Groundwater Monitoring Report
Spring 2006 Semiannual Sampling Event
Municipal Service Center
7101 Edgewater Drive
Oakland, California

May 19, 2006
001-09225-21

Prepared for:
City of Oakland, Public Works Agency
Environmental Services Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California

LFR

LFR ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

May 19, 2006 001-09225-21

Mr. Gopal Nair
City of Oakland, Public Works Department
Environmental Sciences Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California 94612

Subject: Groundwater Monitoring Report, Spring 2006 Semiannual Sampling Event, Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Dear Mr. Nair:

LFR Inc. (LFR) is pleased to present this report summarizing data collected during the spring 2006 semiannual groundwater monitoring event at the Municipal Service Center, located at 7101 Edgewater Drive in Oakland, California ("the Site"). These activities were performed in accordance with previous sampling events conducted at the Site.

If you have any questions regarding this report, please call me at (510) 596-9536.

Sincerely,

Charles H. Pardini, P.G. #6444
Principal Geologist

Attachment

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1.0 INTRODUCTION

This report presents the results of the spring 2006 semiannual groundwater monitoring event conducted from March 27 through April 5, 2006 at the Municipal Service Center (MSC), located at 7101 Edgewater Drive in Oakland, California ("the Site"; Figure 1). LFR Levine·Fricke (LFR) conducted monitoring activities at the Site in accordance with Assignment No. GO3-LFR-20.

Described below are the monitoring activities, analytical results, distribution of contaminants in groundwater, conclusions, recommendations, and anticipated semiannual monitoring activities tentatively scheduled for September/October 2006.

2.0 SITE BACKGROUND AND CORRECTIVE ACTION MEASURES

Eighteen 4-inch-diameter and four 2-inch-diameter test/observation wells were installed on site to depths ranging from 13 feet below ground surface (bgs) to 17 feet bgs, in December 2001 and January 2002 by others, according to Uribe & Associates' "Test/Observation Well Installation Report U & A Project 291-03," prepared in April 2002 (Uribe 2002). Seven of the wells (RW-Al, RW-A2, OB-A1, RW-B1, RW-B2, RW-B3, and RW-B4) were installed in the vicinity of Plumes A and B. Fifteen wells (RW-C1, RW-C2, RW-C3, RW-C4, RW-C5, RW-C6, RW-C7, OB-C1, RW-D1, RW-D2, RW-D3, RW-D4, RW-D5, OB-D1, and OB-D2) were installed in the vicinity of plumes C and D. Every well, except OB-A1, was surveyed subsequent to the installation event. The plume locations are shown on Figure 2 and Figure 3. The well locations are shown on Figure 3.

According to the "Second Quarter 2003 Monitoring Report" (Uribe 2003), approximately 10,000 gallons of a groundwater/free product mixture were removed from on-site wells RW-B3 and RW-B4 (Plume B) in September and October 2002, using a trailer-mounted, dual-phase extraction unit with a 10-horsepower vacuum pump. Additionally, approximately 10,000 gallons of liquid were removed from wells RW-C3, RW-C4, RW-C5, and RW-C7 (Plume C) through five daily extractions over a two-month period. The liquid was pumped into a 21,000-gallon aboveground storage tank to allow separation of oil from water and drained through three 2,000-pound granular-activated carbon filters (in series). After filtration, the wastewater was discharged into a local storm drain. A National Pollutant Discharge Elimination System permit was issued prior to discharge.

Within the same time period, hydrogen peroxide, followed by water, was injected biweekly into wells OB-Al, RW-Al, RW-A2, TBW-3, and TBW-4 (Plume A); MW-16 and MW-17 (Plume B); and MW-5 in the active tank area, to promote in-situ bioremediation.

In addition, construction of an extraction system to remove separate-phase hydrocarbons (SPH) within the vicinity of Plume D began in January 2006. Seven existing groundwater monitoring wells (RW-D1, RW-D2, RW-D3, RW-D4, RW-D5, TBW-5, and RW-1) were converted to extraction wells by URS. The extraction system was completed in April 2006, and the system will begin operation in mid-May 2006.

3.0 SPRING 2006 SEMIANNUAL MONITORING ACTIVITIES

3.1 Field Activities

The field activities, which included depth to water/product measurement and well sampling, were conducted in accordance with the City of Oakland MSC Schedule and Protocol Table presented in Appendix A.

On March 27, 2006, LFR personnel measured depth to water and depth to SPH using an electric oil/water interface probe in the following wells: MW-1, MW-2, MW-5 through MW-17, TBW-1, TBW-3 through TBW-6, RW-A1, RW-A2, OB-A1, RW-B1 through RW-B4, RW-C1 through RW-C5, RW-C8, OB-C1, OB-D1, OB-D2, and RW-1. Monitoring wells MW-3 and MW-4 have been destroyed (Ninyo & Moore 2004) and are not included in the sampling plan. Wells RW-C7 and TBW-2 were covered by equipment and could not be measured. Wells RW-D1, RW-D2, RW-D3, RW-D4, RW-D5, TBW-5, and RW-1 were converted to extraction wells and could not be accessed for depth-to-water and depth-to-SPH measurements. The oil/water interface probe was decontaminated with hexanol when product was encountered, and rinsed with liquinox and distilled water before use in each well to avoid potential cross contamination. Current and historical product thickness measurements, depth-to-groundwater measurements, and groundwater elevations calculated from groundwater measurements are presented in Table 1. Monitoring well locations are shown on Figures 2 and 3.

On April 4 and 6, 2006, LFR personnel collected groundwater samples from wells MW-1, MW-2, MW-5, and MW-7 through MW-17. Well MW-6 was not sampled because SPH was encountered in this well. Using a clean, disposable Teflon bailer for each well, a minimum of three well-casing volumes of water was purged from each of the nine on-site wells before groundwater samples were collected. The wells were allowed to recover to at least 80 percent of their original static groundwater levels before sampling. Oxygen reduction potential (ORP), temperature, pH, and conductivity were measured for each well volume purged. Additionally, characteristics of the water (color, turbidity, odor, sheen) were noted on the field data sheets, which are included in Appendix B.

After purging the wells, samples were collected using the disposable, polyvinyl chloride, bottom-discharging bailer used to purge the well. The samples were transferred from the bailer to the appropriate sample containers, labeled, and placed in a “wet chilled” cooler containing ice, under chain-of-custody protocol. The samples

were secured in the cooler and transferred to Curtis & Tompkins, Ltd., Analytical Laboratories (C&T), a California Department of Health Services–certified environmental laboratory located in Berkeley, California. Purged and decontamination water generated during sampling activities was transferred into an on-site Baker tank that was part of the on-site extraction and treatment system maintained by the City of Oakland.

3.2 Sample Analyses

The groundwater samples were analyzed by C&T for the following parameters:

- total petroleum hydrocarbons (TPH) as gasoline (TPH-g) using U.S. Environmental Protection Agency (U.S. EPA) Method 8015B; kerosene (TPH-k), diesel (TPH-d), and motor oil (TPH-mo) using U.S. EPA Method 8015B, using a silica gel cleanup
- the aromatic hydrocarbons benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX) and methyl tertiary-butyl ether (MTBE) using U.S. EPA Method 8260B

4.0 MONITORING RESULTS

4.1 Shallow Groundwater Topography

Depth to groundwater was measured on March 27, 2006, using a Solinst oil/water interface meter (Table 1). Prior to groundwater measurement, the well caps were removed from all wells to allow the water column within each well to come into equilibrium with atmospheric pressure. Groundwater levels were allowed to equilibrate prior to groundwater measurement. Groundwater elevations were determined using well survey data from the report entitled "Second Quarter 2003 Monitoring Report, City of Oakland Municipal Service Center" (Uribe 2003).

Groundwater elevations ranged from 9.43 feet mean sea level (msl) at TBW-3 to 3.00 feet msl at MW-17 (Figure 2). Wells MW-16 and MW-17 are located adjacent to San Leandro Bay on the southwestern portion of the Site, with MW-17 located farther downgradient. Groundwater flow direction, measured between wells TBW-6 and MW-12, is toward the west in the northern section of the Site at 0.020 foot/foot (ft/ft), and toward the southwest (measured between wells MW-6 and MW-17) at 0.023 ft/ft in the southern portion of the Site. A groundwater high is observed in the vicinity of well TBW-3. This observed groundwater high may be due to the presence of coarse-grained backfill in the area. The variation in the groundwater gradient may be due to differences in lithologic characteristics in the subsurface, preferential pathways (possibly due to backfilled utility trenches and underground storage tank pits). The groundwater flow direction for this sampling period was similar to that reported by Ninyo & Moore in its July 14, 2004 Spring Semiannual Monitoring Report for the Site, and in more recent LFR monitoring reports.

4.2 Occurrence of Separate-Phase Hydrocarbons

SPH was observed and thickness measured in the following on-site wells: MW-6 (0.57 foot), OB-C1 (1.05 foot), and RW-C6 (0.96 foot). These results are similar to previous results. SPH was previously observed and measured in wells TBW-5, RW-D1, RW-D2, RW-D3, RW-D4, RW-D5, and OB-D2 (Plume D) during the September 2005 monitoring event; however, SPH could not be assessed and measured in these wells during this monitoring event because the wells had been converted to extraction wells and the access hole in each well was too small to accommodate the oil/water interface probe. The results of the SPH assessment are presented in Table 1. SPH was observed in September 2005 in wells TBW-6, RW-B3, RW-C2, and OB-D2 but was not present in these wells during this monitoring event. Plumes B and C show a significant decrease in lateral extent of SPH compared to the April 2004 monitoring event. The four monitoring wells that comprised Plume A did not contain measurable amounts of SPH during this monitoring event. The lateral extent of plume D could not be assessed as noted above. The extent of SPH is presented on Figure 2. Figure 3 presents a detailed plume map of SPH.

4.3 Contaminant Distribution in Groundwater

The analytical data from this groundwater monitoring event are presented in Table 1 along with historical analytical results. Laboratory analytical data reports are included in Appendix C. Historical data for volatile organic compounds, semivolatile organic compounds, Leaking Underground Fuel Tank metals, and other metals are provided in Appendix D, (in Tables 2, 3, 4, and 5, respectively).

For quality assurance/quality control (QA/QC), LFR collected a duplicate sample from well MW-11 and analyzed it for TPH-g, TPH-k, TPH-d, TPH-mo, BTEX, and MTBE. Analytical results for this duplicate sample were very similar to the analytical results for sample MW-11.

4.3.1 Benzene

Benzene concentrations detected above laboratory analytical detection limits (LADL) were reported in groundwater samples collected from 8 of the 14 monitoring wells sampled. The maximum benzene concentration reported from groundwater samples collected during this monitoring event was 470 micrograms per liter (μg/l) in well MW-1. Historically, concentrations of benzene in well MW-1 have been as high as 2,000 μg/l.

In its July 2004 monitoring report (Ninyo & Moore 2004), Ninyo & Moore cited the following regulatory standards for benzene: acceptable risk threshold for the San Francisco Airport Ecological Protection Zone (SFAEPZ) Tier I Standard was 71 μg/l; the City of Oakland Tier I Carcinogenic Risk-Based Standard Level (RBSL) was also 71 μg/l. However, LFR has not included City of Oakland RBSLs in this report because they were promulgated in 1999 and are considered out of date. The San Francisco Bay

Regional Water Quality Control Board (RWQCB) Environmental Screening Level (ESL) for Surface Water Bodies in a Marine Environment for benzene is 71 μg/l (RWQCB 2005; Table F). Benzene concentrations at the Site for this sampling event are above these levels at monitoring wells MW-1 and MW-9.

Benzene was also reported in groundwater samples collected from wells MW-2 (2.1 μg/l), MW-5 (14 μg/l), MW-7 (2.7 μg/l), MW-9 (140 μg/l), MW-10 (2.1 μg/l), MW-11 (5.7 μg/l and 6.5μg/l), and MW-14 (1.7 μg/l). These concentrations are generally consistent with historical concentrations for these wells and, with the exception of MW-9, are below the above-referenced standards.

4.3.2 Toluene

Toluene was reported at very low concentrations in 4 of the 14 wells sampled: wells MW-1 (13 μg/l), MW-5 (2.1 μg/l), MW-9 (5.2 μg/l), and MW-11 (1.0 μg/l). Concentrations are well below regulatory action levels for toluene of 40 μg/l (RWQCB ESLs).

4.3.3 Ethylbenzene

Ethylbenzene was reported in a groundwater sample collected from 3 of the 14 wells sampled. Ethylbenzene was detected at a concentration of 280 μg/l in the sample collected from well MW-5. This concentration is similar to the historical concentration of ethylbenzene in this well. The concentration is below the SFAEPZ Tier I Standard (29,000 μg/l), but exceeds the RWQCB ESL for Surface Water Bodies in a Marine Environment of 30 μg/l (RWQCB 2005).

4.3.4 Total Xylenes

Total xylenes were reported in groundwater samples collected from 5 of the 14 monitoring wells sampled. The maximum concentration of total xylenes was 13 μg/l in a groundwater sample collected from well MW-5. Concentrations are below regulatory action levels for the RWQCB ESLs for Surface Water Bodies in a Marine Environment for total xylenes (100 μg/l).

Total xylenes were also reported in samples collected from wells MW-1 (6.3 μg/l), MW-2 (0.5 μg/l), MW-9 (4.1 μg/l) and MW-11 (7.3 μg/l). These concentrations are consistent with historical concentrations for these wells and are below RWQCB ESLs.

4.3.5 MTBE

MTBE concentrations above LADL were reported in groundwater samples collected from 3 of the 14 monitoring wells sampled. MTBE was detected in samples collected from wells MW-2 (0.5 μg/l), MW-5 (31 μg/l), and MW-11 (7.4 μg/l). The concentration in MW-5 is below historical concentrations previously detected in this

well. All concentrations of MTBE detected in samples collected during this sampling event are below the RWQCB ESLs for Surface Water Bodies in a Marine Environment for MTBE (180 µg/l).

4.3.6 TPH-g

TPH-g was reported in groundwater samples collected from 4 of the 14 wells sampled. The maximum TPH-g concentration reported for this groundwater monitoring event was 3,700 µg/l in the groundwater sample collected from well MW-1. This concentration is consistent with historical concentrations for this well. It is equal to the SFAEPZ Tier I Standard Acceptable Threshold of 3,700 µg/l for TPH-g (Ninyo & Moore 2004), and equal to the RWQCB ESL for Surface Water Bodies in a Marine Environment for TPH-g, which is also 3,700 µg/l.

TPH-g was also detected in wells MW-5 (3,400 µg/l), MW-9 (160 µg/l) and MW-11 (220 µg/l). Concentrations of TPH-g are consistent with historical concentrations for these wells and are below the SFAEPZ Tier I Standard Acceptable Threshold for TPH-g and the RWQCB ESL for Surface Water Bodies in a Marine Environment for TPH-g.

4.3.7 TPH-d

TPH-d was reported in groundwater samples collected from 9 of the 14 monitoring wells sampled. Analytical results presented in Table 1 indicated that all of the TPH-d concentrations contained a caveat. Upon further review of the chromatograms by C&T, the analytical laboratory, it was noted that there was no diesel present in any of the samples collected. The samples either contained TPH-g (four samples), TPH-mo (four samples), or a heavier oil (one sample).

4.3.8 TPH-mo

TPH-mo was reported in groundwater samples collected from 4 of the 14 wells sampled. TPH-mo was detected at 910 µg/l in a sample from well MW-13 and at 760 µg/l in a sample from well MW-15. These concentrations are above both the SFAEPZ Tier I Standard Acceptable Threshold for TPH-mo of 640 µg/l (middle distillates; Uribe 2003) and the RWQCB ESL for Surface Water Bodies in a Marine Environment for residual fuels, which is also 640 µg/l (middle distillates). This concentration is consistent with historical concentrations of TPH-mo in this well. Other TPH-mo concentrations were 420 µg/l and 320 µg/l in samples collected from wells MW-16 and MW-9, respectively.

4.3.9 TPH-k

TPH-k was reported in groundwater samples collected from 6 of the 14 monitoring wells sampled. Analytical results presented in Table 1 indicated that all of the TPH-k

concentrations contained a caveat. Upon further review of the chromatograms by C&T, it was noted that there was no kerosene present in any of the samples collected. The samples contained either TPHg (three samples), TPHmo (two samples), or a heavier oil (one sample).

4.4 Laboratory Analysis

Current laboratory analytical results and historical results are presented in Table 1. Copies of laboratory data sheets and chain-of-custody documents are included in Appendix C.

5.0 LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

A laboratory QA/QC review was performed on the laboratory analytical data to evaluate the quality and usability of the analytical results. The following sections summarize the QA/QC review.

5.1 Method Holding Times

Extraction and analyses performed on the collected samples were reviewed by LFR personnel and were found to be within the appropriate holding times.

5.2 Blanks

One field blank (MW-1-FB) was collected along with groundwater sample MW-1, and analyzed for TPH-g, TPH-k, TPH-d, TPH-mo, BTEX, and MTBE. Additionally, laboratory method blank results were reviewed for detection of target analytes. No target analytes were detected in MW-1-FB, indicating that sample collection methods and transportation and laboratory procedures were not a source of contamination.

5.3 Laboratory Control Samples

Laboratory Control Samples and MS, MSD and BS, BSD were conducted by C&T for TPH-g, TPH-d, TPH-k, TPH-mo, and BTEX. All samples were within the percentage recovery range required by the laboratory.

5.4 Surrogates

All surrogates, including hexacosane, bromofluorobenzene, and trifluorotoluene for TPH-g, TPH-d, TPH-k, and TPH-mo, and bromofluorobenzene, 1,2-dichloroethane-d4, and toluene-d8 for BTEX, were used for laboratory QA/QC analysis. All surrogates were within the laboratory recovery limits.

5.5 False-Positive Petroleum Hydrocarbon Identification

Qualifiers were reported in the laboratory analytical reports as noted in previous sections.

6.0 CONCLUSIONS AND RECOMMENDATIONS

- Groundwater elevations ranged from 3.00 feet msl at well MW-17 to 6.43 feet msl at well TBW-3, located on the southern portion of the Site. The direction of shallow groundwater flow is toward the southwest in the northern section of the Site at a 0.021 ft/ft gradient and toward the southwest at 0.014 ft/ft in the southern portion of the Site. A shallow groundwater high was observed in the vicinity of well TBW-3. This groundwater high is probably the result of higher subsurface permeability in areas of excavation backfill.
- SPH was observed in three wells. The maximum product thickness measured was 1.05 feet in well OB-C1, located in the vicinity of plume C.
- Benzene was detected above LADL in 8 of 14 wells sampled. The maximum concentration of benzene detected in shallow groundwater was 470 μg/l in well MW-1 and 140 μg/l in well MW-9. These concentrations are above both the SFAEPZ threshold and the RWQCB ESL for Surface Water Bodies in a Marine Environment of 71 μg/l.
- Toluene was detected above LADL in 4 of 14 wells sampled. The maximum concentration of toluene detected in shallow groundwater was 13 μg/l in well MW-1. This concentration is well below the RWQCB ESL for Surface Water Bodies in a Marine Environment of 40 μg/l.
- Ethylbenzene was detected above LADL in 3 of 14 wells sampled. The maximum concentration of ethylbenzene was detected in shallow groundwater at 280 μg/l in well MW-5. The concentration is below the SFAEPZ Tier I Standard (29,000 μg/l), but exceeds the RWQCB ESL for Surface Water Bodies in a Marine Environment of 30 μg/l (RWQCB 2005).
- Total xylenes were detected above LADL in 5 of 14 wells sampled. The maximum concentration of xylenes detected in shallow groundwater was 13 μg/l in well MW-5. Concentrations are well below regulatory action levels for the RWQCB ESL for Surface Water Bodies in a Marine Environment for total xylenes (100 μg/l).
- MTBE was detected above LADL in 3 of 14 wells sampled. The maximum concentration of MTBE detected in shallow groundwater was 31 μg/l in well MW-5. This concentration is below the RWQCB ESL for Surface Water Bodies in a Marine Environment for MTBE of 180 μg/l.
- TPH-g was detected in 4 of 14 wells sampled. The maximum concentration of TPH-g detected in shallow groundwater was 3,700 μg/l in well MW-1. This

concentration is equal to both the SFAEPZ acceptable threshold and RWQCB ESL for middle petroleum distillates of 3,700 µg/l.

- TPH-k was not detected above laboratory analytical limits in any of the 14 wells sampled, as noted in Section 4.3.9.
- TPH-mo was detected in 4 of 14 wells sampled at a maximum concentration of 910 µg/l in well MW-13 and at a concentration of 760 µg/l in well MW-15. These concentrations are above both the SFAEPZ acceptable threshold and the RWQCB ESL for middle petroleum distillates of 640 µg/l.
- TPH-d was not detected above laboratory analytical detection limits in any of the 14 wells sampled as noted in Section 4.3.7.
- Petroleum hydrocarbon concentrations were similar to previous sampling event results in 9 of the 14 wells sampled. Heavier hydrocarbon concentrations (TPH-mo, wells MW-13 and MW-15) increased in 2 wells and lighter petroleum hydrocarbon concentrations (TPH-g, wells MW-1 and MW-9) increased an order of magnitude in 2 wells.

Based on the results of the spring 2006 groundwater monitoring event, LFR has the following recommendations:

- Continue semiannual groundwater monitoring on site due to the elevated concentrations of TPH-g, ethylbenzene, and TPH-mo reported during this monitoring event.
- Continue monitoring SPH, which was detected in 3 monitoring wells at the Site, ranging from 0.57 foot to 1.05 feet.
- Continue in situ remediation using hydrogen peroxide and begin groundwater extraction.

7.0 LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No other warranty, expressed or implied, is made regarding the professional opinions presented in this report. Please note this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site can change with time as a result of natural processes or the activities of man at the site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which LFR has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. LFR should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

8.0 SELECTED REFERENCES

Ninyo & Moore. 2004. Groundwater Monitoring Report, Spring Semiannual, Municipal Service Center, 7101 Edgewater Drive, Oakland, California, Assignment No. G03-N&M-10. July 14.

Regional Water Quality Control Board (RWQCB). 2003. Screening for Environmental Concerned Sites with Contaminated Soil and Groundwater (Interim Final). July.

Uribe & Associates ("Uribe"). 2002. Test/Observation Well Installation Report U & A Project 291-03. April 2.

———. 2003. Final Report, Second Quarter 2003 Monitoring Report, City of Oakland Municipal Service Center. May.

