 1

Response [mV]

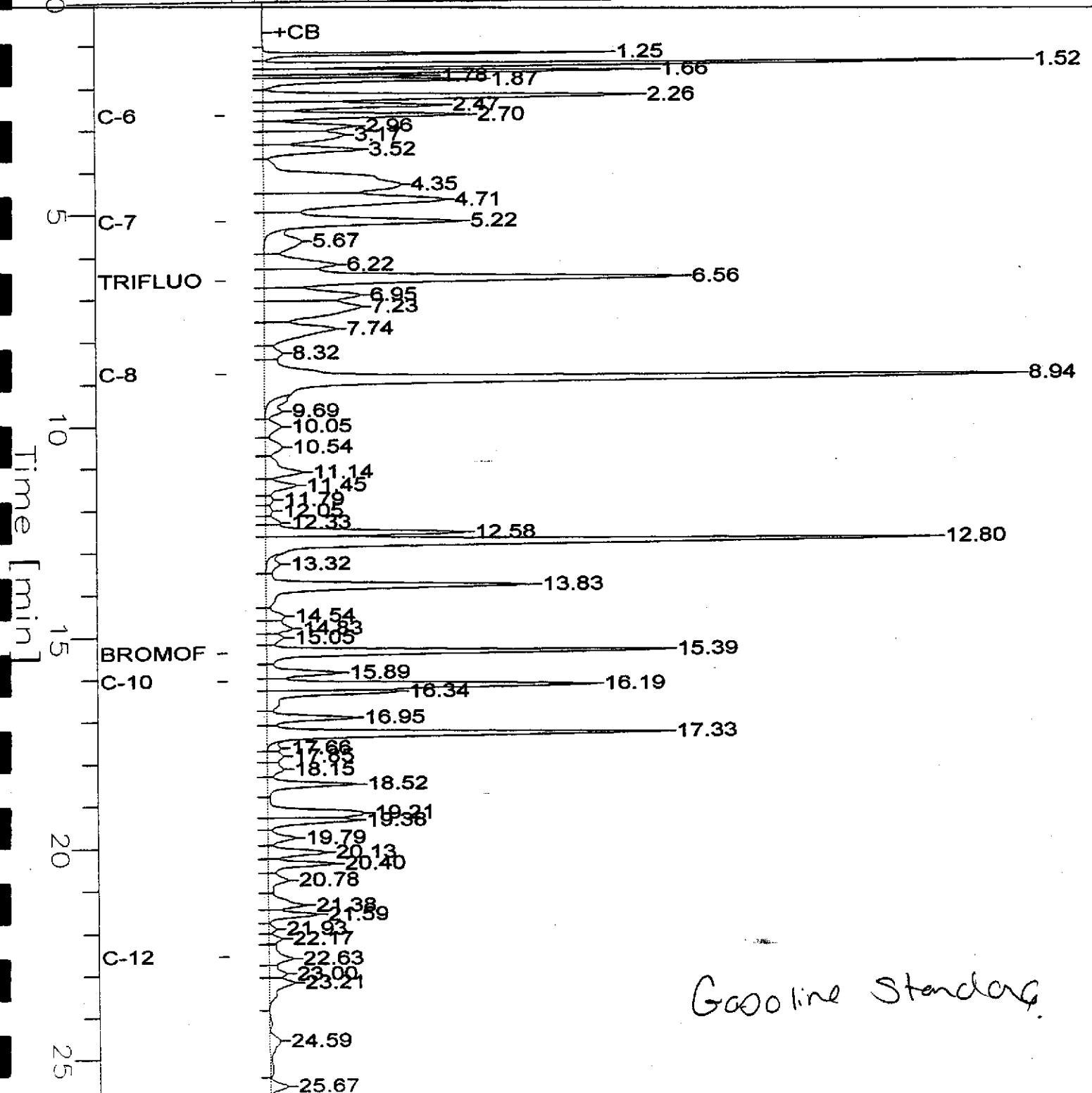
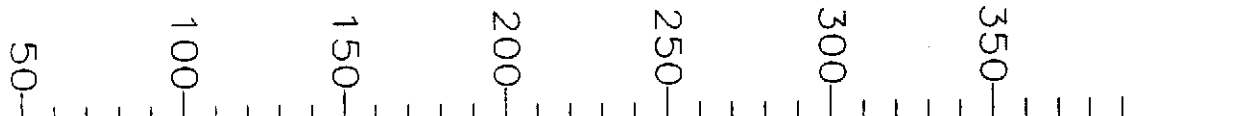