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
MW-1														
10/4/089	10.20	---	---	8020		---	---	---	540	65	26	14	22	---
10/4/89	10.20	---	---	8240		---	---	---	---	120	46	43	78	---
4/27/93	10.20	---	---	8020		---	---	---	<1,000	<1.0	<1.0	<1.0	<1.0	---
4/19/95	10.20	---	---	8020		---	---	---	3,200	880	15	23	21	---
7/27/95	10.20	4.62	5.58	8020		---	---	---	980	130	3.6	1.4	5.6	---
11/20/95	10.20	6.08	4.12	8020		---	---	---	400	99	2.8	1.1	4.6	---
2/21/96	10.20	4.62	5.58	8020		---	---	---	1,700	340	8.4	5.3	16	---
5/13/96	10.20	4.33	5.87	8020		---	---	---	7,300	2,000	30	42	38	---
8/27/96	10.20	5.25	4.95	8020		---	---	---	380	61	2.4	<0.5	4.2	---
2/23/98	10.20	1.75	8.45	8020		<50	<500	<50	820	160	4.9	3	9.7	---
8/19/98	10.20	4.78	5.42	8020	SGC	1,200	---	---	780	69	4.1	0.84	8.5	<5.0
11/11/98	10.20	5.64	4.56	---		---	---	---	---	---	---	---	---	---
2/23/99	10.20	3.41	6.79	8020	SGC	1,200	1,600	<50	1,100	190	5	3	12	<5.0
5/27/99	10.20	3.96	6.24	---		---	---	---	---	---	---	---	---	---
8/24/99	10.20	4.92	5.28	8020	SGC	640	1,900	<50	370	37	0.9	<0.5	1.9	<5.0
11/22/99	10.20	5.46	4.74	---		---								
1/18/00	10.05	5.41	4.64	---		---	---	---	---	---	---	---	---	---
1/19/00	10.05	---	---	8020	SGC	50	<200	<50	660	43	2.3	1.1	6	<5.0
5/11/00	10.05	4.63	5.42	---		---	---	---	---	---	---	---	---	---
8/24/00	10.05	5.07	4.98	---		---	---	---	---	---	---	---	---	---
8/25/00	10.05	---	---	8020	SGC	340	<250	290	480	53	1.4	<0.5	2.9	<5.0
11/28/00	10.05	5.60	4.45	---		---	---	---	---	---	---	---	---	---
2/27/01	10.05	3.95	6.10	8020	Filtered+SGC	270	<250	<61	1,500	110	6.3	<1.5	9.9	<15
5/17/01	10.05	4.00	6.05	---		---	---	---	---	---	---	---	---	---
8/16/01	10.05	4.17	5.88		Filtered+SGC	280	<B200	<100	4,000	640	9.7	5.7	13	<5.0
12/15/01	10.05	5.52	4.53	---		---	---	---	---	---	---	---	---	---
4/9/02	10.05	3.78	6.27	8021	SGC	1,100	1,000	---	2,000	320	5.38	3.08	6.24	<5
6/21/02	10.05	4.92	5.13	---		---	---	---	---	---	---	---	---	---
9/13/02	10.05	5.52	4.53	8021	SGC	88 b,c	<300	88	260	9.6	<0.5	<0.5	1.0	<2
4/22/03	10.05	4.41	5.64	8021B	SGC	570 L Y	<300	660	1,900 Z	400.0	9.6	5.4	8.1	<2.0
4/28/04	10.05	3.95	6.10	8260B	SGC	<100	<400	<100	154	20	<1.0	<1.0	2.3	<1.0
10/29/04	10.05	5.68	4.37	8260B	SGC	230 L Y	<300	240	340 H Z	6.4	0.6	<0.5	1.4	<0.5
9/2/05 [1]	10.05	4.35	5.70	8260B	SGC	140 L Y	<300	170	350	6.6	1.0	<0.5	2.3	<0.5
4/4/2006 [3]	10.05	2.24	7.81	8260B	SGC	830 L Y	<300	1,100 L Y	3,700	470	13	7.8	6.3	<3.6
MW-2														
10/4/89	10.47	---	---	8020		---	---	---	<30	<0.3	<0.3	<0.3	<0.3	---
10/4/89	10.47	---	---	8240		---	---	---	---	2	<2.0	<2.0	<2.0	---
4/27/93	10.47	---	---	8020		---	---	---	<1,000	<1.0	<1.0	<1.0	<1.0	---
4/19/95	10.47	---	---	8020		---	---	---	<50	1.8	<0.5	<0.5	<0.5	---
7/27/95	10.47	6.22	4.25	8020		---	---	---	<50	2.3	<0.5	<0.5	<0.5	---
11/20/95	10.47	7.49	2.98	8020		---	---	---	<50	2.2	<0.5	<0.5	<0.5	---
2/12/96	10.47	6.68	3.79	8020		---	---	---	<50	1.7	<0.5	<0.5	0.5	---
5/13/96	10.47	6.32	4.15	8020		---	---	---	---	2	<0.5	<0.5	<0.5	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
8/27/96	10.47	6.84	3.63	8020		---	---	---	---	2.4	<0.5	<0.5	<0.5	---
2/24/98	10.47	5.44	5.03	8020		<50	<500	<50	---	1.6	<0.5	<0.5	<0.5	---
8/19/98	10.47	6.56	3.91	8020	SGC	330	---	---	<50	4.1	3.4	0.8	2.6	<5.0
11/11/98	10.47	7.37	3.10	---		---	---	---	---	---	---	---	---	---
2/23/99	10.47	8.68	1.79	8020	SGC	200	900	<50	<50	3.5	0.6	0.6	1.2	<5.0
5/27/99	10.47	5.20	5.27	---		---	---	---	---	---	---	---	---	---
8/24/99	10.47	6.75	3.72	8020	SGC	140	700	<50	<50	2.6	<0.5	<0.5	<0.5	<5.0
11/22/99	10.47	7.58	2.89	---		---	---	---	---	---	---	---	---	---
1/18/00	10.47	7.41	3.06	8020	SGC	60 a	660	<50	<50	2.1	<0.5	<0.5	<0.5	<5.0
5/11/00	10.47	6.43	4.04	---		---	---	---	---	---	---	---	---	---
8/24/00	10.47	8.91	1.56	8020	SGC	170	440	130	<50	2.4	<0.5	<0.5	<0.5	<5.0
11/28/00	10.47	7.35	3.12	---		---	---	---	---	---	---	---	---	---
2/27/01	10.47	6.70	3.77	8020	Filtered+SGC	<59	<240	<59	<50	3.6	<0.5	<0.5	<0.5	<5
5/17/01	10.47	6.90	3.57	---		---	---	---	---	---	---	---	---	---
8/16/01	10.47	6.95	3.52		Filtered+SGC	<50	B200	<100	<50	<0.5	<0.5	<0.5	<0.5	<5.0
12/15/01	10.47	7.21	3.26	---		---	---	---	---	---	---	---	---	---
4/5/02	10.47	6.02	4.45	8021	SGC	200	400	---	<50	2.9	<0.5	<0.5	<0.5	<5
6/21/02	10.47	8.07	2.40	---		---	---	---	---	---	---	---	---	---
9/17/02	10.47	7.12	3.35	8021	SGC	<50	<300	<50	<50	2.1	<0.5	<0.5	<0.5	<2
4/23/03	10.47	6.36	4.11	8021B	SGC	<50	<300	<50	<50	1.6	<.50	<.50	<.50	<2.0
4/28/04	10.47	5.99	4.48	8260B	SGC	<100	<400	<100	<100	<0.5	<1.0	<1.0	1.3	<1.0
9/1/05 [1]	10.47	6.08	4.39	8260B	SGC	<50	<300	<50	<50	2.8	<0.5	<0.5	<0.5	0.8
4/4/2006 [3]	10.47	4.96	5.51	8260B	SGC	<50	<300	<50	<50	2.1	<0.5	<0.5	0.5	0.5
MW-3														
10/4/89	---	---	---	8020		---	---	---	<30	<0.3	<0.3	<0.3	<0.3	---
10/4/89	---	---	---	8240		---	---	---	---	<2.0	<2.0	<2.0	<2.0	---
2/23/98	---	---	---	---		<50	<500	<50	---	---	---	---	---	---
11/11/98	---	5.83	---	---		---	---	---	---	---	---	---	---	---
2/23/99	---	---	---	---	Submerged	---	---	---	---	---	---	---	---	---
5/27/99	---	1.68	---	---		---	---	---	---	---	---	---	---	---
8/24/99	---	4.76	---	---		---	---	---	---	---	---	---	---	---
11/22/99	---	6.46	---	---		---	---	---	---	---	---	---	---	---
11/22/99	---	---	---	---	Destroyed	---	---	---	---	---	---	---	---	---
MW-4														
10/4/89	7.89	---	---	8020		---	---	---	<30	<0.3	<0.3	<0.3	<0.3	---
10/4/89	7.89	---	---	8240		---	---	---	---	<2.0	<2.0	<2.0	<2.0	---
11/11/98	7.89	6.25	1.64	---		---	---	---	---	---	---	---	---	---
2/23/99	7.89	3.10	4.79	---		---	---	---	---	---	---	---	---	---
5/27/99	7.89	4.03	3.86	---		---	---	---	---	---	---	---	---	---
8/24/99	7.89	5.07	2.82	---		---	---	---	---	---	---	---	---	---
11/22/99	7.89	6.32	1.57	---		---	---	---	---	---	---	---	---	---
11/22/99	---	---	---	---	Destroyed	---	---	---	---	---	---	---	---	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
MW-5														
12/13/91	11.15	---	---	8020		1,900	---	---	13,000	1,500	190	970	2,500	---
12/13/91	11.15	---	---	8020	Dup	---	---	---	16,000	1,400	180	870	2,500	---
12/13/91	11.15	---	---	8240		---	---	---	---	1,800	<250	1,000	3,800	---
12/13/91	11.15	---	---	8240	Dup	---	---	---	---	1,600	<250	980	3,500	---
4/27/93	11.15	---	---	8240		12,000	---	---	35,000	2,100	<1.0	1,800	2,700	---
4/19/95	11.15	---	---	8240		880	4,700	---	14,000	490	51	610	1,200	---
7/27/95	11.15	6.29	4.86	8240		590	5,000	---	22,000	1,300	54	1,500	2,400	---
11/20/95	11.15	6.98	4.17	8020		<50	<50	<50	8,900	430	31	610	880	---
2/21/96	11.15	5.97	5.18	8020		480	<50	<50	1,000	540	65	700	970	---
5/13/96	11.15	6.25	4.90	8020		<50	<50	<50	5,900	430	26	580	760	---
5/13/96	11.15	---	---	8020	Dup	<50	<50	<50	7,300	360	22	49	640	---
8/27/96	11.15	6.40	4.75	8020		2,000	<51	<51	6,600	430	27	600	650	---
8/27/96	11.15	---	---	8020	Dup	6,600	<51	<51	6,300	410	25	580	620	---
2/23/98	11.15	4.22	6.93	8020		<50	<500	<50	740	19	1.4	41	34	---
8/19/98	11.15	6.14	5.01	8020		1,400	<250	1700	5,800	500	25	730	300	5,900
8/19/98	11.15	6.14	5.01	8260	SGC	---	---	---	---	---	---	---	---	6,700
11/11/98	11.15	6.51	4.64	---		---	---	---	---	---	---	---	---	---
2/23/99	11.15	3.59	7.56	8020	SGC	2,000	700	<50	6,700	300	26	800	690	1,600
5/27/99	11.15	5.71	5.44	---		---	---	---	---	---	---	---	---	---
8/24/99	11.15	6.02	5.13	8020	SGC	220	2,000	<50	2,100 e	190 e	5.5	340 e	78	380 e
11/22/99	11.15	6.16	4.99	---		---	---	---	---	---	---	---	---	---
1/18/00	11.15	6.60	4.55	---		---	---	---	---	---	---	---	---	---
1/19/00	11.15	---	---	8020	SGC	100	320	<50	3,000	66 e	6.3	400 e	90	300 E (1,300)
5/11/00	11.15	5.62	5.53	---		---	---	---	---	---	---	---	---	---
8/24/00	11.15	6.32	4.83	8020	SGC	4,800	560	6,600	12,000	220	21	430	91	1,200 (1,400)
11/28/00	11.15	6.47	4.68	---		---	---	---	---	---	---	---	---	---
2/27/01	11.15	4.40	6.75	8020	Filtered+SGC	230	<250	<61	6,300	150	7	350	55	830
5/17/01	11.15	5.77	5.38	8020	Filtered+SGC	190	<200	<50	7,500	140	7	580	101	170
8/16/01	11.15	4.87	6.28		Filtered+SGC	320	B500	<100	2,300	46	<5	110	24	850
12/15/01	11.15	5.50	5.65	---		---	---	---	---	---	---	---	---	---
4/9/02	11.15	5.15	6.00	8021	SGC	480	260	---	8,000	110	5.95	650	53.9	166
6/21/02	11.15	6.01	5.14	8021	SGC	200 a,b,c	<300	190	4,600	130	33	380	56	440
9/12/02	11.15	6.40	4.75	8021	SGC	620 b,c	<300	650	4,000 J	120	<0.5	260	16	580
4/22/03	11.15	4.69	6.46	8021B	SGC	1600 L Y	<300	1800	6000	91	<1.0	870	59.4	150 C
4/28/04	11.15	5.70	5.45	8260B	SGC	<650	<400	<810	4780	34	<1.0	560	44	47
10/29/04	11.15	5.73	5.42	8260B	SGC	840 L Y	<300	940	3000	18	2.1	280	16.1	94
9/2/05 [1]	11.15	6.08	5.07	8260B	SGC	510 L Y	<300	640	1600	13	1.4	55	8.6	92
4/5/2006 [3]	11.15	3.64	7.51	8260B	SGC	840 L Y	<300	850 H	3,400	14	2.1	280	13	31
MW-6														
12/13/91	10.98	---	---	8020		520	---	---	780	110	2.7	<2.5	5.5	---
12/13/91	10.98	---	---	8240		---	---	---	---	95	5	<5	<5	---
4/27/93	10.98	---	---	8020		<1,000	---	---	<1,000	430	4	5	10	---
4/19/95	10.98	---	---	8020		6,700	---	---	5,700	40	<0.8	3.9	29	---

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Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/19/95	10.98	---	---	8020	Dup	3,700	---	---	3,000	310	3.1	2.7	100	---
7/27/95	10.98	7.09	3.89	8020		3,900	---	---	6,100	430	15	200	600	---
7/27/95	10.98	---	---	8020	Dup	2,600	---	---	6,300	420	15	200	600	---
11/20/95	10.98	7.89	3.09	8020		850	---	---	6,800	160	4.6	8	240	---
11/20/95	10.98	---	---	8020	Dup	---	---	---	3,600	130	11	4.4	200	---
2/21/96	10.98	7.40	3.58	8020	Filtered+SGC	1,700	---	---	2,800	230	2.8	3.8	44	---
2/21/96	10.98	---	---	8020	Dup	2,500	---	---	2,200	280	3	4	4.6	---
5/13/96	10.98	7.10	3.88	8020		400	<50	<50	3,100	430	12	5.2	67	---
8/27/96	10.98	7.42	3.56	8020		3,100	---	---	4,200	300	9.3	110	110	---
8/19/98	10.98	---	---	---	SPH: 0.125 ft.	---	---	---	---	---	---	---	---	---
11/11/98	10.98	7.09	3.93	---	SPH: 0.05 ft.	---	---	---	---	---	---	---	---	---
2/23/99	10.98	7.31	3.67	---	SPH: N M	---	---	---	---	---	---	---	---	---
5/27/99	10.98	6.91	4.25	---	SPH: 0.20 ft.	---	---	---	---	---	---	---	---	---
8/24/99	10.98	7.46	3.72	---	SPH: 0.03 ft.	---	---	---	---	---	---	---	---	---
11/22/99	10.98	7.96	3.15	---	SPH: 0.16 ft.	---	---	---	---	---	---	---	---	---
1/18/00	10.98	8.08	3.05	---	SPH: 0.19 ft.	---	---	---	---	---	---	---	---	---
5/11/00	10.98	7.52	4.47	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
8/24/00	10.98	7.50	3.53	---	SPH: 0.06 ft.	---	---	---	---	---	---	---	---	---
11/28/00	10.98	6.39	4.62	---	SPH: 0.04 ft.	---	---	---	---	---	---	---	---	---
2/26/01	10.98	7.80	3.50	8020	SPH: 0.40 ft., f	820	<240	<60	6,100	181	<5	14.2	<5	<50
2/26/01	10.98	---	---	8260B		---	---	---	---	270	3	9	3	(19)
5/17/01	10.98	7.57	3.66	---	SPH: 0.32 ft.	---	---	---	---	---	---	---	---	---
8/16/01	10.98	7.75	3.49		SPH: 0.32 ft., f	740	B200	<100	4,200	360	4.6	13	12	14
12/15/01	10.98	7.58	3.40	---	SPH: 0.07 ft.	---	---	---	---	---	---	---	---	---
4/3/02	10.98	6.92	4.06	---	SPH: 0.11 ft.	---	---	---	---	---	---	---	---	---
6/21/02	10.98	7.05	3.93	---	SPH: 0.19 ft.	---	---	---	---	---	---	---	---	---
9/12/02	10.98	7.22	4.02	---	SPH: 0.33 ft.	---	---	---	---	---	---	---	---	---
4/22/03	10.98	4.71	6.27	---	SPH: 0.16 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.98	5.09	5.89		SPH: 0.23 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.98	6.12	4.86	--	SPH: product on probe	---	---	---	---	---	---	---	---	---
8/31/05	10.98	6.11	4.87	--	SPH: 0.95 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.98	4.11	---	--	SPH: 0.57 ft.	---	---	---	---	---	---	---	---	---
MW-7														
12/13/91	11.51	---	---	8020		<50	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
12/13/91	11.51	---	---	8240		---	---	---	---	<5	<5	<5	<5	---
4/27/93	11.51	---	---	8240		<1,000	---	---	<1,000	<1.0	<1.0	<1.0	<1.0	---
4/19/95	11.51	---	---	8240		<50	<1,000	---	<50	<2.0	<2.0	<2.0	<2.0	---
7/27/95	11.51	6.87	4.64	8240		<50	<1,000	---	<50	<2.0	<2.0	<2.0	<2.0	---
11/20/95	11.51	8.48	3.03	8020		<50	---	---	<50	<0.5	<0.5	<0.5	1.5	---
2/21/96	11.51	6.29	5.22	8020		<50	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
5/13/96	11.51	6.95	4.56	8020		<50	---	---	---	<0.5	<0.5	<0.5	<0.5	---
8/27/96	11.51	6.80	4.71	8020		---	---	---	---	<0.5	<0.5	<0.5	<0.5	---
8/19/98	11.51	6.88	4.63	---		---	---	---	---	---	---	---	---	---
11/11/98	11.51	7.40	4.11	---		---	---	---	---	---	---	---	---	---

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7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
2/23/99	11.51	5.57	5.94	8020		<50	<200	<50	80	<0.5	<0.5	<0.5	1	<5.0
5/27/99	11.51	6.56	4.95	---		---	---	---	---	---	---	---	---	---
8/24/99	11.51	6.29	5.22	8020	SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	5
11/22/99	11.51	6.80	4.71	---		---	---	---	---	---	---	---	---	---
1/18/00	11.51	7.31	4.20	---		---	---	---	---	---	---	---	---	---
1/19/00	11.51	---	---	8020	SGC	<50	<200	<50	54	1.5	1.5	2.4	3.8	<5.0
5/11/00	11.51	6.41	5.10	---		---	---	---	---	---	---	---	---	---
8/24/00	11.51	7.11	4.40	8020		<50	<250	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	11.51	7.30	4.21	---		---	---	---	---	---	---	---	---	---
2/27/01	11.51	5.75	5.76	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5
5/17/01	11.51	6.65	4.86	---		---	---	---	---	---	---	---	---	---
8/16/01	11.51	5.97	5.54		Filtered+SGC	<50	B600	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/15/01	11.51	6.43	5.08	---		---	---	---	---	---	---	---	---	---
4/8/02	11.51	6.17	5.34	8021	SGC	80	<200	---	<50	<0.5	0.5	0.6	<0.5	<5
6/21/02	11.51	6.75	4.76	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	3.3
9/12/02	11.51	7.05	4.46	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	2.6
4/22/03	11.51	6.24	5.27	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	4 C
4/28/04	11.51	6.61	4.90	8260B	SGC	<100	<400	<100	<100	1.6	<1.0	<1.0	<1.0	<1.0
9/2/05 [1]	11.51	6.56	4.95	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	3.2
4/5/2006 [3]	11.51	4.58	6.93	8260B	SGC	<50	<300	<50	<50	2.7	<0.5	<0.5	<0.5	<0.5
MW-8														
11/20/96	12.22	---	---	8020		880	---	---	<50	0.66	<0.5	<0.5	<0.5	---
11/20/97	12.22	9.59	2.63	8020		200	---	---	<50	<0.5	<0.5	<0.5	<0.5	2
2/24/98	12.22	8.42	3.80	8020		<50	<500	<50	<50	<0.5	<0.5	<0.5	<0.5	---
6/8/98	12.22	9.57	2.65	8020		1,200	1,000	<50	<50	<0.5	<0.5	<0.5	<0.5	---
8/19/98	12.22	9.49	2.73	8020	SGC	<50	<250	<50	<50	1.6	3.4	1	2.8	<5.0
11/11/98	12.22	9.64	2.58	8020	SGC	<50	<200	<50	<50	0.9	0.8	0.6	2.3	<5.0
2/23/99	12.22	11.53	0.69	8020		700	1,500	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/27/99	12.22	9.65	2.57	8020		<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/24/99	12.22	9.62	2.60	8020	SGC	70	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/22/99	12.22	9.64	2.58	8020	SGC	57	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/18/00	12.22	8.31	3.91	8020	SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	12.22	9.69	2.53	8020	SGC	<50	<200	<50	<50	<0.5	1.3	<0.5	2.1	<5.0
8/24/00	12.22	9.40	2.82	---		---	---	---	---	---	---	---	---	---
8/25/00	12.22	---	---	8020	SGC	85	<250	<50	<50					
11/28/00	12.22	9.40	2.83	8020	SGC	<50	910	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
2/27/01	12.22	9.50	2.72	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	12.22	9.71	2.51	---		---	---	---	---	---	---	---	---	---
5/18/01	12.22	---	---	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	12.22	9.80	2.42		Filtered+SGC	<50	<200	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/15/01	12.22	9.28	2.94	8021	SGC	390	1,300	<50	<50	<0.5	<0.5	<0.5	<0.5	<5
4/8/02	12.22	9.55	2.67	8021	SGC	440	800	---	<50	<0.5	<0.5	<0.5	<0.5	<5
6/21/02	12.22	9.71	2.51	---		---	---	---	---	---	---	---	---	---
9/18/02	12.22	9.86	2.36	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2

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Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/22/03	12.22	9.54	2.68	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/28/04	12.22	---	---	---		---	---	---	---	---	---	---	---	---
10/27/04	12.22	NM[4]	---	---		---	---	---	---	---	---	---	---	---
4/5/2006 [3]	12.22	8.73	3.49	8260B	SGC	54 Y	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-9														
11/20/96	10.77	---	---	8020		1,900	---	---	240	21	0.81	1.8	2.2	---
11/20/97	10.77	7.91	2.86	8020		---	---	---	300	20	<0.5	<0.5	1.8	<1.0
2/24/98	10.77	6.11	4.66	8020		<50	<500	<50	2,200	540	5.6	1.6	4.9	---
6/8/98	10.77	7.14	3.63	8020		1,800	890	<50	840	450	6.1	3.3	5.3	---
8/19/98	10.77	7.88	2.89	8020	SGC	190	<250	160	740	370	8.6	0.99	7.3	<5.0
11/11/98	10.77	8.23	2.54	8020	SGC	<50	230	<50	700	130	4.3	<0.5	3.9	<5.0
2/23/99	10.77	6.65	4.12	8020		1,100	3,700	<50	1,100	620	9.7	1.5	7.7	<5.0
5/27/99	10.77	7.70	3.07	8020	SGC	70	300	<50	950	470	11	1.5	9.2	<5.0
8/24/99	10.77	8.12	2.65	8020	SGC	890	1,700	<50	290	45	2.8	<0.5	3	<5.0
11/22/99	10.77	8.33	2.44	8020	SGC	1,000	6,000	<50	170	12	1.8	<0.5	2	<5.0
1/18/00	10.77	8.63	2.14	8020	SGC	200 a	2,300	<50	160	5.7	1.9	0.6	4.2	<5.0
5/11/00	10.77	7.70	3.07	8020	SGC	180 a	980	<100	1,050	280	7.0	<2.5	5.9	<25
8/24/00	10.77	8.31	2.46	---		---	---	---	---	---	---	---	---	---
8/25/00	10.77	---	---	8020	SGC	580	2,200	170	180	23	2.4	<0.5	2.7	<5.0
11/28/00	10.77	8.45	2.32	8020	SGC	200	1,600	<50	130	1.9	<0.5	<0.5	<0.5	<5.0
11/28/00	10.77	8.45	2.32	---	Filtered+SGC	<50	<200	<50	---	---	---	---	---	---
2/26/01	10.77	6.40	4.37	8020	Filtered+SGC	120	<200	<50	142	33	1.8	<0.5	<0.5	<5.0
5/17/01	10.77	9.88	0.89	---		---	---	---	---	---	---	---	---	---
5/18/01	10.77	---	---	8020	Filtered+SGC	<50	<200	<50	74	4.6	<0.5	<0.5	<0.5	<5.0
8/16/01	10.77	8.05	2.72		Filtered+SGC	<50	<200	<100	70	0.62	<0.5	<0.5	<0.5	<5
12/16/01	10.77	7.75	3.02	8021	SGC	1,400	4,100	<50	210	15	1.6	<0.5	2.2	<5
4/5/02	10.77	7.50	3.27	8021	SGC	870	1,000	---	1,498	367	11	2.1	7.8	<5
6/20/02	10.77	8.27	2.50	8021	SGC	<50	<300	<50	430	180	5.7	2.4	4.15	<2
9/18/02	10.77	8.25	2.52	8021	SGC	63 b,c	<300	60	250	49	5.8	<0.5	3.1	<2
4/22/03	10.77	7.25	3.52	8021B	SGC	<50	<300	<50	69	4.1 C	<0.5	<0.5	0.9	<2
4/28/04	10.77	---	---	---		---	---	---	---	---	---	---	---	---
10/27/04	10.77	NM[4]	---	---		---	---	---	---	---	---	---	---	---
4/5/2006 [3]	10.77	6.01	4.76	8260B	SGC	140 H Y	320	64 H Y	160	140	5.2	<1.0	4.1	<1.0
MW-10														
11/20/96	10.59	---	---	8020		940	---	---	<50	49	0.59	0.54	1.2	---
11/20/97	10.59	7.70	2.89	8020		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	---
2/24/98	10.59	4.39	6.20	8020		<50	<500	<50	<50	<0.5	<0.5	<0.5	<0.5	---
6/8/98	10.59	6.94	3.65	8020		500	<500	<50	<50	7.3	<0.5	<0.5	<0.5	---
8/19/98	10.59	6.99	3.60	8020	SGC	240	520	110	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/11/98	10.59	7.57	3.02	8020	SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
2/23/99	10.59	5.51	5.08	8020		170	1,200	<50	<50	1.3	<0.5	<0.5	<0.5	<5.0
5/27/99	10.59	6.72	3.87	8020	SGC	<50	<200	<50	350	170	1.5	0.5	2.3	<5.0
8/24/99	10.59	7.27	3.32	8020	SGC	140	300	<50	380	160 e	<0.5	<0.5	2.6	<5.0

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Municipal Service Center
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Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
11/22/99	10.59	7.71	2.88	8020	SGC	570	3,400	<50	110	5.1	<0.5	<0.5	0.72	<5.0
1/18/00	10.59	7.77	2.82	---		---	---	---	---	---	---	---	---	---
1/19/00	10.59	---	---	8020	SGC	120 a,b	1,200	<50	100	<0.5	<0.5	0.8	<0.5	<5.0
5/11/00	10.59	7.00	3.59	8020	SGC	110 a	990	<50	145	1.62	0.5	0.5	0.9	<5.0
8/24/00	10.59	7.31	3.28	---		---	---	---	---	---	---	---	---	---
8/25/00	10.59	---	---	8020	SGC	430	1,300	110	<50	1.0	<0.5	<0.5	<0.5	<5.0
11/28/00	10.59	7.90	2.69	8020	SGC	220	1,500	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
2/27/01	10.59	5.80	4.79	8020	Filtered+SGC	85	<230	<57	<50	1.3	<0.5	<0.5	<0.5	<5.0
5/17/01	10.59	6.27	4.32	---		---	---	---	---	---	---	---	---	---
5/18/01	10.59	---	---	8020	Filtered+SGC	<50	<200	<50	<50	0.7	<0.5	<0.5	<0.5	<5.0
8/16/01	10.59	8.75	1.84		Filtered+SGC	<50	<200	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/16/01	10.59	6.97	3.62	8021	SGC	410	2,100	<50	<50	2.4	<0.5	<0.5	<0.5	<5
4/8/02	10.59	6.51	4.08	8021	SGC	220	300	---	<50	1.1	<0.5	<0.5	<0.5	<5
6/20/02	10.59	8.10	2.49	8021	SGC	1,100 a,c	6,200	<50	120	34	<0.5	<0.5	<0.5	<2
9/17/02	10.59	7.66	2.93	8021	SGC	150 a,c	880	<50	130 a,c,j	32	<0.5	2.3	<0.5	<2
4/22/03	10.59	6.81	3.78	8021B	SGC	<50	<300	<50	51	1.0 C	<.50	1.2	<.50	<2
4/28/04	10.59	6.70	3.89	8260B	SGC	<100	<400	<100	114	14	<1.0	6.9	5.2	3.5
10/28/04	10.59	6.98	3.61	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/1/05 [1]	10.59	6.76	3.83	8260B	SGC	<50	<300	<50	110	2.4	<0.5	<0.5	0.7	<0.5
4/5/2006 [3]	10.59	4.86	5.73	8260B	SGC	<50	<300	<50	<50	2.1	<0.5	<0.5	<0.5	<0.5
MW-11														
1/18/00	11.60	7.08	4.52	---		---	---	---	---	---	---	---	---	---
1/19/00	11.60	---	---	8020	SGC	<50	500	<50	220	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	11.60	5.95	5.65	8020	SGC	<50	430	<50	600	23	2.1	18	15	<5.0
8/24/00	11.60	6.58	5.02	8020		<50	<250	<50	110	5.9	<0.5	0.73	0.64	<5.0
11/28/00	11.60	6.91	4.69	8020	SGC	<50	<200	<50	180	4	<0.5	1.9	<0.5	<5.0
2/27/01	11.60	5.65	5.95	8020	Filtered+SGC	86	<240	<60	720	29	5.2	38	36	<5.0
5/17/01	11.60	6.85	4.75	8020	Filtered+SGC	<50	<200	<50	720	36	3.4	15	18	9.7
8/16/01	11.60	6.01	5.59		Filtered+SGC	<50	B500	<100	110	4.8	<0.5	1.4	<0.5	<5
12/15/01	11.60	6.26	5.34	8021	SGC	200	300	<50	170	1.7	0.6	2.4	1.8	<2
4/5/02	11.60	5.47	6.13	8021	SGC	160	<200	---	330	8.9	2.0	6.9	8.7	<5
6/21/02	11.60	6.17	5.43	8021	SGC	<50	<300	<50	280	16	1.8	8.7	9.6	3.6
9/12/02	11.60	6.60	5.00	8021	SGC	<50	<300	<50	93	<0.5	<0.5	1.1	<0.5	2.1
4/24/03	11.60	5.71	5.89	8021B	SGC	<50	<300	<50	320	21	2.1	12	6.13	8.9
4/28/04	11.60	5.92	5.68	8260B	SGC	<100	<400	<100	360	18	<1.0	6.5	4.5	4
10/27/04	11.60	6.59	5.01	8260B	SGC	---	---	---	---	---	---	---	---	---
9/2/05 [1]	11.60	6.22	5.38	8260B	SGC	<50	<300	<50	85	<0.5	<0.5	<0.5	<0.5	4.5
4/4/2006 [3]	11.60	4.17	7.43	8260B	SGC	71 L Y	<300	75 L Y	230	5.7	0.9	14	7.0	6.5
4/4/06	11.60	---	---	8260B	dup	<50	<300	55 L Y	220	6.5	1.0	15	7.3	7.4
MW-12														
1/18/00	10.43	8.11	2.32	---		---	---	---	---	---	---	---	---	---
1/19/00	10.43	---	---	8020	SGC	1,800 a	11,000	<50	200	<0.5	3.4	1.5	8.4	<5.0
5/11/00	10.43	6.78	3.65	8020	SGC	2,400 a	4,900	<100	370	<0.5	<0.5	<0.5	0.9	<5.0

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Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
8/24/00	10.43	7.56	2.87	---		---	---	---	---	---	---	---	---	---
8/25/00	10.43	---	---	8020	SGC	3,500	5,000	3,700	170	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	10.43	8.13	2.30	8020	SGC	2,100	14,000	<50	290	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	10.43	8.13	2.30	---	Filtered+SGC	50	<200	<50	---	---	---	---	---	---
2/27/01	10.43	6.00	4.43	8020	Filtered+SGC	320	<250	66	110	1.4	<0.5	<0.5	<0.5	<5.0
5/17/01	10.43	7.01	3.42	8020	Filtered+SGC	<50	<200	<50	220	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	10.43	8.47	1.96	8020	Filtered+SGC	200	B300	<100	160	<0.5	<0.5	<0.5	<0.5	<5
4/8/02	10.43	6.65	3.78	8021	SGC	500	500	---	180	<0.5	<0.5	0.7	<1.5	<5
6/21/02	10.43	7.10	3.33	8021	SGC	1,100 a,b,c	3,000 h	640	180	<0.5	<0.5	0.63	1.62	<2
9/17/02	10.43	7.75	2.68	8021	SGC	220 a,b,c	360	190	130	<0.5	<0.5	<0.5	<0.5	<2
4/22/03	10.43	6.60	3.83	8021B	SGC	140 L Y	<300	120	150	<0.5	<0.5	<0.5	<0.5	<2
4/28/04	10.43	6.60	3.83	8260B	SGC	<550	1,020	<100	<100	<0.5	<1.0	<1.0	<1.0	<1.0
10/29/04	10.43	7.87	2.56	8260B	SGC	240 H L Y	460	180	170 H	<0.5	<0.5	<0.5	<0.5	<0.5
9/2/05 [1]	10.43	7.04	3.39	8260B	SGC	<50	<300	<50	170	<0.5	<0.5	<0.5	<0.5	<0.5
9/2/05 [1]	10.43	7.04	3.39	8260B	SGC	110 L Y	<300	120	150	<0.5	<0.5	<0.5	<0.5	<0.5
4/4/2006 [3]	10.43	4.49	5.94	8260B	SGC	110 Y	<300	110 Y	110	<0.5	<0.5	<0.5	<0.5	<0.5
MW-13														
1/18/00	11.34	9.63	1.71	8020	SGC	8,800 a	120,000	<50	<50	<0.5	0.8	<0.5	<0.5	<5.0
5/11/00	11.34	10.12	1.22	8020	SGC	11,000 a	110,000	<500	70	1.6	5.4	1.2	7.6	<5.0
8/24/00	11.34	10.22	1.12	---		---	---	---	---	---	---	---	---	---
8/25/00	11.34	---	---	8020	SGC	3,100	13,000	1,200	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	11.34	10.50	0.84	8020	SGC	2,400	36,000	<1300	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	11.34	10.50	0.84	---	Filtered+SGC	280	1,100	<50	---	---	---	---	---	---
2/26/01	11.34	9.60	1.74	8020	Filtered+SGC	100	<260	<64	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	11.34	10.10	1.24	---		---	---	---	---	---	---	---	---	---
5/18/01	11.34	---	---	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	11.34	10.50	0.84		Filtered+SGC	<50	B300	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
12/16/01	11.34	9.43	1.91	8021	SGC	1,900	18,000	<250	<50	<0.5	<0.5	<0.5	<0.5	<5
4/8/02	11.34	10.24	1.10	8021	SGC	440	900	---	<50	<0.5	<0.5	<0.5	<0.5	<5
6/20/02	11.34	10.75	0.59	8021	SGC	270 a,c	1,500 h	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
9/18/02	11.34	10.60	0.74	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/22/03	11.34	10.46	0.88	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0
4/28/04	11.34	10.22	1.12	8260B	SGC	<100	799	<100	<100	<0.5	<1.0	<1.0	<1.0	<1.0
10/28/04	11.34	9.50	1.84	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/1/05 [1]	11.34	9.56	1.78	8260B	SGC	<50	320	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/5/2006 [3]	11.34	7.86	3.48	8260B	SGC	180 H Y	910	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-14														
1/18/00	10.05	7.37	2.68	8020	SGC	1,700 a	22,000	<50	120	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	10.05	6.73	3.32	8020	SGC	360 a	4,300	<100	120	<0.5	<0.5	<0.5	0.5	<5.0
8/24/00	10.05	7.30	2.75	---		---	---	---	---	---	---	---	---	---
8/25/00	10.05	---	---	8020	SGC	1,000	3,100	460	90	6.3	<0.5	<0.5	<0.5	<5.0
11/28/00	10.05	7.40	2.65	8020	SGC	380	6,400	<250	140	7.4	<0.5	<0.5	<0.5	<5.0
11/28/00	10.05	7.40	2.65	---	Filtered+SGC	<50	<200	<50	---	---	---	---	---	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
2/26/01	10.05	6.20	3.85	8020	Filtered+SGC	150	<230	<58	73	2.3	<0.5	<0.5	<0.5	<5.0
5/17/01	10.05	7.74	2.31	---		---	---	---	---	---	---	---	---	---
5/18/01	10.05	---	---	8020	Filtered+SGC	120	<200	<50	100	11	<0.5	<0.5	<0.5	<5.0
8/16/01	10.05	7.85	2.20		Filtered+SGC	<50	<200	<100	60	<0.5	<0.5	<0.5	<0.5	<5
12/16/01	10.05	6.60	3.45	8021	SGC	1,110	3,000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5
4/9/02	10.05	6.58	3.47	8021	SGC	870	1,100	---	250	<0.5	<0.5	<0.5	<0.5	<5
6/20/02	10.05	7.52	2.53	8021	SGC	<50	310 h	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
9/18/02	10.05	7.55	2.50	8021	SGC	<50	<300	<50	<50	1.3	<0.5	0.80	<0.5	<2
4/22/03	10.05	6.71	3.34	8021B	SGC	<50	<300	<50	61	4.2	<0.5	1.0	<0.5	12.0
4/28/04	10.05	6.81	3.24	8260B	SGC	<230	<400	<100	241	1.4	<1.0	<1.0	<1.0	<1.0
10/28/04	10.05	6.99	3.06	8260B	SGC	<50	<300	<50	56	3.5	<0.5	<0.5	<0.5	0.5
10/28/04	10.05	---	---	8260B	dup	<50	<300	<50	53	1.9	<0.5	<0.5	<0.5	<0.5
9/1/05 [1]	10.05	7.60	2.45	8260B	SGC	<50	<300	<50	79	6.7	<0.5	<0.5	<0.5	0.7
4/5/2006 [3]	10.05	5.91	4.14	8260B	SGC	50 Y	<300	<50	<50	1.7	<0.5	<0.5	<0.5	<0.5
MW-15														
1/18/00	12.36	10.56	1.80	8020	SGC	12,000 a	89,000	<50	110	3.8	2.1	1	4.6	<5.0
5/11/00	12.36	10.03	2.33	8020	SGC	120 a	590	<50	90	0.9	0.9	<0.5	3.3	<5.0
8/24/00	12.36	10.22	2.14	---		---	---	---	---	---	---	---	---	---
8/25/00	12.36	---	---	8020	SGC	1,900	8,600	1,000	<50	1.9	<0.5	<0.5	1.5	<5.0
11/28/00	12.36	10.30	2.06	8020	SGC	2,500	36,000	<1300	80	1.7	<0.5	<0.5	1.6	<5.0
11/28/00	12.36	10.30	2.06	---	Filtered+SGC	73	<200	<50	---	---	---	---	---	---
2/26/01	12.36	9.30	3.06	8020	Filtered+SGC	190	<240	<60	55	0.6	<0.5	<0.5	0.5	<5.0
5/17/01	12.36	10.09	2.27	---		---	---	---	---	---	---	---	---	---
5/18/01	12.36	---	---	8020	Filtered+SGC	210	<230	<57	66	1.5	<0.5	<0.5	2.1	<5.0
8/16/01	12.36	10.20	2.16		Filtered+SGC	<50	B500	<100	<50	<0.5	<0.5	<0.5	2.4	<5
12/16/01	12.36	9.80	2.56	8021	SGC	3,800	15,000	<250	<50	<0.5	<0.5	<0.5	2	<5
4/5/02	12.36	9.58	2.78	8021	SGC	1,000	1,400	---	<50	<0.5	<0.5	<0.5	2.3	<5
6/20/02	12.36	10.24	2.12	8021	SGC	670 a,c	2,700 h	95 c,i	<50	0.83	<0.5	<0.5	2.20	<2
9/18/02	12.36	9.89	2.47	8021	SGC	70 a,c	<300	<50	<50	<0.5	<0.5	1.5	1.71	<2
4/22/03	12.36	9.55	2.81	8021B	SGC	<50	<300	<50	<50	1 C	<.50	1.4	1.9	<2
4/28/04	12.36	9.68	2.68	8260B	SGC	<250	567	<100	<100	<0.5	<1.0	<1.0	<1.0	2.8
10/28/04	12.36	9.58	2.78	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	2.2	<0.5
9/1/05 [1]	12.36	9.56	2.80	8260B	SGC	420 Y	<300	120 H Y	55	<0.5	<0.5	<0.5	2.0	<0.5
4/5/2006 [3]	12.36	8.76	3.60	8260B	SGC	300 H Y	760	87 H Y	<50	<0.5	<0.5	<0.5	2.4	<0.5
MW-16														
1/18/00	13.57	10.22	3.43	---	SPH: 0.1 ft.	---	---	---	---	---	---	---	---	---
5/11/00	13.57	13.31	0.27	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
8/24/00	13.57	8.91	4.66	---	SPH: N M	---	---	---	---	---	---	---	---	---
11/28/00	13.57	13.05	0.86	---	SPH: 0.42 ft.	---	---	---	---	---	---	---	---	---
2/26/01	13.57	13.10	0.79	---	SPH: 0.40 ft.	---	---	---	---	---	---	---	---	---
5/17/01	13.57	12.62G	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
8/16/01	13.57	11.94G	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
12/15/01	13.57	N M	---	---	SPH: N M	---	---	---	---	---	---	---	---	---

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Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/3/02	13.57	12.88	0.69	---		---	---	---	---	---	---	---	---	---
6/21/02	12.22	N M	---	---	SPH: N M	---	---	---	---	---	---	---	---	---
4/22/03	12.22				Well cap stuck									
4/28/04	12.22	12.48	-0.26	8260B	SGC	<230	1030	<260	2000	150	<1.0	46	<1.0	<1.0
10/28/04	12.22	11.97	0.25	8260B	SGC	450 L Y	<300	480	1100	18	1.7	29	1.7	<0.5
8/31/05	12.22	12.09	0.13	---	SPH: None	---	---	---	---	---	---	---	---	---
4/5/2006 (3)	12.22	3.80	8.42	8260B	SGC	95 H Y	420	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-17														
1/18/00	9.86	5.35	4.51	8020	SGC	850 a	21,000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/11/00	9.86	9.85	0.01	8020	SGC	150 a	2,900	<100	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/24/00	9.86	8.59	1.27	---		---	---	---	---	---	---	---	---	---
8/25/00	9.86	---	---	8020	SGC	190	610	71	<50	0.58	<0.5	<0.5	<0.5	<5.0
11/28/00	9.86	9.25	0.61	8020	SGC	<250	2,400	<250	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	9.86	9.25	0.61	---	Filtered+SGC	<50	<200	<50	---	---	---	---	---	---
2/26/01	9.86	9.40	0.46	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	9.86	8.32	1.54	---		---	---	---	---	---	---	---	---	---
5/18/01	9.86	---	---	8020	Filtered+SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/16/01	9.86	10.35	-0.49		Filtered+SGC	<50	B400	<100	<50	<0.5	<0.5	<0.5	<0.5	<5.0
12/16/01	9.86	8.01	1.85	8021	SGC	940	1,000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
4/9/02	9.86	9.76	0.10	8021	SGC	590	880	---	60	<0.5	<0.5	1.6	<0.5	<5.0
6/21/02	9.86	9.79	0.07	8021	SGC	99 a,c	650 h	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
9/18/02	9.86	8.25	1.61	8021	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/23/03	9.86	9.75	0.11	8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<2
4/28/04	9.86	8.90	0.96	8260B	SGC	<100	<400	<100	<100	<0.5	<1.0	2.4	<1.0	<1.0
10/28/04	9.86	8.32	1.54	`	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/1/05 (1)	9.86	8.38	1.48	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/5/2006 (3)	9.86	6.86	3.00	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
MW-18														
4/24/03	---	6.49		8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	2.4	<0.5	<2
4/28/04	---				Developed to monitor a utility trench, not sampled									
8/31/05	---	---	---	---		---	---	---	---	---	---	---	---	---
3/27/06	---	---	---	---		---	---	---	---	---	---	---	---	---
TBW-1														
2/23/99	---	6.25	---	---	SPH: 0.10 ft.	---	---	---	---	---	---	---	---	---
5/27/99	---	5.29	---	---	SPH: 0.01 ft	---	---	---	---	---	---	---	---	---
8/24/99	---	6.99	---	---	SPH: 0.18 ft.	---	---	---	---	---	---	---	---	---
11/22/99	---	---	---	---	Inaccessible	---	---	---	---	---	---	---	---	---
1/18/00	---	---	---	---	Inaccessible	---	---	---	---	---	---	---	---	---
5/11/00	---	6.90	---	---	SPH: 0.10 ft.	---	---	---	---	---	---	---	---	---
8/24/00	---	7.12	---	---	SPH: N M	---	---	---	---	---	---	---	---	---