GC04 TVH 'J' Data File FID

Sample Name : ccv/lcs,qc182893,73447,02ws1033,5/5000
 File Name : G:\GC04\DATA\183J003.raw
 Method : TVHBTXE
 Start Time : 0.00 min
 Scale Factor : 1.0

Sample # :
 Date : 7/2/02 01:25 PM
 Time of Injection : 7/2/02 12:59 PM
 Low Point : 46.50 mV
 Plot Scale : 350.7 mV
 End Time : 26.00 min
 Plot Offset : 46 mV
 High Point : 397.20 mV

Response [mV]



Gasoline Standard

Curtis & Tompkins Laboratories Analytical Report

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00		
Matrix:	Water	Sampled:	06/28/02
Units:	ug/L	Received:	07/01/02

Type:	BLANK	Batch#:	73447
Lab ID:	QC182892	Analyzed:	07/02/02
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B (M)
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)	88	68-145	8015B (M)
Bromofluorobenzene (FID)	86	66-143	8015B (M)
Trifluorotoluene (PID)	98	53-143	EPA 8021B
Bromofluorobenzene (PID)	94	52-142	EPA 8021B

Type:	BLANK	Batch#:	73484
Lab ID:	QC183035	Analyzed:	07/03/02
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	8015B (M)
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)	83	68-145	8015B (M)
Bromofluorobenzene (FID)	82	66-143	8015B (M)
Trifluorotoluene (PID)	91	53-143	EPA 8021B
Bromofluorobenzene (PID)	86	52-142	EPA 8021B

*= Value outside of QC limits; see narrative
 C= Presence confirmed, but confirmation concentration differed by more than a factor of two
 H= Heavier hydrocarbons contributed to the quantitation
 Y= Sample exhibits fuel pattern which does not resemble standard
 Z= Sample exhibits unknown single peak or peaks
 b= See narrative
 ND= Not Detected
 RL= Reporting Limit
 >LR= Response exceeds instrument's linear range

Total Volatile Hydrocarbons

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B (M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC182893	Batch#:	73447
Matrix:	Water	Analyzed:	07/02/02
Units:	ug/L		

Analyte	Spiked	Result	*REC	Limits
Gasoline C7-C12	2,000	2,001	100	79-120

Surrogate	*REC	Limits
Trifluorotoluene (FID)	96	68-145
Bromofluorobenzene (FID)	90	66-143

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC182894	Batch#:	73447
Matrix:	Water	Analyzed:	07/02/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	21.48	107	65-122
Toluene	20.00	22.57	113	67-121
Ethylbenzene	20.00	21.57	108	70-121
m,p-Xylenes	40.00	41.48	104	72-125
o-Xylene	20.00	21.13	106	73-122

Surrogate	%REC	Limits
Trifluorotoluene (PID)	101	53-143
Bromofluorobenzene (PID)	96	52-142

Total Volatile Hydrocarbons

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B(M)
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC183036	Batch#:	73484
Matrix:	Water	Analyzed:	07/03/02
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,098	105	79-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	68-145
Bromofluorobenzene (FID)	91	66-143

Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	73484
Units:	ug/L	Analyzed:	07/03/02
Diln Fac:	1.000		

Type: BS Lab ID: QC183037

Analyte	Spiked	Result	%REC	Limits
Benzene	20.00	17.12	86	65-122
Toluene	20.00	17.51	88	67-121
Ethylbenzene	20.00	17.54	88	70-121
m,p-Xylenes	40.00	34.92	87	72-125
o-Xylene	20.00	17.59	88	73-122

Surrogate	%REC	Limits
Trifluorotoluene (PID)	87	53-143
Bromofluorobenzene (PID)	87	52-142

Type: BSD Lab ID: QC183038

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	18.79	94	65-122	9	20
Toluene	20.00	19.22	96	67-121	9	20
Ethylbenzene	20.00	19.58	98	70-121	11	20
m,p-Xylenes	40.00	38.16	95	72-125	9	20
o-Xylene	20.00	19.24	96	73-122	9	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	94	53-143
Bromofluorobenzene (PID)	91	52-142



Benzene, Toluene, Ethylbenzene, Xylenes

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8021B
Field ID:	ZZZZZZZZZZ	Batch#:	73447
MSS Lab ID:	159450-001	Sampled:	07/02/02
Matrix:	Water	Received:	07/02/02
Units:	ug/L	Analyzed:	07/02/02
Diln Fac:	1.000		