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
11/28/00	---	7.75	---	---	SPH: 0.36 ft.	---	---	---	---	---	---	---	---	---
2/27/01	---	9.06	---	---	SPH: 0.51 ft.	---	---	---	---	---	---	---	---	---
5/17/01	---	6.98	---	---	SPH: 0.28 ft.	---	---	---	---	---	---	---	---	---
8/16/01	---	6.62	---	---	SPH: 0.66 ft., f	1,100	B700	<100	17,000	2,100	75	730	850	<1
12/15/01	---	6.86	---	---	SPH 0.35 ft.	---	---	---	---	---	---	---	---	---
4/3/02	---	6.14	---	---	SPH: None	---	---	---	---	---	---	---	---	---
9/12/02	---	7.52	---	---	SPH: None	---	---	---	---	---	---	---	---	---
4/22/03	---	6.41	---	---	SPH: None	---	---	---	---	---	---	---	---	---
4/28/04	---	6.33	---	---	SPH: None	---	---	---	---	---	---	---	---	---
10/28/04	---	NM	---	---		---	---	---	---	---	---	---	---	---
8/31/05	---	6.50	---	---	Well cap smashed 6"	---	---	---	---	---	---	---	---	---
3/27/06	---	5.20	---	---	SPH: None	---	---	---	---	---	---	---	---	---
TBW-2														
6/21/02	---	8.28	---	---		**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
4/22/03	---	6.70	---	---	SPH globules	---	---	---	---	---	---	---	---	---
4/28/04	---	6.61	---	---	SPH: None	---	---	---	---	---	---	---	---	---
10/28/04	---	7.31	---	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	NM	---	---		---	---	---	---	---	---	---	---	---
3/27/06	---	NM[4]	---	---		---	---	---	---	---	---	---	---	---
TBW-3														
8/19/98	---	2.67	---	8020	SGC	810,000	---	---	920	3.2	<0.5	<0.5	0.77	<10
8/19/98	---	2.67	---	8260		---	---	---	---	---	---	---	---	<5.0
2/23/98	---	1.25	---	8020		3,800	3,000	<50	110	1.6	<0.5	<0.5	<0.5	<5.0
5/27/99	---	---	---	---	DTW: N M	---	---	---	---	---	---	---	---	---
8/24/99	---	3.25	---	---	SPH globules	---	---	---	---	---	---	---	---	---
11/22/99	---	3.68	---	---		---	---	---	---	---	---	---	---	---
1/18/00	9.92	3.73	6.19	---	SPH globules	---	---	---	---	---	---	---	---	---
5/11/00	9.92	2.07	7.85	---		---	---	---	---	---	---	---	---	---
8/24/00	9.92	2.82	7.10	---	SPH: sheen	44,000	13,000	34,000	570	4.7	<0.5	<0.5	<0.5	<5.0
11/28/00	9.92	---	---	---		---	---	---	---	---	---	---	---	---
2/27/01	9.92	1.29	8.63	8020	Filtered+SGC	560	<230	<57	120	1.5	<0.5	<0.5	<0.5	<5.0
5/17/01	9.92	2.47	7.45	---		---	---	---	---	---	---	---	---	---
8/16/01	9.92	1.81	8.11		Filtered+SGC	1,500	B400	<100	180	<0.5	<0.5	<0.5	<0.5	<1
12/15/01	9.92	2.52	---	---	SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---
4/3/02	9.92	1.50	---	---	SPH: None	---	---	---	---	---	---	---	---	---
6/21/02	9.92	2.37	7.55	---	SPH: None	---	---	---	---	---	---	---	---	---
9/12/02	9.92	3.48	6.44	---	SPH: None	---	---	---	---	---	---	---	---	---
4/22/03	9.92	1.45	8.47	---	Sheen	---	---	---	---	---	---	---	---	---
4/28/04	9.92	2.26	7.66	---	SPH: None	---	---	---	---	---	---	---	---	---
10/28/04	9.92	3.42	6.50	---	Sheen	---	---	---	---	---	---	---	---	---
8/31/05	9.92	2.99	6.93	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	9.92	0.49	9.43	---	SPH: None	---	---	---	---	---	---	---	---	---
TBW-4														

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Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
2/27/01	---	1.35	---	8020	Filtered+SGC	410	<230	<57	250	1.9	<0.5	<0.5	<0.5	<5.0
5/17/01	---	2.52	---	---		---	---	---	---	---	---	---	---	---
8/16/01	---	1.88	---	---	Filtered+SGC	2,600	B700	<100	390	<0.5	<0.5	<0.5	<0.5	<5
6/21/02	---	2.32	---	---		---	---	---	---	---	---	---	---	---
4/22/03	---	1.41	---	---	Sheen	---	---	---	---	---	---	---	---	---
4/28/04	---	2.21	---	---		---	---	---	---	---	---	---	---	---
10/27/04	---	3.37	---	---	Sheen	---	---	---	---	---	---	---	---	---
8/31/05	---	2.92	---	---		---	---	---	---	---	---	---	---	---
3/27/06	---	0.49	---	---	SPH: None	---	---	---	---	---	---	---	---	---
TBW-5														
2/23/99	---	9.72	---	---	SPH: 1.45 ft.	---	---	---	---	---	---	---	---	---
5/27/99	---	7.03	---	---	SPH: 1.13 ft.	---	---	---	---	---	---	---	---	---
8/24/99	---	6.52	---	---	SPH: 1.33 ft.	---	---	---	---	---	---	---	---	---
11/22/99	---	8.31	---	---	SPH: 1.29 ft.	---	---	---	---	---	---	---	---	---
1/18/00	10.22	6.20	4.74	---	SPH: 0.90 ft.	---	---	---	---	---	---	---	---	---
5/11/00	10.22	9.41	1.05	---	SPH: 0.30 ft.	---	---	---	---	---	---	---	---	---
8/24/00	10.22	9.62	0.81	---	SPH: 0.26 ft.	---	---	---	---	---	---	---	---	---
11/28/00	10.22	10.25	0.34	---	SPH: 0.46 ft.	---	---	---	---	---	---	---	---	---
2/27/01	10.22	9.06	1.45	---	SPH: 0.36 ft.	---	---	---	---	---	---	---	---	---
5/17/01	10.22	8.75	1.47	---	SPH: 0.67 ft.	---	---	---	---	---	---	---	---	---
8/16/01	10.22	8.32	2.51	8020	SPH: 0.76 ft., f	550	B400	<100	30,000	2,900	100	1,500	5,100	<1
12/15/01	10.22	9.09	1.13	---	SPH: 0.36 ft.	---	---	---	---	---	---	---	---	---
4/3/02	Well has active remediation unit/recovery													
6/21/02	10.22	7.87	2.35	---	SPH: 0.03 ft.	---	---	---	---	---	---	---	---	---
9/12/01	10.22	7.26	2.97	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/22/03	10.22	6.22	4.00	---	SPH: 0.06 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.22	6.26	3.96	---	SPH: 0.21 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.22	3.62	6.60	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	10.22	6.41	---	---	SPH: 0.30 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.22	NM[2]	---	---		---	---	---	---	---	---	---	---	---
TBW-6														
2/23/99	---	2.09	---	8020		160	600	<50	60	<0.5	<0.5	<0.5	<0.5	<5.0
5/27/99	---	3.31	---	---		---	---	---	---	---	---	---	---	---
8/24/99	---	7.29	---	8020	SGC	180	400	<50	130	<0.5	<0.5	<0.5	<0.5	<5.0
11/22/99	---	4.37	---	---		---	---	---	---	---	---	---	---	---
1/18/00	9.49	3.83	5.66	---		---	---	---	---	---	---	---	---	---
1/19/00	9.49	---	---	8020	SGC	55 C	<200	<50	170	0.6	<0.5	<0.5	<0.5	<5.0
5/11/00	9.49	2.51	6.98	---		---	---	---	---	---	---	---	---	---
8/24/00	9.49	4.34	5.15	---		---	---	---	---	---	---	---	---	---
8/25/00	9.49	---	---	8020	SGC	320	<250	200	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	9.49	4.74	4.75	---		---	---	---	---	---	---	---	---	---
2/27/01	9.49	2.30	7.19	8020	Filtered+SGC	<57	<230	<57	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	9.49	3.35	6.14	---		---	---	---	---	---	---	---	---	---
8/16/01	9.49	3.85	5.64		Filtered+SGC	<50	<200	<100	<50	<0.5	<0.5	<0.5	<0.5	<5

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7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
12/15/01	9.49	3.96	5.53	---		---	---	---	---	---	---	---	---	---
4/3/02	9.49	2.51	6.98	---		---	---	---	---	---	---	---	---	---
6/21/02	9.49	3.58	5.91	---		---	---	---	---	---	---	---	---	---
9/12/02	9.49	6.07	4.56	---	SPH: 1.42 ft.	---	---	---	---	---	---	---	---	---
4/23/03	9.49	2.42	7.07	---		---	---	---	---	---	---	---	---	---
4/28/04	9.49	3.21	6.28	---		---	---	---	---	---	---	---	---	---
10/27/04	9.49	4.49	5.00	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	9.49	4.43	---	---	SPH: 0.52 ft.	---	---	---	---	---	---	---	---	---
3/27/06	9.49	1.90	7.59	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-A1														
4/22/03	---	1.81	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.09	2.52	7.57	---		---	---	---	---	---	---	---	---	---
10/27/04	10.09	3.03	7.06	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	10.09	3.31	6.78	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	10.09	0.62	9.47	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-A2														
4/22/03	---	1.22	---	---	Sheen	---	---	---	---	---	---	---	---	---
4/28/04	9.67	2.01	7.66	---		---	---	---	---	---	---	---	---	---
10/27/04	9.67	3.20	6.47	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	9.67	2.75	6.92	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	9.67	0.30	9.37	---	SPH: None	---	---	---	---	---	---	---	---	---
OB-A1														
4/22/03	---	2.24	---	---	SPH: .01 ft.	---	---	---	---	---	---	---	---	---
4/28/04	---	3.01	---	---	SPH: None	---	---	---	---	---	---	---	---	---
10/27/04	---	5.11	---	---	SPH: None (strong odor)	---	---	---	---	---	---	---	---	---
8/31/05	---	4.10	---	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	---	1.25	---	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B1														
4/22/03	---	7.26	---	---	Sheen	---	---	---	---	---	---	---	---	---
4/28/04	11.22	7.20	4.02	---		---	---	---	---	---	---	---	---	---
10/27/04	11.22	7.80	3.42	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	11.22	7.14	4.08	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	11.22	6.10	5.12	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B2														
4/22/03	---	7.29	---	---	Sheen, Odor	---	---	---	---	---	---	---	---	---
4/28/04	11.23	7.20	4.03	---		---	---	---	---	---	---	---	---	---
10/27/04	11.23	7.81	3.42	---	SPH: None	---	---	---	---	---	---	---	---	---

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7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
8/31/05	11.23	7.14	4.09	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	11.23	6.09	5.14	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B3														
4/22/03	---	9.90	---	---	visible Product	---	---	---	---	---	---	---	---	---
4/28/04	11.14	13.20	-2.06	---	SPH: 3.09	---	---	---	---	---	---	---	---	---
10/27/04	11.14	9.33	1.81	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	11.14	9.60	1.54	---	SPH: 0.01	---	---	---	---	---	---	---	---	---
3/27/06	11.14	9.08	2.06	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B4														
4/22/03	---	10.55	---	---	SPH: .55 ft.	---	---	---	---	---	---	---	---	---
4/28/04	11.29	10.22	1.07	---	SPH: None	---	---	---	---	---	---	---	---	---
10/27/04	11.29	9.55	1.74	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	11.29	9.70	1.59	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	11.29	9.23	2.06	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C1														
4/24/03	---	8.34	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.44	8.00	2.44	---		---	---	---	---	---	---	---	---	---
10/27/04	10.44	7.59	2.85	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	10.44	5.81	4.63	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	10.44	1.94	8.50	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C2														
4/24/03	---	6.22	---	---	SPH: .03 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.58	6.19	4.39	---	SPH: 0.06 ft	---	---	---	---	---	---	---	---	---
10/27/04	10.58	7.00	3.58	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	10.58	6.30	4.28	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.58	5.10	5.48	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C3														
4/24/03	---	6.36	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.71	6.25	4.46	---		---	---	---	---	---	---	---	---	---
10/27/04	10.71	7.10	3.61	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	10.71	6.39	4.32	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	10.71	5.30	5.41	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C4														
4/22/03	---	7.15	---	---	Strong odor	---	---	---	---	---	---	---	---	---
4/28/04	11.32	6.95	4.37	---	SPH: 0.01 ft	---	---	---	---	---	---	---	---	---
10/27/04	11.32	7.45	3.87	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	11.32	6.71	4.61	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	11.32	6.47	4.85	---	SPH: None	---	---	---	---	---	---	---	---	---

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Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
RW-C5														
4/22/03	---	6.46	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.79	6.39	4.40	---		---	---	---	---	---	---	---	---	---
10/27/04	10.79	7.21	3.58	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	10.79	6.51	4.28	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	10.79	5.33	5.46	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-C6														
4/22/03	---	6.05	---	---	SPH: 0.07 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.31	6.30	4.01	---	SPH: 0.05 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.31	6.85	---	---	SPH: 0.15 ft.	---	---	---	---	---	---	---	---	---
8/31/05	10.31	6.81	---	---	SPH: 0.93 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.31	5.66	---	---	SPH: 0.96 ft.	---	---	---	---	---	---	---	---	---
RW-C7														
4/22/03	---	6.51	---	---	visible Product	---	---	---	---	---	---	---	---	---
4/28/04	10.12	6.60	3.52	---	SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.12	NM	---	---	---	---	---	---	---	---	---	---	---	---
8/31/05	10.12	NM	---	---	---	---	---	---	---	---	---	---	---	---
3/27/06	10.12	NM[4]	---	---	---	---	---	---	---	---	---	---	---	---
OB-C1														
4/22/03	---	6.26	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.39	7.39	3.00	---	SPH: 1.27 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.39	8.06	2.33	---	SPH: 1.08 ft.	---	---	---	---	---	---	---	---	---
8/31/05	10.39	7.84	---	---	SPH: 1.55 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.39	6.15	---	---	SPH: 1.05 ft.	---	---	---	---	---	---	---	---	---
RW-D1														
4/22/03	---	6.97	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.18	5.62	4.56	---		---	---	---	---	---	---	---	---	---
10/27/04	10.18	6.67	3.51	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	10.18	5.75	---	---	SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.18	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
RW-D2														
4/22/03	---	7.15	---	---	SPH 1.25 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.33	7.45	2.88	---	SPH: 0.1 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.33	6.41	3.92	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	10.33	8.44	---	---	SPH: 3.12 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.33	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---

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Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
RW-D3														
4/22/03	---	6.89	---	---	SPH: 1.58 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.07	8.18	1.89	---	SPH: 3.25 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.07	6.37	3.70	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	10.07	7.72	---	---	SPH: 2.46	---	---	---	---	---	---	---	---	---
3/27/06	10.07	NM[(2)]	---	---	---	---	---	---	---	---	---	---	---	---
RW-D4														
4/22/03	---	8.11	---	---	SPH: 1.98 ft.	---	---	---	---	---	---	---	---	---
4/28/04	10.22	7.99	2.23	---	SPH: 2.09 ft.	---	---	---	---	---	---	---	---	---
10/27/04	10.22	6.49	3.73	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	10.22	8.09	---	---	SPH: 2.12 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.22	NM[(2)]	---	---	---	---	---	---	---	---	---	---	---	---
RW-D5														
4/22/03	---	6.04	---	---	SPH: 0.07 ft.	---	---	---	---	---	---	---	---	---
4/28/04	9.99	5.96	4.03	---	SPH: None	---	---	---	---	---	---	---	---	---
10/27/04	9.99	6.48	3.51	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	9.99	7.02*	---	---	SPH: 1.01 ft.	---	---	---	---	---	---	---	---	---
3/27/06	9.99	NM[(2)]	---	---	---	---	---	---	---	---	---	---	---	---
OB-D1														
4/22/03	---	5.41	---	---	Strong Odor	---	---	---	---	---	---	---	---	---
4/28/04	9.46	5.31	4.15	---	Strong Odor	---	---	---	---	---	---	---	---	---
10/27/04	9.46	5.89	3.57	---	---	---	---	---	---	---	---	---	---	---
8/31/05	9.46	5.42	---	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	9.46	3.09	6.37	---	SPH: None	---	---	---	---	---	---	---	---	---
OB-D2														
4/22/03	---	5.14	---	---		---	---	---	---	---	---	---	---	---
4/28/04	9.95	5.25	4.70	---		---	---	---	---	---	---	---	---	---
10/27/04	9.95	6.42	3.53	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	9.95	5.71	---	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
3/27/06	9.95	2.32	7.63	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-1														
4/22/03	---	6.43	---	---		---	---	---	---	---	---	---	---	---
4/28/04	---	5.73	---	---		---	---	---	---	---	---	---	---	---
10/27/04	---	6.34	---	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	---	5.83	---	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	---	NM[(2)]	---	---	---	---	---	---	---	---	---	---	---	---

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Field Blank														
10/28/04	---	---	---	8260B		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/1/05	---	---	---	8260B		<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/2/05	---	---	---	8260B		---	---	---	<50	---	---	---	---	---
4/4/06	---	---	---	8260B		<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank														
8/19/98	---	---	---	8020		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/22/99	---	---	---	8020		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	---	---	---	8020		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
2/27/01	---	---	---	8020	Filtered+SGC	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	---	---	---	8020	SGC	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
12/16/01	---	---	---	8021		---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5.0
4/5/02	---	---	---	8021	Trip Blank 1	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5
4/5/02	---	---	---	8021	Trip Blank 2	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5
6/21/02	---	---	---	8021	Trip Blank 1	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<5
9/12/02	---	---	---	8021	Trip Blank 1	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<2
9/13/02	---	---	---	8021	Trip Blank 2	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<2
4/23/03	---	---	---	8021B	Trip Blank 1	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<2
4/28/04	---	---	---	8260B	Trip Blank 1	---	---	---	<100	<0.5	<1.0	<1.0	<1.0	<1.0
10/29/04	---	---	---	8260B	Trip Blank 2	---	---	---	<50	---	---	---	---	---

Notes:

Groundwater elevations corrected for the presence of free product according to the calculation: GW Elevation = TOC - DTW + (0.8 x SPH thickness)

(1) = Depth to groundwater measured on August 31, 2005.
(2) = Converted to an extraction well and access port is too small for the oil/water probe.
(3) = Depth to groundwater measured on March 27, 2006.
(4) = Could not locate well.

--- = Not measured/analyzed
* = Product was thick; difficult to measure thickness.

BTEX = Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020 or 8240/8260.
DTW = Depth to water
Dup = Duplicate sample
Filtered = Groundwater samples were filtered through a 0.45-micron glass membrane filter.
ID = Identification
MTBE = Methyl tertiary-butyl ether by EPA Method 8020 or 8260. Confirmation 8260 results shown in parentheses.
NM = Not measured. Well obstructed or could not be located.
SPH = Separate-phase hydrocarbons; measured thickness
SGC = Silica gel cleanup based on Method 3630B prior to TPH-d, TPH-k, or TPH-mo analysis, following California Regional Water Quality Control Board February 16, 1999 memorandum
TBW = Tank backfill well

Table 1
Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
Municipal Service Center
7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (in feet)	Depth to Groundwater (in feet)	Groundwater Elevation (in feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)

TOC = Top of casing
TPH-d = Total petroleum hydrocarbons quantitated as diesel - analyzed by EPA Method 8015B
TPH-g = Total petroleum hydrocarbons quantitated as gasoline - analyzed by EPA Method 8015B
TPH-k = Total petroleum hydrocarbons quantitated as kerosene - analyzed by EPA Method 8015B
TPH-mo = Total petroleum hydrocarbons quantitated as motor oil - analyzed by EPA Method 8015B

a = The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the diesel range actually resemble heavier fuels at the front end of the motor oil pattern.
b= The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the diesel range actually resemble lighter fuels; the response looks like lower carbon chain compounds close to the gasoline range.
c= The analytical laboratory reviewed the data and noted that the sample exhibits a fuel pattern that does not resemble the standard.
e= Results are estimated due to concentrations exceeding the calibration range
f= Filtration with 0.45-micron glass membrane filter and silica gel treatment
g= Depth to product, depth to water could not be determined.
h= The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the motor oil range are actually from the front end of the kerosene oil pattern.
i= The analytical laboratory reviewed the data and noted that petroleum hydrocarbons quantified in the motor oil range are actually from the back end of the kerosene oil pattern.
j= The analytical laboratory reviewed the data and noted that the sample exhibited an unknown peak or peaks.
J= Value qualified as "estimated"
L= Lighter hydrocarbons contributed to the quantitation.
Y= Sample exhibits chromatographic pattern that does not resemble standard.
B= Results flagged with "B" indicate motor oil was detected in the method blank.
Z= Sample exhibits unknown single peak or peaks
H= Heavier hydrocarbons contributed to the quantitation.

Table 2
Summary of Groundwater Analytical Data, VOCs
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	Benzene (µg/l)	n-Butyl-benzene (µg/l)	sec-Butyl-benzene (µg/l)	tert-Butyl-benzene (µg/l)	Chloro-ethane (µg/l)	Chloro-form (µg/l)	Methyl Chloride (µg/l)	1,2-DCA (µg/l)	cis-1,2-DCE (µg/l)	1,2-DCP (µg/l)	Ethyl-benzene (µg/l)	Isopropyl-benzene (µg/l)	p-Isopropyl-toluene (µg/l)	MTBE (µg/l)	Napthalene (µg/l)	n-Propyl-benzene (µg/l)	Toluene (µg/l)	1,2,4-TMB (µg/l)	1,3,5-TMB (µg/l)	Xylenes (µg/l)
MW-5																				
2/27/01	180	9	4	ND	3	ND	ND	7	ND	3	260	23	6	1,100	43	68	7	1	11	53
MW-6																				
2/27/01	270	11	3	ND	<1	ND	ND	7	ND	<1	9	6.0	1.0	19.0	62	21	3	1	<1	3
8/20/01	E280	14	<1	<1	<1	3	2	<1	<1	<1	11	4.0	<1	14.0	E82	14	4	<1	<1	9
TBW-1																				
8/20/01	E530	30	<1	54	<1	4	10	<1	2	<1	E540	36	54	<1	E300	E120	79	E430	<1	E790
TBW-3																				
8/20/01	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	6	<1	<1	<1	5	<1	<1	<1	<1	3
TBW-5																				
8/20/01	E620	<1	<1	E160	<1	3	<1	<1	<1	<1	E730	40	E160	<1	E450	E140	E110	<1	<1	E3100

Notes:

cis-1,2-DCE = cis-1,2-dichloroethene
E = estimated concentration
MTBE = methyl tertiary-butyl ether
ND = Not detected.
VOCs = Volatile organic compounds by EPA Method 8260. Sample not subject to silica gel cleanup or filtration prior to analysis.
1,2-DCA = 1,2-dichloroethane
1,2-DCP = 1,2-dichloropropane
1,2,4-TMB = 1,2,4-trimethylbenzene
1,3,5-TMB = 1,3,5-trimethylbenzene

Table 3
Summary of Groundwater Analytical Data, SVOCs
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	Napthalene (µg/l)	Pyrene (µg/l)	Other SVOCs (µg/l)
MW-6			
2/27/01	19	ND	ND
8/20/01	52	< 5	39
MW-9			
11/28/00	ND	ND	ND
MW-13			
11/28/00	ND	10	ND
MW-17			
11/28/00	ND	ND	ND
TBW-1			
8/20/01	140	8	387
TBW-3			
8/20/01	< 5	< 5	5
TBW-5			
8/20/01	220	< 5	73

Notes:

SVOCs = Semivolatile organic compounds by EPA Method 8270
ND = Not detected

Samples not subject to silica gel cleanup or filtration before analysis.

Table 4
Summary of Groundwater Analytical Data, LUFT Metals
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in milligrams per liter (mg/l)

Well ID/ Date	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Nickel (mg/l)	Zinc (mg/l)	Notes
MW-2						
8/19/98	---	---	< 100	---	---	a
MW-6						
2/28/01	< 0.001	0.035	0.23	0.046	0.19	non-filtered
8/16/01	< 0.001	0.020	0.12	0.032	0.11	
TBW-1						
8/16/01	< 0.001	0.017	0.042	0.034	0.10	0.1
TBW-3						
8/16/01	< 0.001	0.008	0.01	0.019	< 0.02	
TBW-5						
8/16/01	< 0.001	< 0.005	0.01	0.008	0.03	

Notes:

LUFT metals by EPA Method 6010. Samples filtered in lab before analysis, unless noted otherwise.

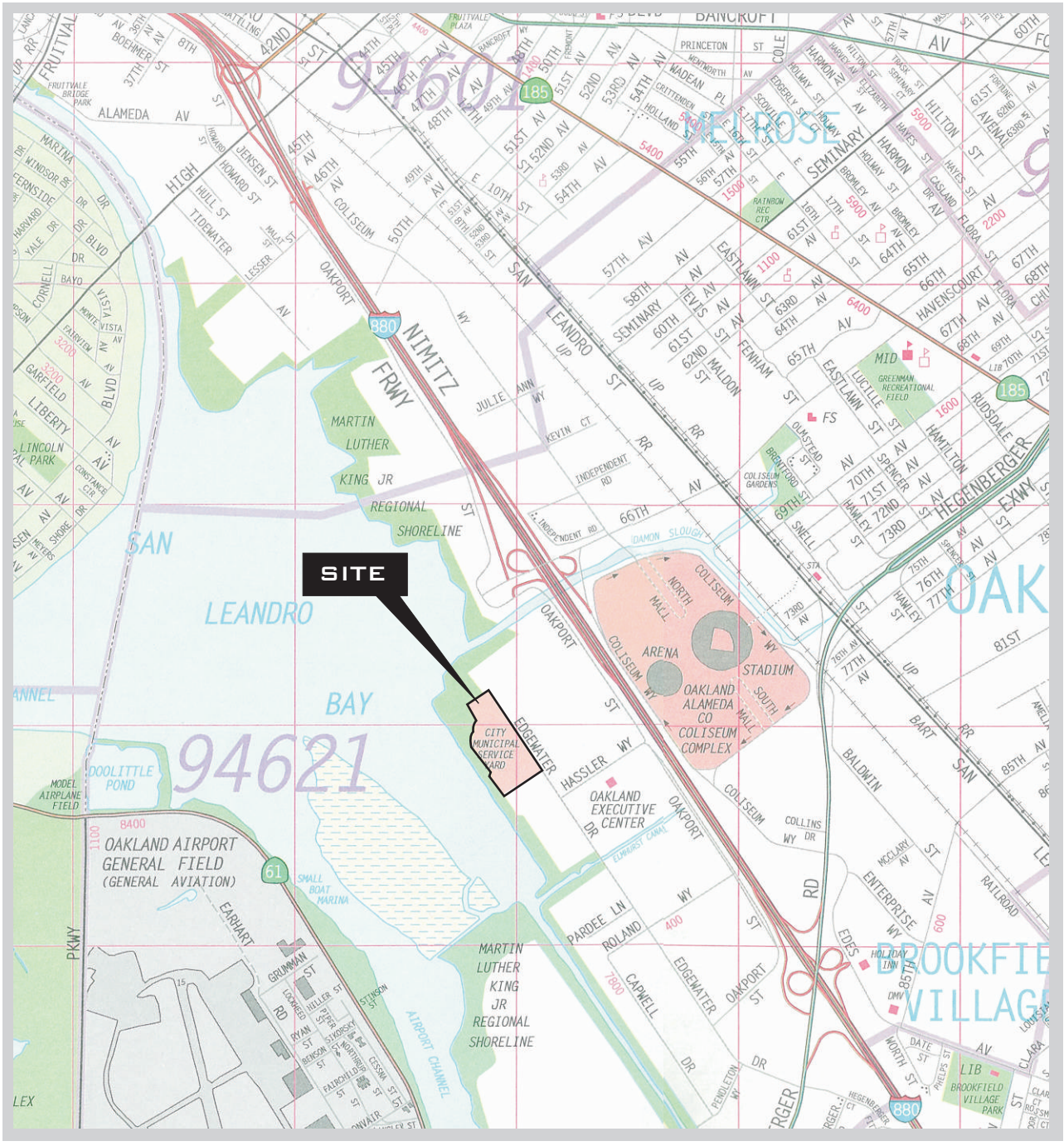
--- = not measured/analyzed
a = analyzed for organic lead
LUFT = Leaking Underground Fuel Tank

Table 5
Summary of Groundwater Analytical Data, Additional Metals
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Sample ID/ Date	Antimony (mg/l)	Arsenic (mg/l)	Beryllium (mg/l)	Copper (mg/l)	Selenium (mg/l)	Silver (mg/l)	Thallium (mg/l)
MW-6							
8/16/01	<0.01	0.033	<0.001	0.025	<0.01	<0.003	<0.01
TBW-1							
8/16/01	<0.01	0.015	<0.001	0.017	<0.01	<0.003	<0.01
TBW-3							
8/16/01	<0.01	0.009	<0.001	0.008	<0.01	<0.003	<0.01
TBW-5							
8/16/01	<0.01	0.020	<0.001	<0.005	<0.01	<0.003	<0.01

Notes:

Metals by EPA Method 6010. Samples filtered in lab before analysis, unless noted otherwise.
mg/l = milligrams per liter



0 2400 4800

APPROXIMATE SCALE IN FEET

SOURCE: 2002 THOMAS GUIDE FOR ALAMEDA AND CONTRA COSTA COUNTIES

DESIGN\09225\11\000\09225 SiteVicinity.CDR

Site Vicinity Map

Municipal Service Center, 7101 Edgewater Drive, Oakland, California

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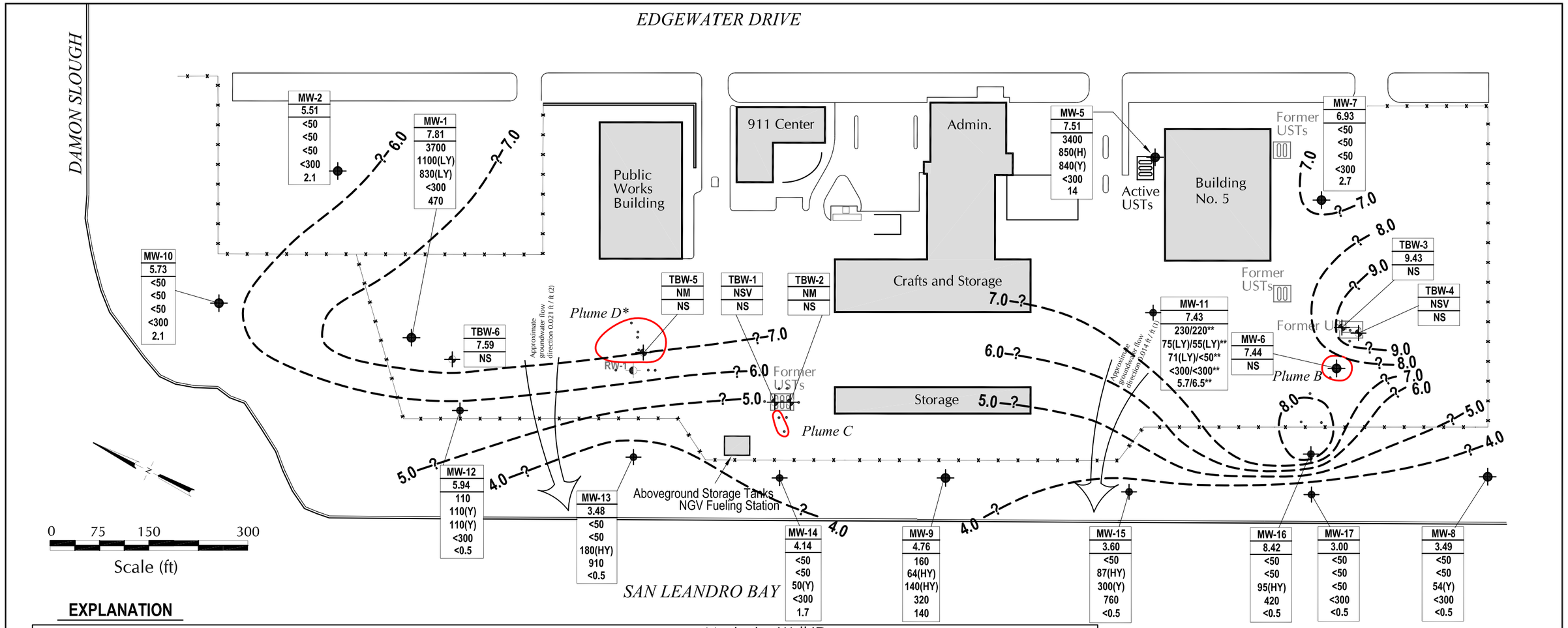
Figure 1



EXPLANATION

MW-1	Monitoring well location
RW-1	Remediation well location
TBW-1	Tank Backfill Well
MW-3	Abandoned Well
NS	Not Sampled
NM	Not Measured / Inaccessible
NSV	Not Surveyed
*	Unable to access wells within plume for product measurement. Access hole in wells was too small for oil/water interface probe.
**	Duplicate Sample
(1)	Measured between wells MW-11 & MW-15
(2)	Measured between wells TBW-6 & MW-12
L	Lighter hydrocarbons contributed to the quantitation
Y	Sample exhibits chromatographic pattern that does not resemble standard
H	Heavier hydrocarbons contributed to the quantitation

Well	Monitoring Well ID
ELEV	Groundwater elevation, feet above mean sea level (msl)
TPHg, TPHk, TPHd, TPHmo, B	TPHg, TPHk TPHd, TPHmo, and benzene concentrations in Micrograms per Liter (ug/L)
TPHg	Total Petroleum Hydrocarbons as Gasoline
TPHk	Total Petroleum Hydrocarbons as Kerosene
TPHd	Total Petroleum Hydrocarbons as Diesel
TPHmo	Total Petroleum Hydrocarbons as Motor Oil
B	Benzene
ft/ft	Foot per foot
UST	Underground storage tank
	Approximate plume boundary
	Fence
4.0	Groundwater elevation contour; dashed where inferred: queried where uncertain

Source: CAMBRIA

Groundwater Elevation Contour Map and Hydrocarbon Concentrations in Shallow Groundwater - March 2006

Municipal Service Center, Oakland, California

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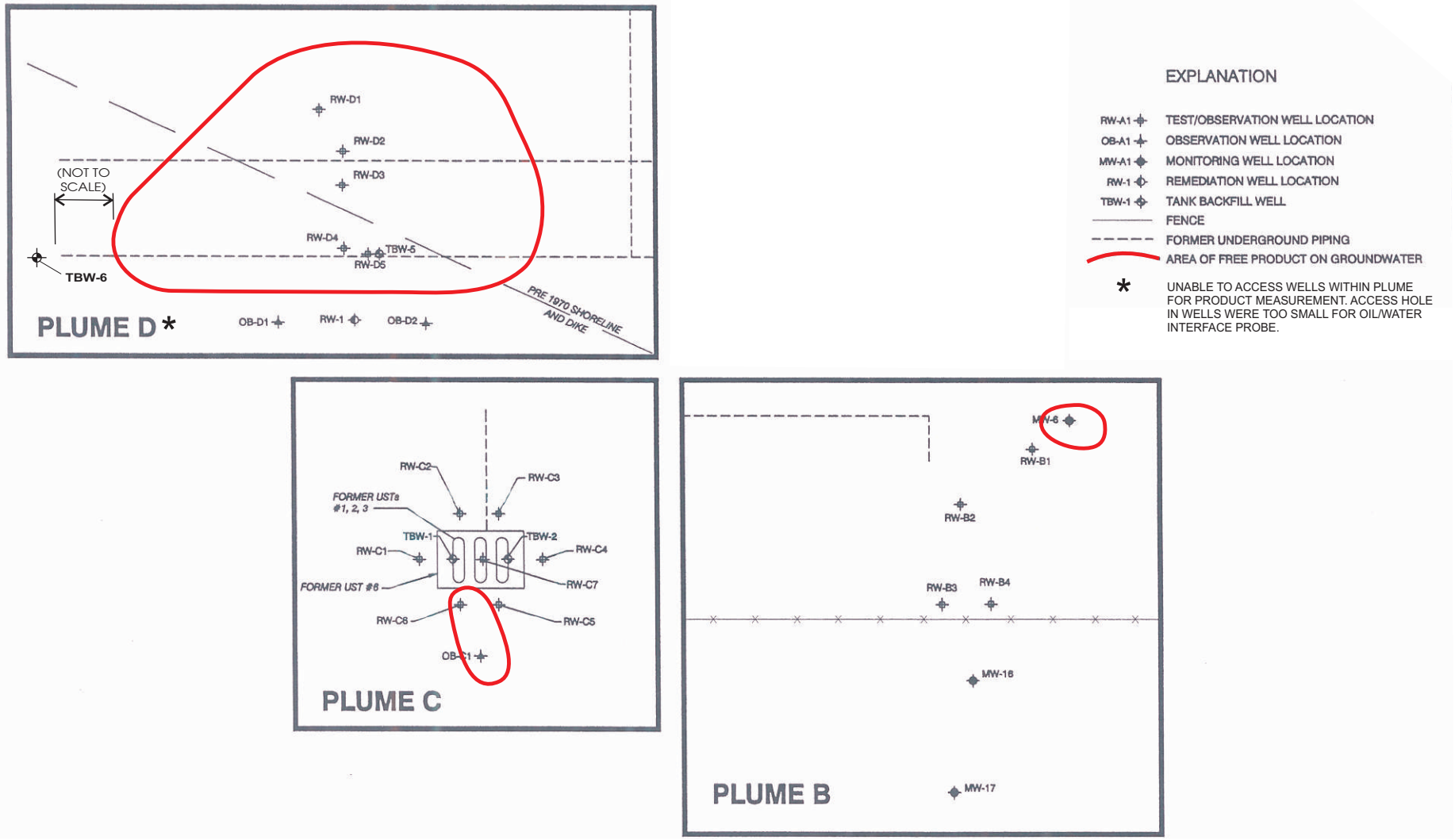
Figure 2

I:\Design\001\09225\21\000\dwg\GWE and Hydrocarbons in Shallow GW 03-2000.dwg, Layout1, 8/8/2006 4:13:54 PM



NOTE: ALL DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE
SOURCE: NINYO & MOORE - JULY 2004

DESIGN\001\09225\21\000\09225 Plume Detail March 2006.cdr

Detail Plume Map
March 2006

Municipal Service Center, 7101 Edgewater Drive, Oakland, California

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Figure 3

APPENDIX A

City of Oakland MSC Schedule and Protocol

Table A: Revised Well Sampling Schedule and Protocol

City of Oakland Municipal Service Center

Well ID	Monitoring Schedule		Parameters to Be Monitored							
	March	September	Elevation	Floating Product Thickness	PH	Dissolved Oxygen	Temperature	Specific Conductivity	TPH-gas BTEX & MTBE	TPH d/k/mo
MW-1	X	X	X	X	X	X	X	X	X	X
MW-2	X	gauge only	X	X	X	X	X	X	X	X
MW-3	Closed/ Destroyed									
MW-4	Closed/ Destroyed									
MW-5	X	X	X	X	X	X	X	X	X	X
MW-6	X	X	X	X	X	X	X	X	X	X
MW-7	X	gauge only	X	X	X	X	X	X	X	X
MW-8	X	X	X	X	X	X	X	X	X	X
MW-9	X	X	X	X	X	X	X	X	X	X
MW-10	X	X	X	X	X	X	X	X	X	X
MW-11	X	gauge only	X	X	X	X	X	X	X	X
MW-12	X	X	X	X	X	X	X	X	X	X
MW-13	X	X	X	X	X	X	X	X	X	X
MW-14	X	X	X	X	X	X	X	X	X	X
MW-15	X	X	X	X	X	X	X	X	X	X
MW-16	X	X	X	X	X	X	X	X	X	X
MW-17	X	X	X	X	X	X	X	X	X	X
MW-18	gauge only	gauge only	X	X						
TBW-1	gauge only	gauge only	X	X						
TBW-2	gauge only	gauge only	X	X						
TBW-3	gauge only	gauge only	X	X						
TBW-4	gauge only	gauge only	X	X						
TBW-5	gauge only	gauge only	X	X						
TBW-6	gauge only	gauge only	X	X						
RW-1	gauge only	gauge only	X	X						
RW-A1	gauge only	gauge only	X	X						
RW-A2	gauge only	gauge only	X	X						
OB-A1	gauge only	gauge only	X	X						
RW-B1	gauge only	gauge only	X	X						
RW-B2	gauge only	gauge only	X	X						
RW-B3	gauge only	gauge only	X	X						
RW-B4	gauge only	gauge only	X	X						
RW-C1	gauge only	gauge only	X	X						
RW-C2	gauge only	gauge only	X	X						
RW-C3	gauge only	gauge only	X	X						
RW-C4	gauge only	gauge only	X	X						
RW-C5	gauge only	gauge only	X	X						
RW-C6	gauge only	gauge only	X	X						
RW-C7	gauge only	gauge only	X	X						
OB-C1	gauge only	gauge only	X	X						
RW-D1	gauge only	gauge only	X	X						
RW-D2	gauge only	gauge only	X	X						
RW-D3	gauge only	gauge only	X	X						
RW-D4	gauge only	gauge only	X	X						
RW-D5	gauge only	gauge only	X	X						
OB-D1	gauge only	gauge only	X	X						
OB-D2	gauge only	gauge only	X	X						

Notes:

gauge only = measure groundwater elevation and floating product thickness only

TPH d/k/mo = total petroleum hydrocarbons as diesel, kerosene, and motor oil after silica gel cleanup

APPENDIX B

Groundwater Sampling Field Data Sheets

LFR LEVINE FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 9/4/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name SK Sample No. MW-1 ☒ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location —

Date Purge Water Disposed 9/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/k/mo	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-1 Depth of Water 2.25

Well Diameter: 2" Well Depth 15.80

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 13.55

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.17

80% DTW 4.96

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer Reading~~ ORP	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~ mS/cm	Turb (NTU)	Remarks
1049	—	2.25	—	—	—	—	—	—	START PURGE
1155			2.25	-152.9	14.14	7.22	6.46	turb	brown/gray
1200			4.50	-152.3	16.76	7.10	9.04	turb	brown/gray
1205			6.75	-155.8	17.40	6.96	1.58	turb	brown gray dewatered
1412		3.24							Sample

Continue remarks on reverse, if needed.

frm-water-quality-sampling-log: MER; 10/00; FORM FRONT

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK Sample No. MW-5 ☒ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE	
TPHd / mo / K	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-5 Depth of Water 3.28

Well Diameter: 2" Well Depth 14.41

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 11.13

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.78

80% DTW _____

ORP

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer Reading~~	Temperature (C°)	PH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1500		3.28	—	—	—	—	—	—	START PURGE
1503		—	1.75	-43.6	17.10	7.09	5201	turb	cloudy
1505		—	3.50	-51.3	16.34	7.80	1160	turb	cloudy
1507		—	5.25	-45.2	16.22	7.30	1122	turb	cloudy
1509		—	7.00	-45.9	16.17	7.27	1160	turb	cloudy
1511		—	8.75	-44.4	16.13	7.22	1227	turb	cloudy
1515		3.33	—	—	—	—	—	—	SAMPLE

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/4/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name SK Sample No. MW-2 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE,	
TPHd/mo/k.	

Lab Name _____

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-2 Depth of Water 10.95

Well Diameter: 2" Well Depth 15.70

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 4.75

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.76

80% DTW _____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading (ORP)	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~ (mS/cm)	Turb (NTU)	Remarks
1045	—	10.95	—	—	—	—	—	—	start Purge
1051	water?		0.75	—	15.88	5.93	20.19	turb	gray
1054			1.50	-51.6	16.86	6.09	21.03	turb	gray
1056			2.25	-44.3	16.91	6.25	21.27	turb	gray
1059			3.00	-50.9	16.98	6.45	21.77	turb	gray
1101			4.00	-49.2	17.09	6.50	22.30	turb	gray
1104			4.75	-48.9	17.19	6.59	22.57	turb	gray
1106			5.80	-52.2	17.30	6.67	22.80	turb	gray
1108		4.75	6.25	-48.8	17.11	6.68	22.65	turb	gray

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK/DN Sample No. MW-6 ☐ FB

Sampling Plan By LPL Dated ____ C.O.C. No. ____ ☐ DUP ____

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other ____

Purge Water Storage Container Type 55 gal drum Storage Location —

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
NA	

Lab Name —

Delivery By ☐ Courier ____ ☐ Hand ____

Well No. MW-6 Depth of Water —

Well Diameter: 2" Well Depth —

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height —

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume —

80% DTW ____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	PH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1525	—	—	—	—	—	—	—	—	~0.5 to 1 foot product in well as measur. by oil/water interface and visual observation of bailer

LFR LEVINE FRICKE — WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name SK/DN Sample No. MW-7 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location —

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/Kl/MO	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-7 Depth of Water 4.30

Well Diameter: 2" Well Depth 14.30

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 10.00

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.60

80% DTW 6.30

ORP

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1431		4.30	—	—	—	—	—	—	START PURGE
1434		—	1.75	-34.5	17.19	6.70	5237	turb	brown
1436			3.25	-35.1	17.23	6.99	2239	turb	brown
1438			5.00	-13.0	17.06	6.96	2248	turb	brown
1440			6.50	-12.4	16.98	6.92	2365	turb	brown
1445		6.12							Sample

Continue remarks on reverse, if needed.

LFR LEVINE FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK/DN Sample No. MW-8 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/K/mo	

Lab Name CET

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-8 Depth of Water 9.14

Well Diameter: 2" Well Depth 15.15

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 6.01

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.96 gal (6 RP)

80% DTW 10.35

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~ mS/cm	Turb (NTU)	Remarks
0945		9.14	—	—	—	—	—	—	Start Purge
0950			1.00	26.0	15.58	6.70	5.857	turb	brown
0955			2.00	-28.7	16.00	7.02	7704	turb	brown
0958			3.00	-62.6	16.34	6.99	15.689	turb	brown
1000			4.00	-79.3	16.43	7.10	15.230	turb	brown
1002			4.75	—	—	—	—	—	dewatered
1058		10.35							sample

Continue remarks on reverse, if needed.

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK/DN Sample No. MW-9 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/k/mo	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-9 Depth of Water 6.04

Well Diameter: 2" Well Depth 14.41

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.37

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.34

80% DTW 7.71

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ ORP Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1235		6.04	—	—	—	—	—	—	start Purge
1237			1.50	-136.4	17.03	7.54	3348	turb	brown
1239			2.75	-135.1	16.92	7.50	3298	turb	brown
1241			4.25	-136.1	17.12	7.42	3312	turb	brown
1245		7.21							sample

Continue remarks on reverse, if needed.

LFR LEVINE·FRICKE — WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK/DN Sample No. MW-10 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/k/ms	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-10 Depth of Water 4.62

Well Diameter: 2" Well Depth 14.60

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 9.98

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.60

80% DTW _____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer Reading~~ ORP	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1337		4.62	—	—	—	—	—	—	Start Purge
1341			1.75	-13.2	15.59	7.90	521	turb	gray
1343			3.25	-2.3	15.57	7.68	645	turb	gray
1345			5.00	-6.9	15.59	7.56	745	turb	gray
1347			6.75	-19.2	15.63	7.48	857	turb	gray
1349			8.50	-23.8	15.74	7.44	916	turb	gray
1353			10.00	-34.9	15.87	7.40	1087	turb	gray
1355			11.75	-44.9	15.91	7.38	1252	turb	gray.
1358			13.25	-50.4	16.00	7.39	1654	turb	gray
1405			15.00	-47.2	15.79	7.37	1092	turb	gray
1407			16.75	-51.5	15.80	7.29	1085	turb	gray
1412		4.80							sample

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

LFR LEVINE-FRICKE

Project No. 001-09225-21 Date 4/4/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK Sample No. MW-11 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☒ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☐ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	3 VOA's + HCl
TPHd/k/mo	1 L Amber

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-11 Depth of Water 4.02

Well Diameter: 2" Well Depth 19.30

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 15.28

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.44

80% DTW _____

ORP mS/cm

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~	Turb (NTU)	Remarks
1312		4.02	—	—	—	—	—	—	START PURGE
1317			2.50	-70.2	16.86	7.08	3.808	turb	gray
1322			5.00	-59.6	16.92	6.89	4.764	turb	gray
1327			7.50	-53.2	16.99	6.79	5.579	turb	gray
1331			10.00	-50.6	17.08	6.795	5.770	turb	gray
1338			12.50	-47.1	17.20	6.736	6.229	turb	gray
1344		4.92	15.00	-45.1	17.09	6.76	6.099	turb	gray
1349									sample
1354									duplicate

Continue remarks on reverse, if needed.