Type: MS Lab ID: QC182895

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.4200	20.00	20.00	100	52-149
Toluene	<0.4100	20.00	21.23	106	69-130
Ethylbenzene	<0.1700	20.00	20.33	102	70-131
m,p-Xylenes	<0.3300	40.00	38.57	96	68-137
o-Xylene	<0.2000	20.00	20.00	100	73-133

Surrogate	%REC	Limits
Trifluorotoluene (PID)	100	53-143
Bromofluorobenzene (PID)	98	52-142

Type: MSD Lab ID: QC182896

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	20.00	20.41	102	52-149	2	30
Toluene	20.00	20.70	104	69-130	3	30
Ethylbenzene	20.00	19.95	100	70-131	2	30
m,p-Xylenes	40.00	38.01	95	68-137	1	30
o-Xylene	20.00	19.45	97	73-133	3	30

Surrogate	%REC	Limits
Trifluorotoluene (PID)	101	53-143
Bromofluorobenzene (PID)	95	52-142

Total Volatile Hydrocarbons

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	8015B(M)
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	159477-001	Batch#:	73484
Matrix:	Water	Sampled:	07/02/02
Units:	ug/L	Received:	07/02/02

Type: MS Analyzed: 07/03/02
 Lab ID: QC183039

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-Cl2	<33.00	2,000	1,856	93	67-120
Surrogate	%REC		Limits		
Trifluorotoluene (FID)	97	68-145			
Bromofluorobenzene (FID)	91	66-143			

Type: MSD Analyzed: 07/04/02
 Lab ID: QC183040

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-Cl2	2,000	1,880	94	67-120	1	20
Surrogate	%REC		Limits			
Trifluorotoluene (FID)	96	68-145				
Bromofluorobenzene (FID)	92	66-143				

Purgeable Halocarbons by GC/MS

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-01 02Q2	Batch#:	73502
Lab ID:	159447-001	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	ND	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	ND	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	ND	3.1
Chloroform	ND	6.3
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	ND	3.1
Trichloroethene	ND	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	101	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-02 02Q2	Batch#:	73502
Lab ID:	159447-002	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	ND	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	ND	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	ND	3.1
Chloroform	ND	6.3
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	8.8	3.1
Trichloroethene	ND	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	100	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-06 02Q2	Batch#:	73472
Lab ID:	159447-003	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/03/02
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	0.6	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	SRRC	Limits
1,2-Dichloroethane-d4	111	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-07 02Q2	Batch#:	73472
Lab ID:	159447-004	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/03/02
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	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-08 02Q2	Batch#:	73502
Lab ID:	159447-005	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	6.250		

Analyte	Result	RL
Chloromethane	ND	6.3
Vinyl Chloride	80	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	54	3.1
1,1-Dichloroethane	ND	3.1
cis-1,2-Dichloroethene	900	3.1
Chloroform	ND	6.3
1,1,1-Trichloroethane	ND	3.1
Carbon Tetrachloride	ND	3.1
1,2-Dichloroethane	4.9	3.1
Trichloroethene	18	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	103	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-09 02Q2	Batch#:	73502
Lab ID:	159447-006	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	25.00		

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

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-10 02Q2	Batch#:	73472
Lab ID:	159447-007	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/03/02
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	MREC	Limits
1,2-Dichloroethane-d4	109	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-11 02Q2	Batch#:	73472
Lab ID:	159447-008	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Freon 113	ND	1.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	0.6	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	106	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Halocarbons by GC/MS

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-12 02Q2	Batch#:	73472
Lab ID:	159447-009	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	1.000		

Analyte	Result	RL
Chloromethane	ND	1.0
Vinyl Chloride	0.9	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	47	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	42	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	170	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	MRSL	Limits
1,2-Dichloroethane-d4	110	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-120

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

Purgeable Halocarbons by GC/MS

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Field ID:	MW-13 02Q2	Batch#:	73502
Lab ID:	159447-010	Sampled:	06/28/02
Matrix:	Water	Received:	07/01/02
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	2.500		