LFR LEVINE FRICKE — WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date ~~4~~ 4/4/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location ~~MW-12~~ EK Oakland

Sampler's Name EK Sample No. MW-12 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location —

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE	
TPHd / TPHk / TPHmo	
Lab Name CTL	
Delivery By ☐ Courier _____ ☒ Hand _____	

Well No. MW-12 Depth of Water 4.39

Well Diameter: 2" Well Depth 14.48

☒ ~~2~~" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 10.09

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.61

80% DTW _____

ORP mc/cm

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer Reading~~	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~	Turb (NTU)	Remarks
1220		4.39	—	—	—	—	—	—	Start Purge
1224			1.75	-187.3	15.70	7.77	2.65	turb	gray
1229			3.50	-185.6	15.75	7.74	2.641	turb	gray
1232			5.25	-191.7	15.93	7.74	2.909	turb	gray
1237		4.75							sample

Continue remarks on reverse, if needed.

frm-water-quality sampling log: MER; 10/00; FORM FRONT

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK/DN Sample No. MW-13 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/k/mo	

Lab Name C & T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-13 Depth of Water 8.79

Well Diameter: 2" Well Depth 19.60

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 10.81

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.73 OR

80% DTW 10.96

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1315		8.79	—	—	—	—	—	—	START Purge
1317		—	1.75	-37.4	17.76	7.65	4489	turb	brown
1319		—	3.5	-36.5	18.05	7.50	5351	turb	brown
1321		—	5.25	-39.8	18.18	7.45	5383	turb	brown
1324		10.80							Sample

Continue remarks on reverse, if needed.

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/2006 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK/DN Sample No. MW-14 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location —

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/k/ms	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-14 Depth of Water 5.90

Well Diameter: 2" Well Depth 14.65

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.75

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.40

80% DTW _____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading (ORP)	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1255		5.90	—	—	—	—	—	—	start Purge
1259			1.50	-143.8	17.79	7.52	9136	tuvb	black
1301			3.0	-136.3	17.49	7.60	9069	tuvb	black
1303			4.5	-127.2	17.24	7.65	8430	tuvb	black
1308		6.08							sample.

Continue remarks on reverse, if needed.

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name EK/DN Sample No. MW-1S ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location —

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/mold	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-1S Depth of Water 8.64

Well Diameter: 2" Well Depth 20.40

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 11.76

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.88

80% DTW _____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ ORP Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1215		8.64	—	—	—	—	—	—	Start Purge
1219			2.00	-140.4	18.22	7.22	7082	turb	brown
1221			3.75	-146.8	17.70	7.34	6210	turb	brown
1225			5.75	-147.2	17.58	7.35	6815	turb	brown
1229		8.98							Sample

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

LFR LEVINE-FRICKE

Project No. 001-09225-21 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name SK/DN Sample No. MW-16 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP ___

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/k/mo	
Lab Name CAT	
Delivery By ☐ Courier ☒ Hand	

Well No. MW-16 Depth of Water 2.60

Well Diameter: 2" Well Depth 12.02

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 9.42

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.507 ORS

80% DTW 4.48

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1029		2.60	—	—	—	—	—	—	Start Purge
1032			1.50	-25.0	15.85	7.93	1002	turb	brown
1035			3.0	19.4	15.77	7.74	943	turb	brown
1037			4.5	28.3	15.72	7.60	1133	turb	brown
1039			6.0		15.83	7.54	1130	turb	brown
1045		3.60							sample

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

LFR LEVINE-FRICKE

Project No. 001-09225-01 Date 4/5/06 Page 1 of 1

Project Name Oakland Edgewater Sampling Location Oakland

Sampler's Name ZK/DN Sample No. MW-17 ☐ FB

Sampling Plan By LPL Dated _____ C.O.C. No. _____ ☐ DUP

Purge Method: ☐ Centrifugal Pump ☒ Disposable Bailer ☒ Hand Bail ☐ Submersible Pump ☐ Teflon Bailer ☐ Other _____

Purge Water Storage Container Type 55 gal drum Storage Location _____

Date Purge Water Disposed 4/5/06 Where Disposed On-Site Treatment

Analyses Requested	No. and Type of Bottles Used
TPHg/BTEX/MTBE	
TPHd/k/mo	

Lab Name C&T

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-17 Depth of Water 8.64

Well Diameter: 2" Well Depth 17.55

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.91

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.42

80% DTW _____

4 new bolts on well lid

ORP

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer Reading~~	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1005	—	8.64	—	—	—	—	—	—	start Purge
1008	—	—	1.50	-12.1	15.88	7.52	6.684	turb	brown
1012			3.00	-49.4	15.98	7.42	7.464	turb	brown
1015			4.50	-48.7	15.97	7.42	7.320	turb	brown
1018			6.00	-57.7	16.04	7.38	8.581	turb	brown
1025		8.80							sample

Continue remarks on reverse, if needed.

APPENDIX C

Laboratory Results and Chain-of-Custody Documentation

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

A N A L Y T I C A L R E P O R T

Prepared for:

LFR Levine Fricke
1900 Powell Street
12th Floor
Emeryville, CA 94608

Date: 11-APR-06
Lab Job Number: 185979
Project ID: 001-09225-21
Location: Oakland Edgewater

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

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**185979**
Client:	**LFR Levine Fricke**
Project:	**001-09225-21**
Location:	**Oakland Edgewater**
Request Date:	**04/04/06**
Samples Received:	**04/04/06**

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 04/04/06. The samples were received cold and intact. All data were e-mailed to Larry Lapuyade on 04/11/06.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

185771

SAMPLE COLLECTOR:
LFR LEVINE•FRICKE
1900 Powell Street, 12th Floor
Emeryville, California 94608-1827
(510) 652-4500 Fax: (510) 652-2246

PROJECT NO.:	SECTION NO.:	DATE:	SAMPLER'S INITIALS:	SERIAL NO.:
001-09225-21	*****	4/4/06	EK	Nº 201872

PROJECT NAME: Oakland Edgewater
SAMPLER (Signature): Erica Kalvi

SAMPLE							ANALYSES												REMARKS
SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	TYPE: Soil	TYPE: Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602) (8260)	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	TPHx	MTBE (8260)	TAT: Standard	TAT: RUSH:	TAT: HOLD	*VOCs: ☐ 8260 List ☐ 8240 List ☐ 8010 List ☐ 624 List **Metals: ☐ CAM17 ☐ RCRA ☐ LUFT	
TB-1	4/4/06	1045				X	~~X~~	~~X~~	X	X			~~X~~	X	X		X		Hold TB-1
MW-2	4/4/06	1115				X	X	X	X	X			X	X	X				
MW-1-FB	4/4/06	1130				X	X	X	X	X			X	X	X				*Results to Lavvy Lapuyade
MW-12	4/4/06	1237				X	X	X	X	X			X	X	X				
MW-11	4/4/06	1349				X	X	X	X	X			X	X	X				
MW-11-D	4/4/06	1359				X	X	X	X	X			X	X	X				*USE SILICA GEL CLEANUP ON TPHd/TPHmo, TPHx SAMPLES.
MW-1	4/4/06	1412				X	X	X	X	X			X	X	X				*Standard TAT.

SAMPLE RECEIPT: ☐ Intact ☐ Cold ☐ Ice ☐ Ambient
Cooler Temp:
Cooler No:
Preservative Correct? ☐ Yes ☐ No ☐ N/A

METHOD OF SHIPMENT: Hand
LAB REPORT NO.:
FAX COC CONFIRMATION TO:

ANALYTICAL LABORATORY: C&T

FAX RESULTS TO:
SEND HARDCOPY TO:
SEND EDD TO: EMV.LABEDDS.COM

RELINQUISHED BY:	RELINQUISHED BY: 2	RELINQUISHED BY: 3
(SIGNATURE) Erica Kalvi (DATE) 4/4/06	(SIGNATURE) (DATE)	(SIGNATURE) (DATE)
(PRINTED NAME) ERICA KALVI (TIME) 535	(PRINTED NAME) (TIME)	(PRINTED NAME) (TIME)
(COMPANY) LFR	(COMPANY)	(COMPANY)
RECEIVED BY: Lavanna Curtis (SIGNATURE) (DATE) 4/4/06	**RECEIVED BY:** 2 (SIGNATURE) (DATE)	**RECEIVED BY (LABORATORY):** 3 (SIGNATURE) (DATE)
(PRINTED NAME) Lavanna Curtis (TIME) 535	(PRINTED NAME) (TIME)	(PRINTED NAME) (TIME)
(COMPANY) Curtis & Tompkins	(COMPANY)	(COMPANY)

Shipping Copy (White) File Copy (Yellow) Field Copy (Pink)

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 185979 Date Received: 4/4/06 Number of Coolers: 1
Client: LFR Project: Oakland Edgewater

A. Preliminary Examination Phase
Date Opened: 4/4/06 By (print): Don P. (sign)

1. Did cooler come with a shipping slip (airbill, etc.)? YES (NO)
   If YES, enter carrier name and airbill number:
2. Were custody seals on outside of cooler? YES (NO)
   How many and where? Seal date: Seal name:
3. Were custody seals unbroken and intact at the date and time of arrival? YES NO N/A
4. Were custody papers dry and intact when received? (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? (YES) NO
6. Did you sign the custody papers in the appropriate place? (YES) NO
7. Was project identifiable from custody papers? (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO
   Type of ice: WET Temperature: on ice/No temp 0

B. Login Phase
Date Logged In: 4/4/06 By (print): Don P. (sign)

1. Describe type of packing in cooler: Foam
2. Did all bottles arrive unbroken? (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? (YES) NO
4. Did bottle labels agree with custody papers? (YES) NO
5. Were appropriate containers used for the tests indicated? (YES) NO
6. Were correct preservatives added to samples? (YES) NO
7. Was sufficient amount of sample sent for tests indicated? (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below. (YES) NO
9. Was the client contacted concerning this sample delivery? YES NO
   If YES, give details below.
   Who was called? By whom? Date:

Additional Comments:

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	111987
Units:	ug/L	Sampled:	04/04/06
Diln Fac:	1.000	Received:	04/04/06

Field ID: MW-2 Lab ID: 185979-002
Type: SAMPLE Analyzed: 04/04/06

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	69-137
Bromofluorobenzene (FID)	107	80-133

Field ID: MW-1-FB Lab ID: 185979-003
Type: SAMPLE Analyzed: 04/04/06

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	69-137
Bromofluorobenzene (FID)	108	80-133

Field ID: MW-12 Lab ID: 185979-004
Type: SAMPLE Analyzed: 04/04/06

Analyte	Result	RL
Gasoline C7-C12	110	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	69-137
Bromofluorobenzene (FID)	110	80-133

Field ID: MW-11 Lab ID: 185979-005
Type: SAMPLE Analyzed: 04/05/06

Analyte	Result	RL
Gasoline C7-C12	230	50

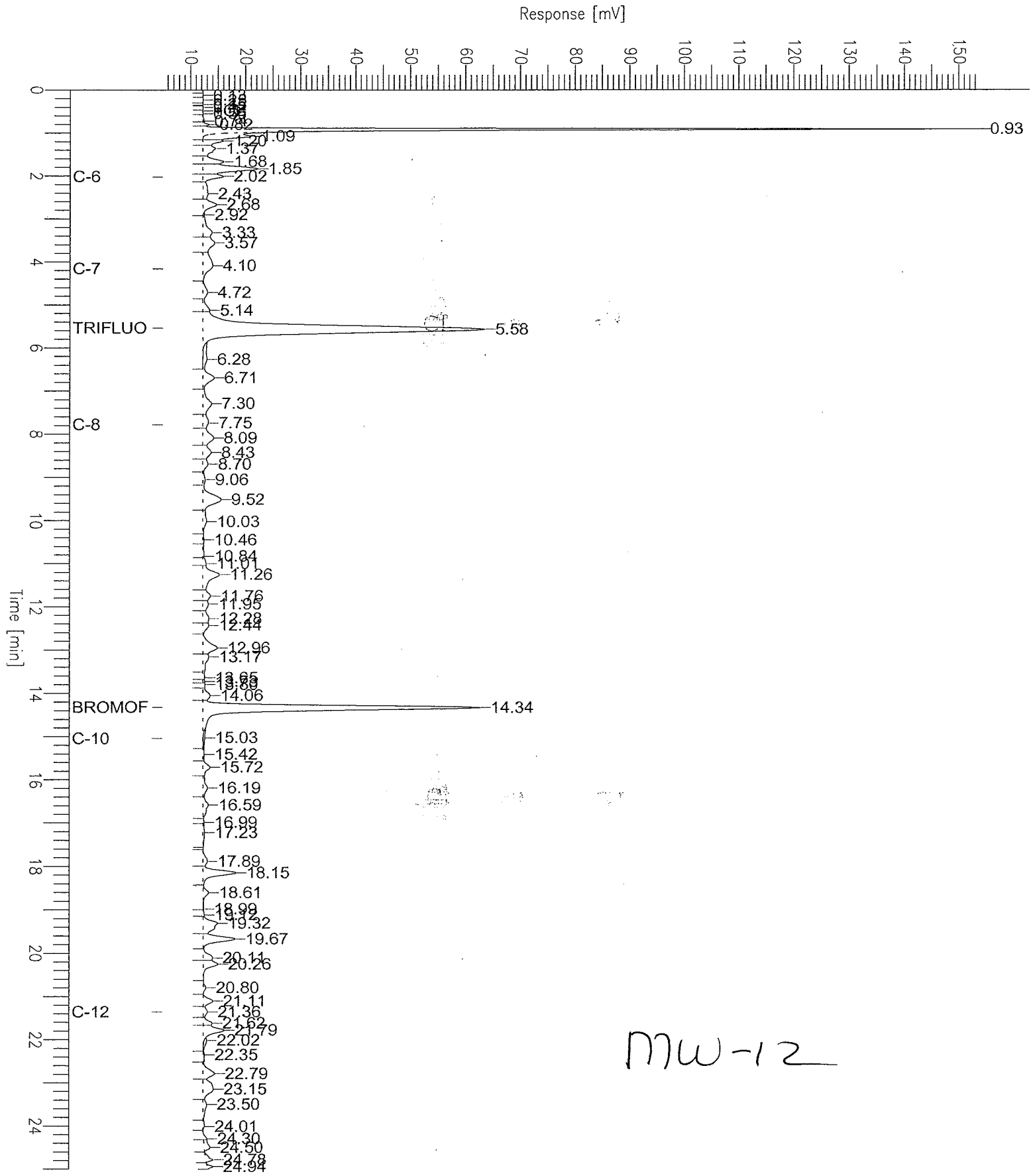
Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	69-137
Bromofluorobenzene (FID)	108	80-133

ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 185979-004,111987,tvh
FileName : G:\GC05\DATA\094G024.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 5 mV

Sample #: a1.6 Page 1 of 1
Date : 4/4/06 11:54 PM
Time of Injection: 4/4/06 11:29 PM
Low Point : 5.08 mV High Point : 153.98 mV
Plot Scale: 148.9 mV

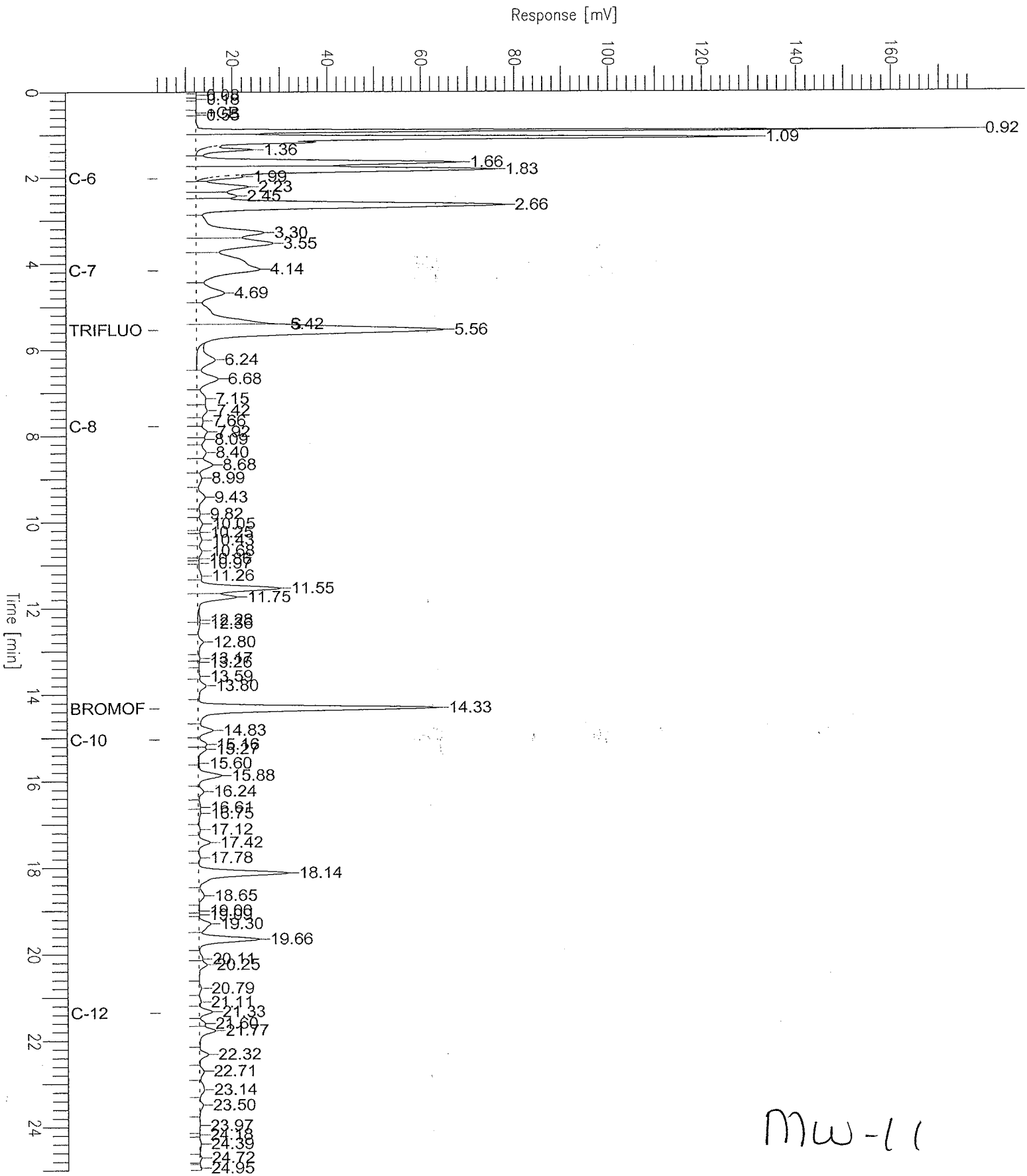


MW-12

Chromatogram

Sample Name : 185979-005,111987,tvh
FileName : G:\GC05\DATA\094G027.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 4 mV

Sample #: a1.9 Page 1 of 1
Date : 4/5/06 10:12 AM
Time of Injection: 4/5/06 09:01 AM
Low Point : 3.98 mV High Point : 177.80 mV
Plot Scale: 173.8 mV



MW-11

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	111987
Units:	ug/L	Sampled:	04/04/06
Diln Fac:	1.000	Received:	04/04/06

Field ID: MW-11-D
Type: SAMPLE
Lab ID: 185979-006
Analyzed: 04/05/06

Analyte	Result	RL
Gasoline C7-C12	220	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	69-137
Bromofluorobenzene (FID)	107	80-133

Field ID: MW-1
Type: SAMPLE
Lab ID: 185979-007
Analyzed: 04/05/06

Analyte	Result	RL
Gasoline C7-C12	3,700	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	69-137
Bromofluorobenzene (FID)	108	80-133

Type: BLANK
Lab ID: QC334230
Analyzed: 04/04/06

Analyte	Result	RL
Gasoline C7-C12	ND	50

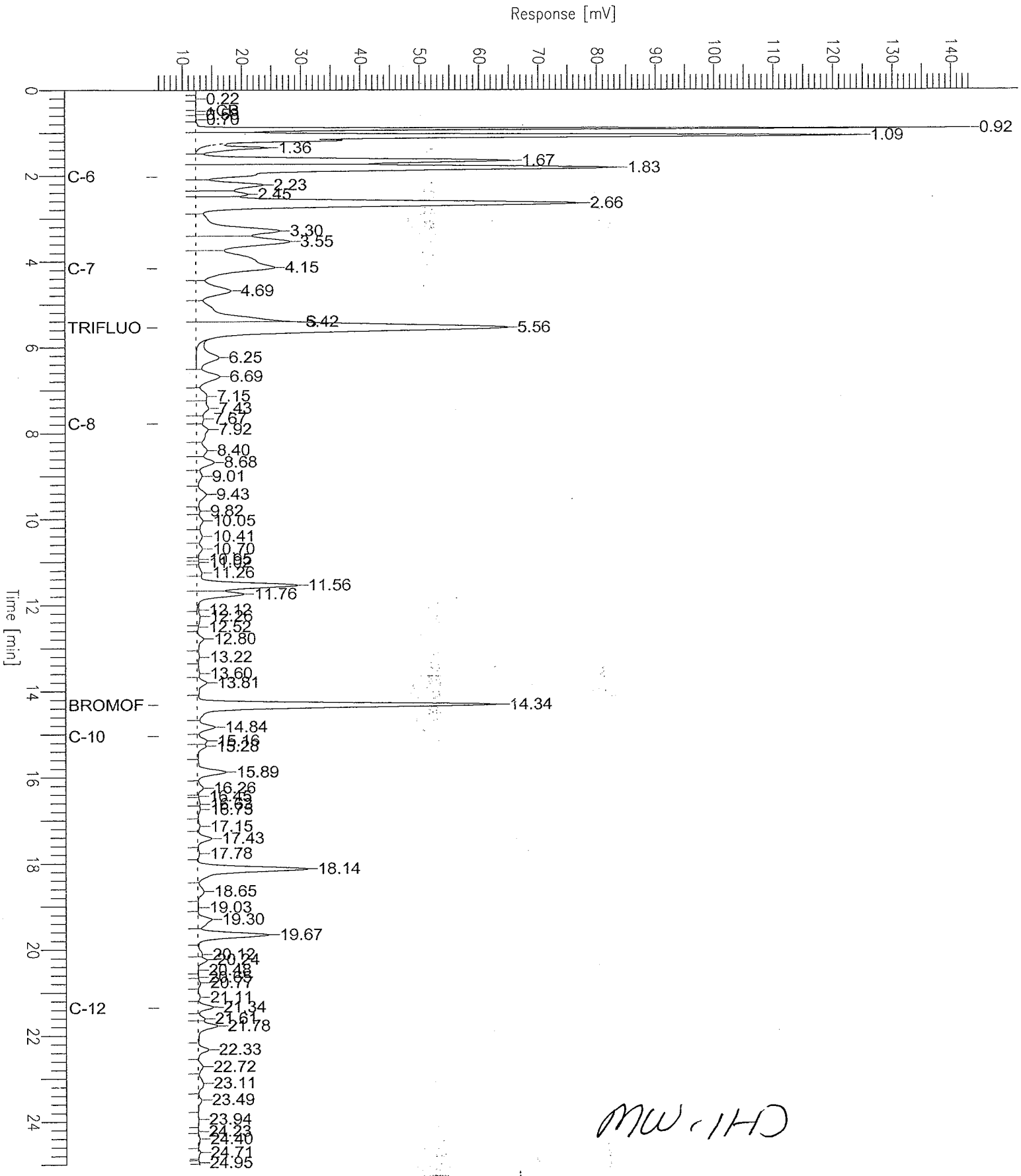
Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	69-137
Bromofluorobenzene (FID)	106	80-133

ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 185979-006,111987,tvh
FileName : G:\GC05\DATA\094G028.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: 6 mV

Sample #: a1.9 Page 1 of 1
Date : 4/5/06 10:12 AM
Time of Injection: 4/5/06 09:32 AM
Low Point : 5.67 mV High Point : 143.23 mV
Plot Scale: 137.6 mV

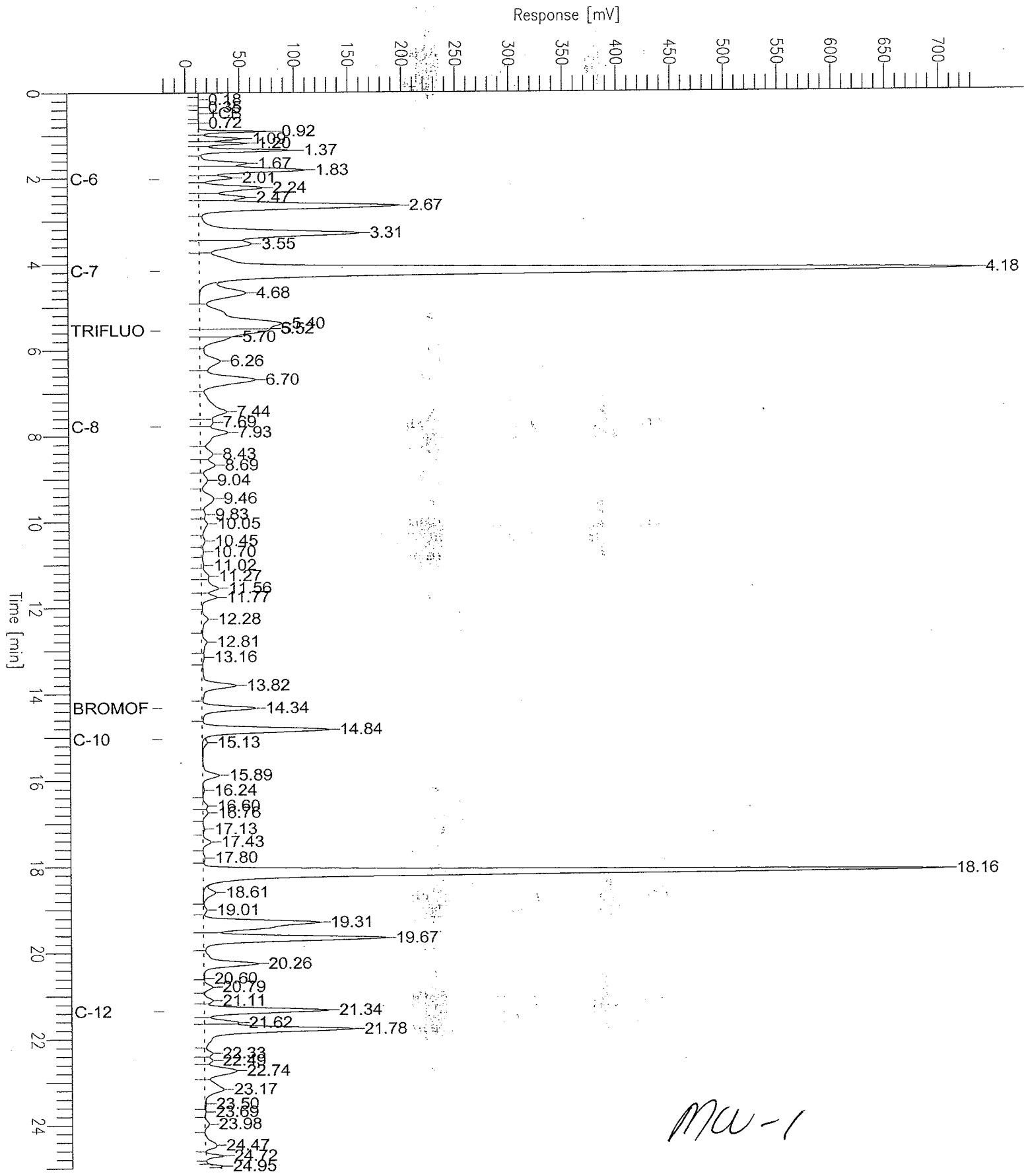


MW-1HD

Chromatogram

Sample Name : 185979-007,111987,tvh
FileName : G:\GC05\DATA\094G029.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 25.00 min
Scale Factor: 1.0 Plot Offset: -24 mV

Sample #: a1.9 Page 1 of 1
Date : 4/5/06 10:42 AM
Time of Injection: 4/5/06 10:03 AM
Low Point : -24.00 mV High Point : 735.10 mV
Plot Scale: 759.1 mV



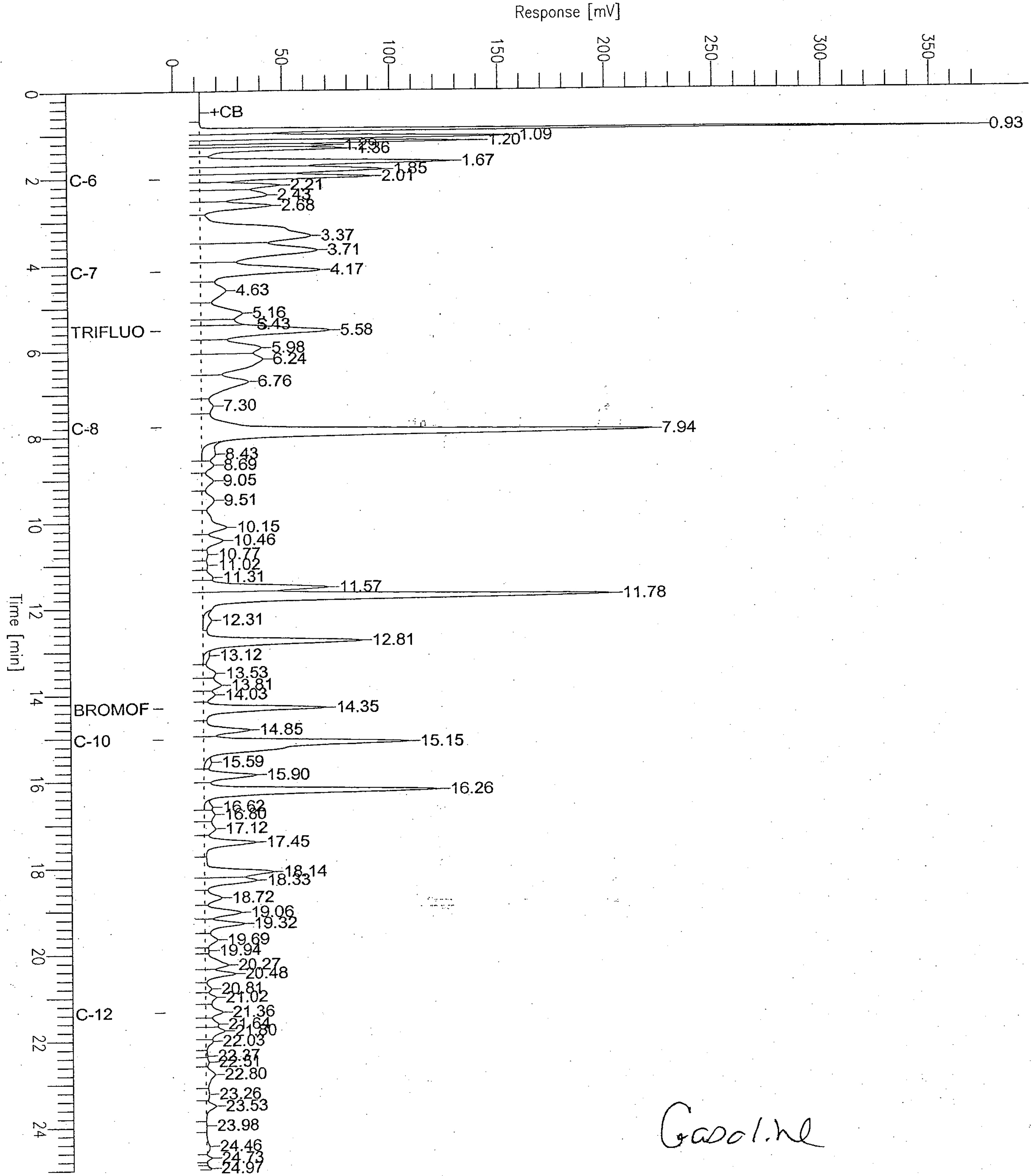
MW-1

Chromatogram

Sample Name : ccv/lcs,qc334232,111987,S3057,5/5000
FileName : G:\GC05\DATA\094G002.raw
Method : TVHBTXE
Start Time : 0.00 min
Scale Factor: 1.0
End Time : 25.00 min
Plot Offset: -6 mV

Sample #:
Date : 4/5/06 10:11 AM
Time of Injection: 4/4/06 10:46 AM
Low Point : -5.79 mV
Plot Scale: 379.3 mV

High Point : 373.47 mV



Gasoline

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC334232	Batch#:	111987
Matrix:	Water	Analyzed:	04/04/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,940	97	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	69-137
Bromofluorobenzene (FID)	122	80-133

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	111987
MSS Lab ID:	185952-001	Sampled:	04/03/06
Matrix:	Water	Received:	04/03/06
Units:	ug/L	Analyzed:	04/05/06
Diln Fac:	1.000		

Type: MS Lab ID: QC334268

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	27.06	2,000	1,916	94	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	69-137
Bromofluorobenzene (FID)	122	80-133

Type: MSD Lab ID: QC334269

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,906	94	80-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	131	69-137
Bromofluorobenzene (FID)	120	80-133

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/04/06
Units:	ug/L	Received:	04/04/06
Diln Fac:	1.000	Prepared:	04/05/06
Batch#:	112049	Analyzed:	04/06/06

Field ID: MW-2 Lab ID: 185979-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	65-130

Field ID: MW-1-FB Lab ID: 185979-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	81	65-130

Field ID: MW-12 Lab ID: 185979-004
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	110 Y	50
Diesel C10-C24	110 Y	50
Motor Oil C24-C36	ND	300

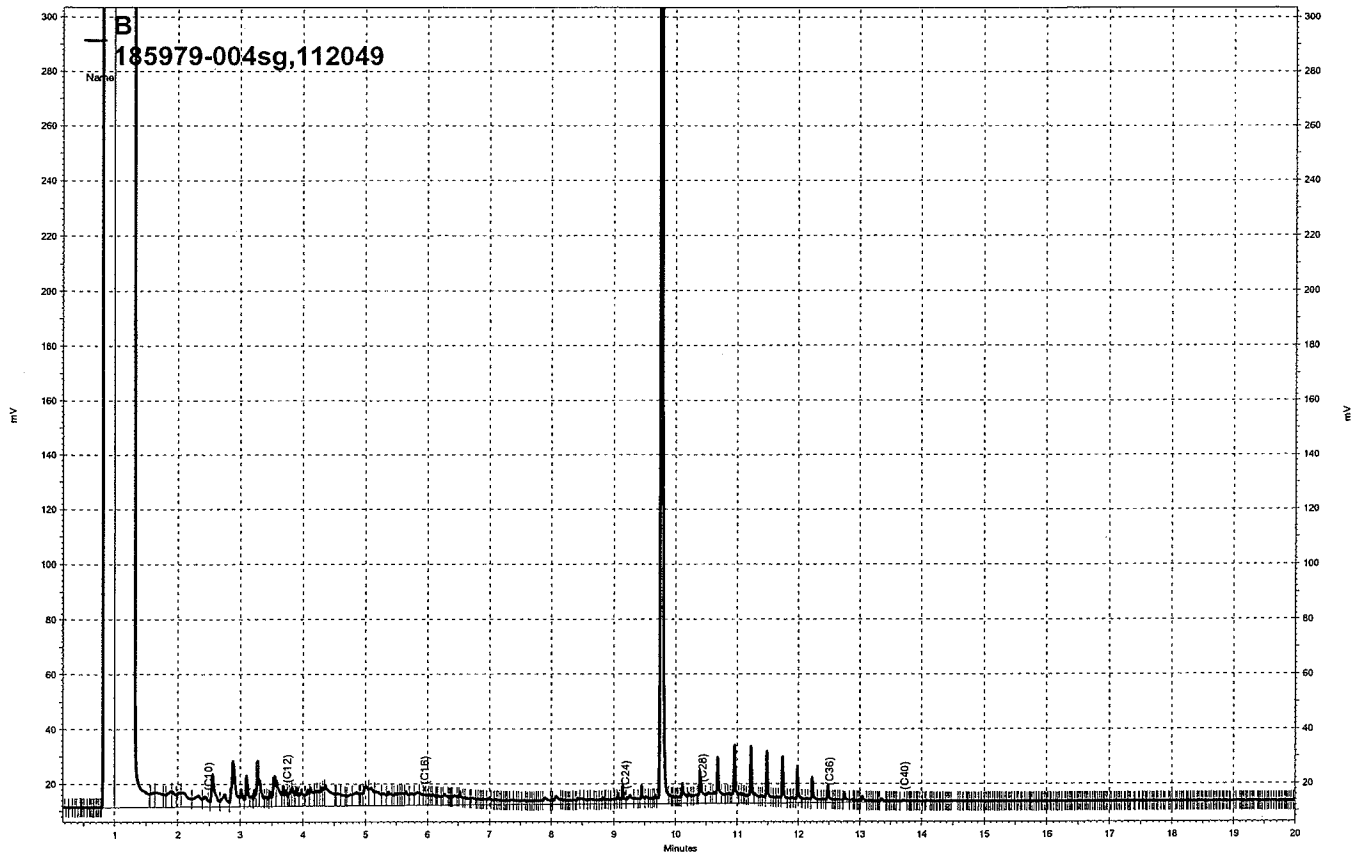
Surrogate	%REC	Limits
Hexacosane	86	65-130

Field ID: MW-11 Lab ID: 185979-005
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	75 L Y	50
Diesel C10-C24	71 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-130

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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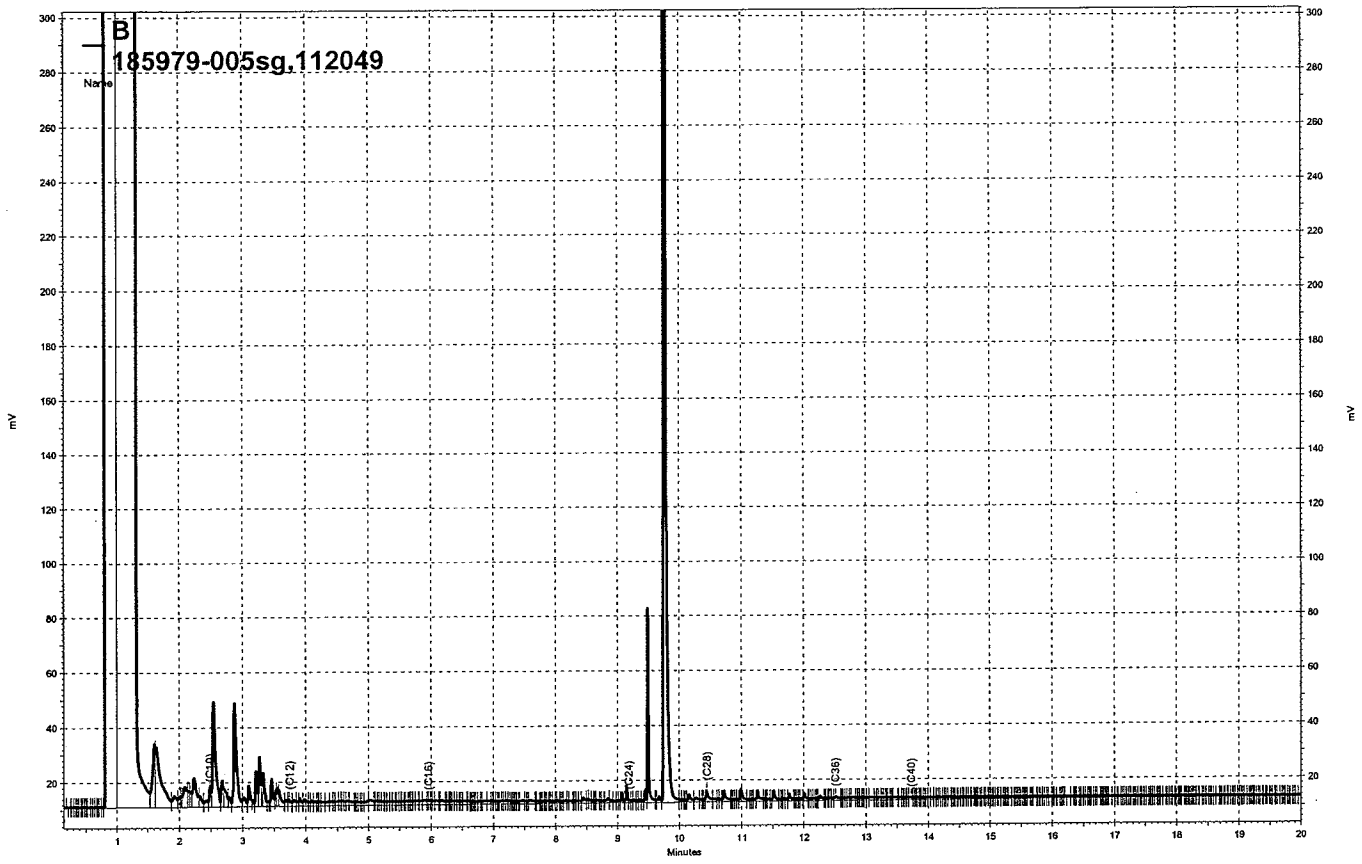
MW-12



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MU-11

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/04/06
Units:	ug/L	Received:	04/04/06
Diln Fac:	1.000	Prepared:	04/05/06
Batch#:	112049	Analyzed:	04/06/06

Field ID: MW-11-D
Type: SAMPLE
Lab ID: 185979-006
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	55 L Y	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	82	65-130

Field ID: MW-1
Type: SAMPLE
Lab ID: 185979-007
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	1,100 L Y	50
Diesel C10-C24	830 L Y	50
Motor Oil C24-C36	ND	300

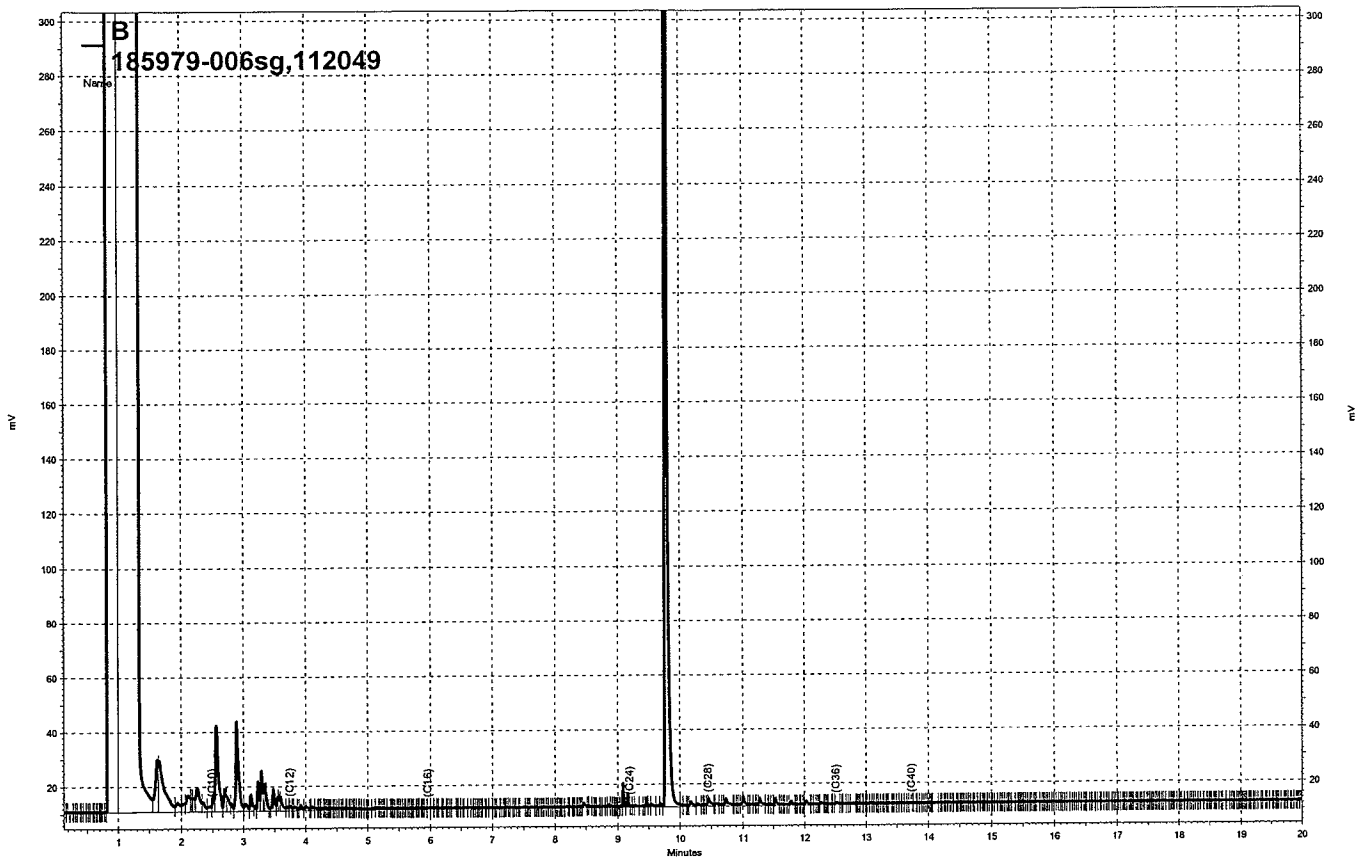
Surrogate	%REC	Limits
Hexacosane	85	65-130

Type: BLANK
Lab ID: QC334476
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-130