Analyte	Result	RL
Chloromethane	ND	2.5
Vinyl Chloride	4.4	1.3
Bromomethane	ND	2.5
Chloroethane	ND	2.5
Trichlorofluoromethane	ND	2.5
Freon 113	ND	2.5
1,1-Dichloroethene	4.7	1.3
Methylene Chloride	ND	50
trans-1,2-Dichloroethene	14	1.3
1,1-Dichloroethane	ND	1.3
cis-1,2-Dichloroethene	430	1.3
Chloroform	ND	2.5
1,1,1-Trichloroethane	ND	1.3
Carbon Tetrachloride	ND	1.3
1,2-Dichloroethane	ND	1.3
Trichloroethene	61	1.3
1,2-Dichloropropane	ND	1.3
Bromodichloromethane	ND	1.3
cis-1,3-Dichloropropene	ND	1.3
trans-1,3-Dichloropropene	ND	1.3
1,1,2-Trichloroethane	ND	1.3
Tetrachloroethene	ND	1.3
Dibromochloromethane	ND	1.3
Chlorobenzene	ND	1.3
Bromoform	ND	1.3
1,1,2,2-Tetrachloroethane	ND	1.3
1,3-Dichlorobenzene	ND	1.3
1,4-Dichlorobenzene	ND	1.3
1,2-Dichlorobenzene	ND	1.3

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected

L= Reporting Limit

Purgeable Halocarbons by GC/MS

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC182994	Batch#:	73472
Matrix:	Water	Analyzed:	07/03/02
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	*RRC	Limits
1,2-Dichloroethane-d4	103	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	108	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC183098	Batch#:	73502
Matrix:	Water	Analyzed:	07/04/02
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	RSC	Limite
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-120

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

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	73472
Units:	ug/L	Analyzed:	07/03/02
Diln Fac:	1.000		

Type: BS Lab ID: QC182991

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	50.50	101	71-131
Trichloroethene	50.00	54.29	109	78-120
Chlorobenzene	50.00	48.85	98	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	107	77-130
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC182992

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	47.50	95	71-131	6	20
Trichloroethene	50.00	52.58	105	78-120	3	20
Chlorobenzene	50.00	46.45	93	80-120	5	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-120

Purgeable Halocarbons by GC/MS

Lab #:	159447	Location:	Sausage Factory
Client:	Clayton Group Services	Prep:	EPA 5030B
Project#:	70-97066.00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	73502
Units:	ug/L	Analyzed:	07/04/02
Diln Fac:	1.000		

Type: BS Lab ID: QC183096

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	46.22	92	71-131
Trichloroethene	50.00	51.39	103	78-120
Chlorobenzene	50.00	46.19	92	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	77-130
Toluene-d8	103	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC183097

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	50.00	44.47	89	71-131	4	20
Trichloroethene	50.00	50.22	100	78-120	2	20
Chlorobenzene	50.00	45.56	91	80-120	1	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	77-130
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120



CHAIN OF CUSTODY

Lab: Curtis&Tompkins

TAT: Standard

159447

Report results to:

Name: Warren Chamberlain
 Company: Clayton Group Services
 Mailing Address: 6920 Koll Center Parkway, Ste. 216
 City, State, Zip: Pleasanton, California 94566
 Telephone No.: (925) 426-2600
 Fax No.: (925) 426-0106
 E-mail: wchamberlain@claytongrp.com

Project Information

Project No.: 70-97066.00
 Name: Sausage Factory
 Location: 630 29th Avenue, Oakland
 Global Id: T0600102114
 Log code: CGSP

Special instructions and/or specific regulatory requirements:

Analyses Requested

Sample Identification	Sample Date	Sample Time	Matrix Media	Vol. (Gals)	Analyses Requested										Sample Condition/Comments	Preservative	
					TPH as Gasoline/BTEX												
MW-01 02Q2	6/28	-	L	6	X	X											HCI
MW-02 02Q2			L	6	X	X											HCI
MW-06 02Q2			L	6	X	X											HCI
MW-07 02Q2			L	6	X	X											HCI
MW-08 02Q2			L	6	X	X											HCI
MW-09 02Q2			L	6	X	X											HCI
MW-10 02Q2			L	6	X	X											HCI
MW-11 02Q2			L	6	X	X											HCI
MW-12 02Q2			L	6	X	X											HCI
MW-13 02Q2			L	6	X	X											HCI

Collected by: Mike Krzeminski Date/Time 6/28
 Relinquished by: [Signature] Date/Time 7/1
 Relinquished by: _____ Date/Time _____
 Method of Shipment: _____

Collector's Signature: [Signature] Date/Time 8/1/03
 Received by: [Signature] Date/Time 8/7/03
 Received by: _____ Date/Time _____
 Sample Condition on Rept: _____

rec'd intact in ice