L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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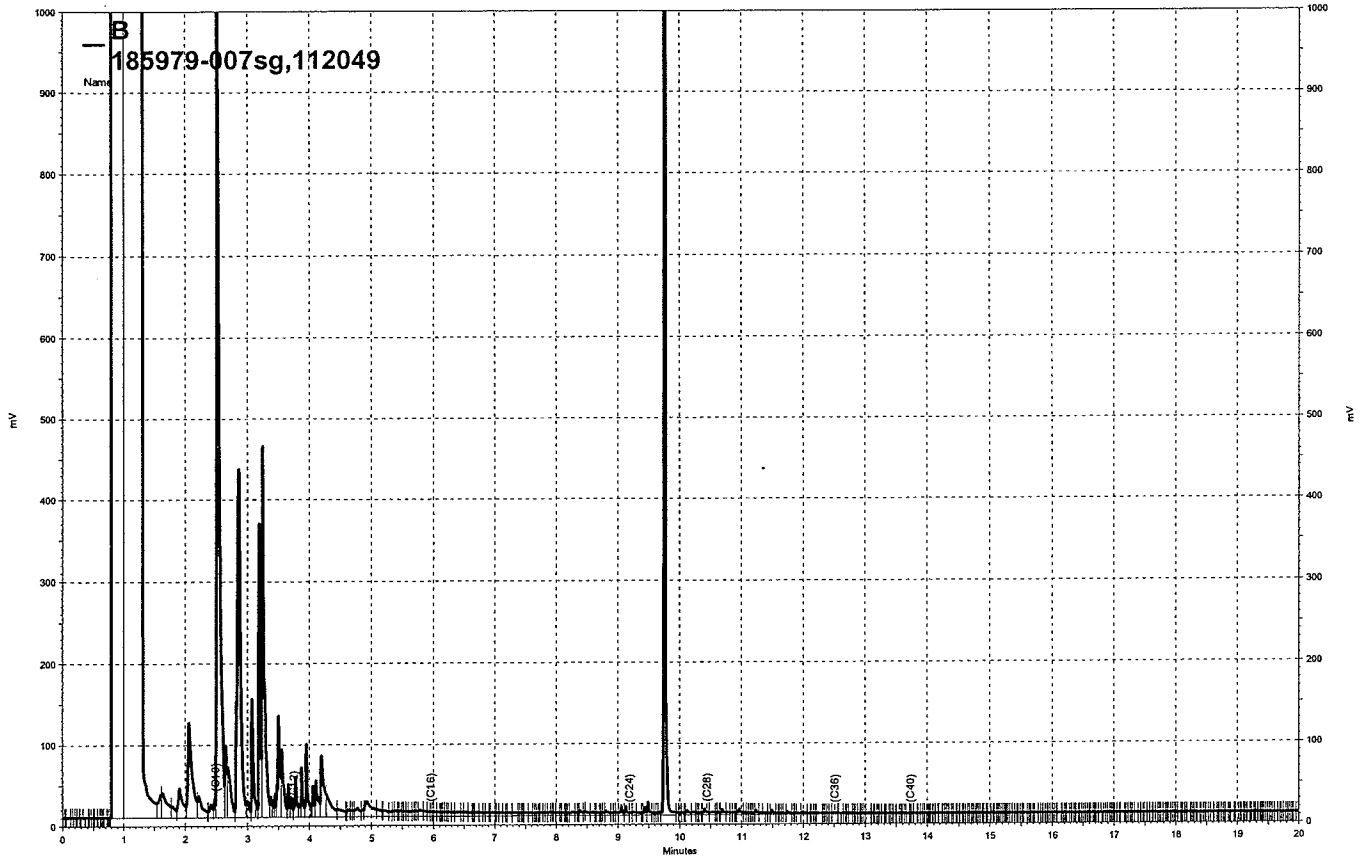
MW-11-D



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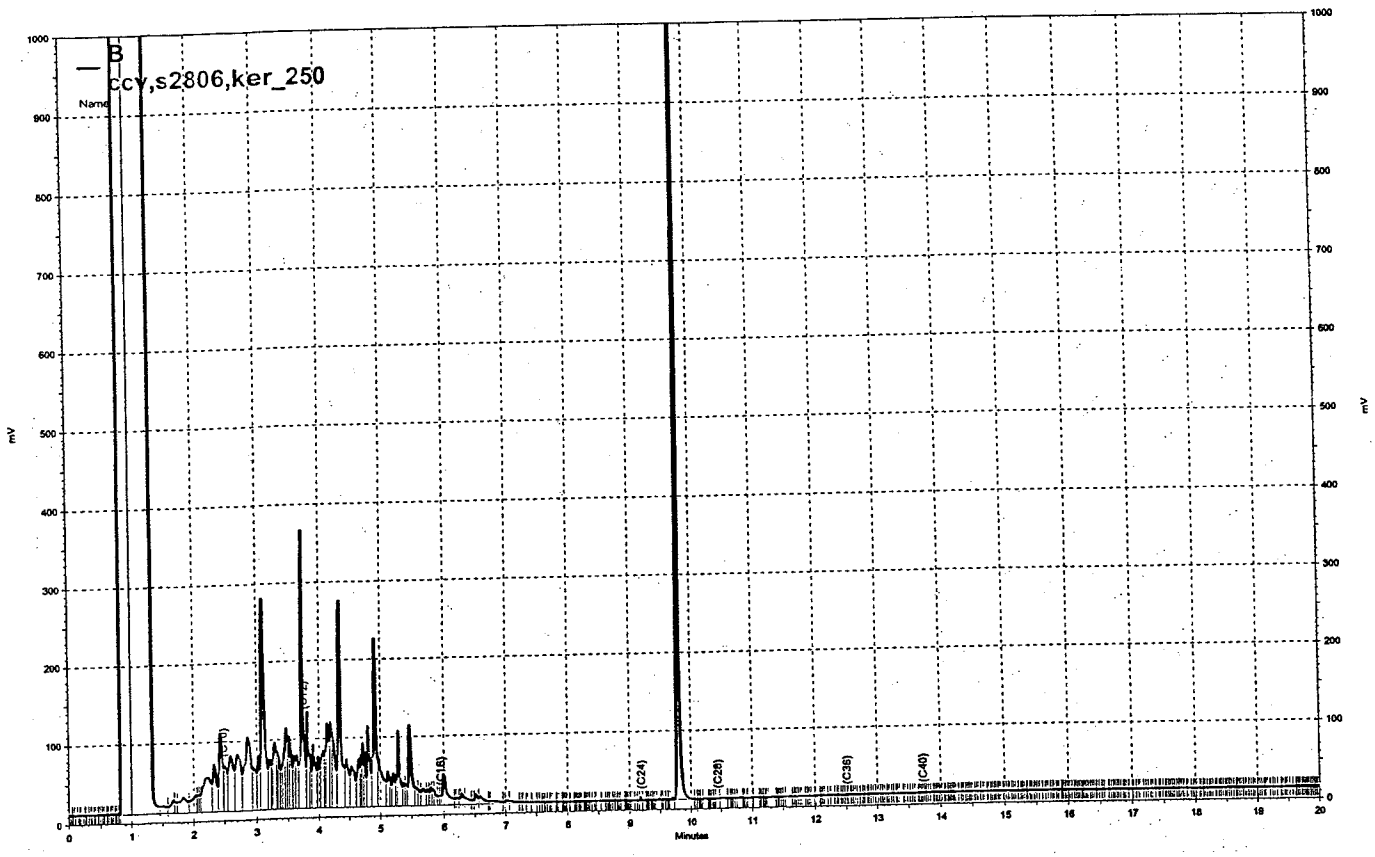
MW-1



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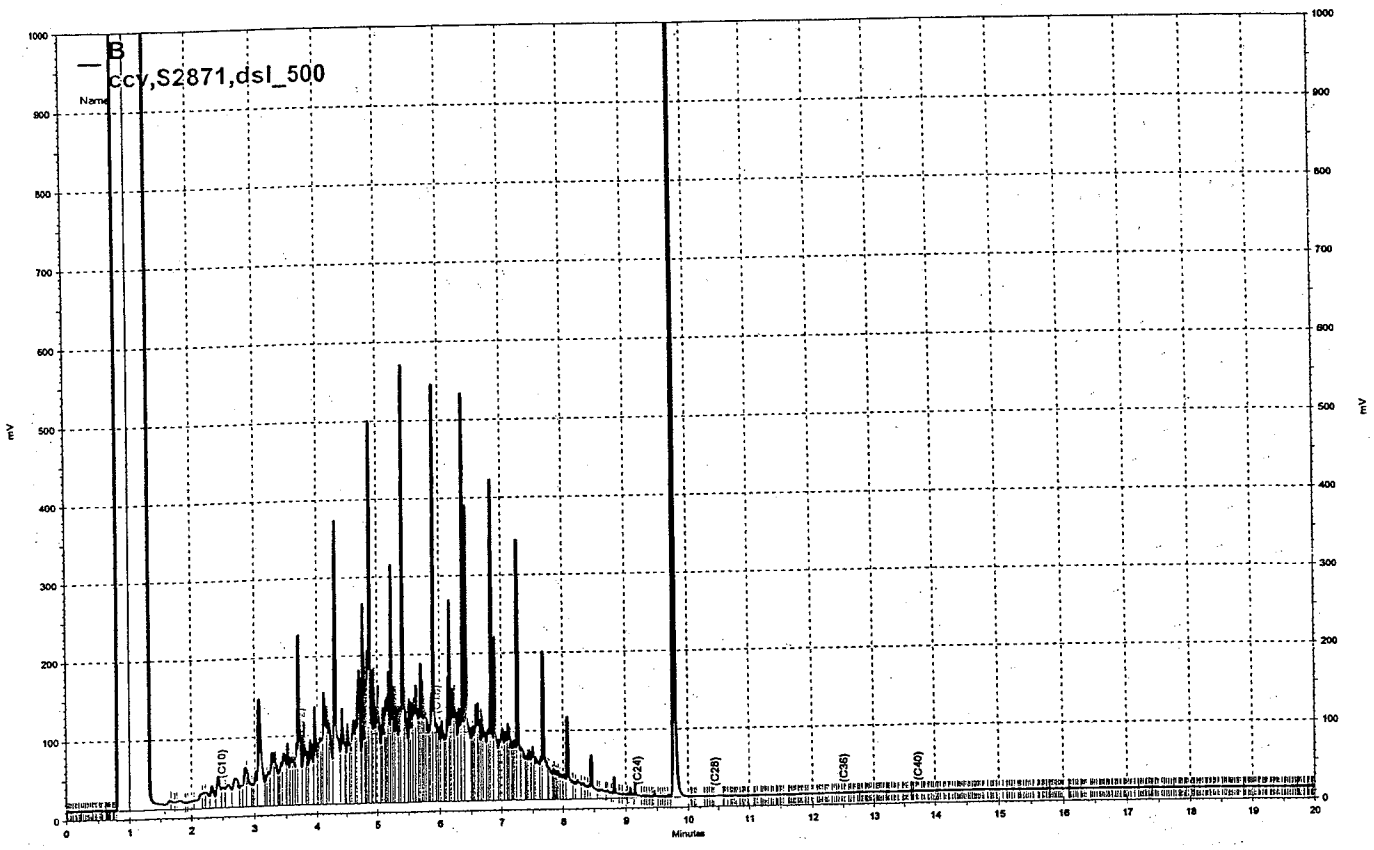
Kerosene



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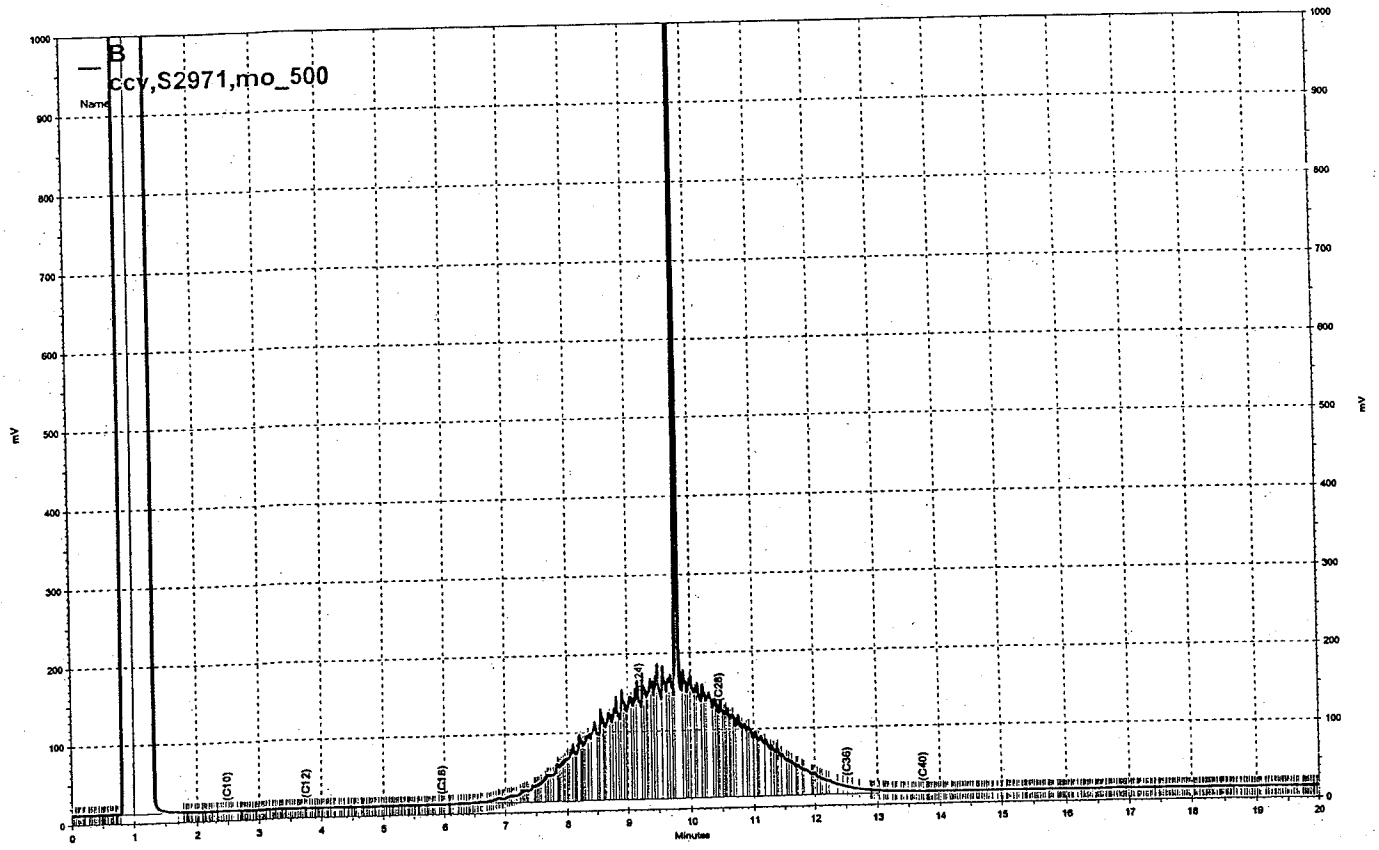
Diesel



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Motor Oil

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	112049
Units:	ug/L	Prepared:	04/05/06
Diln Fac:	1.000	Analyzed:	04/06/06

Type: BS
Lab ID: QC334477
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,040	82	61-133

Surrogate	%REC	Limits
Hexacosane	98	65-130

Type: BSD
Lab ID: QC334478
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,949	78	61-133	5	31

Surrogate	%REC	Limits
Hexacosane	92	65-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	112083
Lab ID:	185979-002	Sampled:	04/04/06
Matrix:	Water	Received:	04/04/06
Units:	ug/L	Analyzed:	04/06/06
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	0.5	0.5
Benzene	2.1	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	0.5	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Field ID:	MW-1-FB	Batch#:	112083
Lab ID:	185979-003	Sampled:	04/04/06
Matrix:	Water	Received:	04/04/06
Units:	ug/L	Analyzed:	04/06/06
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Field ID:	MW-12	Batch#:	112083
Lab ID:	185979-004	Sampled:	04/04/06
Matrix:	Water	Received:	04/04/06
Units:	ug/L	Analyzed:	04/06/06
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Field ID:	MW-11	Batch#:	112083
Lab ID:	185979-005	Sampled:	04/04/06
Matrix:	Water	Received:	04/04/06
Units:	ug/L	Analyzed:	04/06/06
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	6.5	0.5
Benzene	5.7	0.5
Toluene	0.9	0.5
Ethylbenzene	14	0.5
m,p-Xylenes	6.3	0.5
o-Xylene	0.7	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-122

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Field ID:	MW-11-D	Batch#:	112083
Lab ID:	185979-006	Sampled:	04/04/06
Matrix:	Water	Received:	04/04/06
Units:	ug/L	Analyzed:	04/06/06
Diln Fac:	1.000		

Analyte	Result	RL
MTBE	7.4	0.5
Benzene	6.5	0.5
Toluene	1.0	0.5
Ethylbenzene	15	0.5
m,p-Xylenes	6.5	0.5
o-Xylene	0.8	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	96	80-122

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	112128
Lab ID:	185979-007	Sampled:	04/04/06
Matrix:	Water	Received:	04/04/06
Units:	ug/L	Analyzed:	04/07/06
Diln Fac:	7.143		

Analyte	Result	RL
MTBE	ND	3.6
Benzene	470	3.6
Toluene	13	3.6
Ethylbenzene	7.8	3.6
m,p-Xylenes	6.3	3.6
o-Xylene	ND	3.6

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	116	80-130
Toluene-d8	94	80-120
Bromofluorobenzene	105	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC334612	Batch#:	112083
Matrix:	Water	Analyzed:	04/06/06
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC334778	Batch#:	112128
Matrix:	Water	Analyzed:	04/07/06
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	80-130
Toluene-d8	100	80-120
Bromofluorobenzene	106	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	112083
Units:	ug/L	Analyzed:	04/06/06
Diln Fac:	1.000		

Type: BS Lab ID: QC334610

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	22.06	88	72-120
Benzene	25.00	26.19	105	80-120
Toluene	25.00	26.54	106	80-120
Ethylbenzene	25.00	27.94	112	80-120
m,p-Xylenes	50.00	57.20	114	80-121
o-Xylene	25.00	28.26	113	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	92	80-122

Type: BSD Lab ID: QC334611

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	21.37	85	72-120	3	20
Benzene	25.00	24.99	100	80-120	5	20
Toluene	25.00	25.59	102	80-120	4	20
Ethylbenzene	25.00	26.95	108	80-120	4	20
m,p-Xylenes	50.00	55.97	112	80-121	2	20
o-Xylene	25.00	27.81	111	80-120	2	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	97	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	91	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	185979	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	112128
Units:	ug/L	Analyzed:	04/07/06
Diln Fac:	1.000		

Type: BS Lab ID: QC334776

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	22.31	89	72-120
Benzene	25.00	25.35	101	80-120
Toluene	25.00	26.33	105	80-120
Ethylbenzene	25.00	26.13	105	80-120
m,p-Xylenes	50.00	53.15	106	80-121
o-Xylene	25.00	25.75	103	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	80-130
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-122

Type: BSD Lab ID: QC334777

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	21.88	88	72-120	2	20
Benzene	25.00	24.60	98	80-120	3	20
Toluene	25.00	24.95	100	80-120	5	20
Ethylbenzene	25.00	25.21	101	80-120	4	20
m,p-Xylenes	50.00	51.38	103	80-121	3	20
o-Xylene	25.00	24.87	99	80-120	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	95	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

LFR Levine Fricke
1900 Powell Street
12th Floor
Emeryville, CA 94608

Date: 12-APR-06
Lab Job Number: 186011
Project ID: 001-09225-21
Location: Oakland Edgewater

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

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**186011**
Client:	**LFR Levine Fricke**
Project:	**001-09225-21**
Location:	**Oakland Edgewater**
Request Date:	**04/06/06**
Samples Received:	**04/05/06**

This hardcopy data package contains sample and QC results for ten water samples, requested for the above referenced project on 04/06/06. The samples were received cold and intact. All data were e-mailed to Larry Lapuyade on 04/12/06.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Curtis & Tompkins, Ltd.
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900 Phone
(510) 486-0532 Fax

CHAIN OF CUSTODY

C & T LOGIN #: 186011

Sampler: ERICA KALVE

Project No.: 001-09225-21 Report To: Lavvy Lapuyade

Project Name: Oakland Edgewater Company: LFR

Project P.O.: Telephone: (510) 596.9638

Turnaround Time: Standard Fax:

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste		# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE		Analysis: TPHd/TPHmo (8015)	TPHg/BTEX/MTBE (8260B)
-1	TB-2	4/5/06 1000		X			1						HOLD	
-2	MW-17	4/5/06 1025		X			4						X	X
-3	MW-16	4/5/06 1045		X			4						X	X
-4	MW-8	4/5/06 1058		X			4						X	X
-5	MW-15	4/5/06 1229		X			4						X	X
-6	MW-9	4/5/06 1245		X			4						X	X
-7	MW-14	4/5/06 1308		X			4						X	X
-8	MW-13	4/5/06 1329		X			4						X	X
-9	MW-10	4/5/06 1412		X			4						X	X
-10	MW-7	4/5/06 1445		X			4						X	X
-11	MW-5-FB	4/5/06 1457		X			4						HOLD	
-12	MW-5	4/5/06 1515		X			4						X	X

Notes:
HOLD TB-2 and MW-5-FB.

USE SILICA GEL CLEAN UP on TPH_d/TPH_{mo}/TPH_K samples

SAMPLE RECEIPT
☒ Intact ☐ Cold
☒ On Ice ☐ Ambient
Preservative Correct?
☐ Yes ☐ No ☐ N/A

RELINQUISHED BY:
Erica Kalve 4/5/06 1750 DATE / TIME
DATE / TIME
DATE / TIME
SIGNATURE

RECEIVED BY:
Lavanna Ath 4-5-06 5:50 DATE / TIME
DATE / TIME
DATE / TIME

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 186011 Date Received: 4/5/06 Number of Coolers: 1
Client: LFR Project: OAK(AND) Edgewater

A. Preliminary Examination Phase
Date Opened: 4/5/06 By (print): John P. (sign)

1. Did cooler come with a shipping slip (airbill, etc.)? YES NO
   If YES, enter carrier name and airbill number:
2. Were custody seals on outside of cooler? YES NO
   How many and where? Seal date: Seal name:
3. Were custody seals unbroken and intact at the date and time of arrival? YES NO N/A
4. Were custody papers dry and intact when received? YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? YES NO
6. Did you sign the custody papers in the appropriate place? YES NO
7. Was project identifiable from custody papers? YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO
   Type of ice: WET Temperature: On ice - no temp 0

B. Login Phase
Date Logged In: 4/6/06 By (print): John P. (sign)

1. Describe type of packing in cooler: FOAM
2. Did all bottles arrive unbroken? YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? YES NO
4. Did bottle labels agree with custody papers? YES NO
5. Were appropriate containers used for the tests indicated? YES NO
6. Were correct preservatives added to samples? YES NO
7. Was sufficient amount of sample sent for tests indicated? YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below. YES NO
9. Was the client contacted concerning this sample delivery? YES NO
   If YES, give details below.
   Who was called? By whom? Date:

Additional Comments:

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06
Diln Fac:	1.000	Prepared:	04/07/06
Batch#:	112153	Analyzed:	04/10/06

Field ID: MW-17 Lab ID: 186011-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-130

Field ID: MW-16 Lab ID: 186011-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	95 H Y	50
Motor Oil C24-C36	420	300

Surrogate	%REC	Limits
Hexacosane	84	65-130

Field ID: MW-8 Lab ID: 186011-004
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	54 Y	50
Motor Oil C24-C36	ND	300

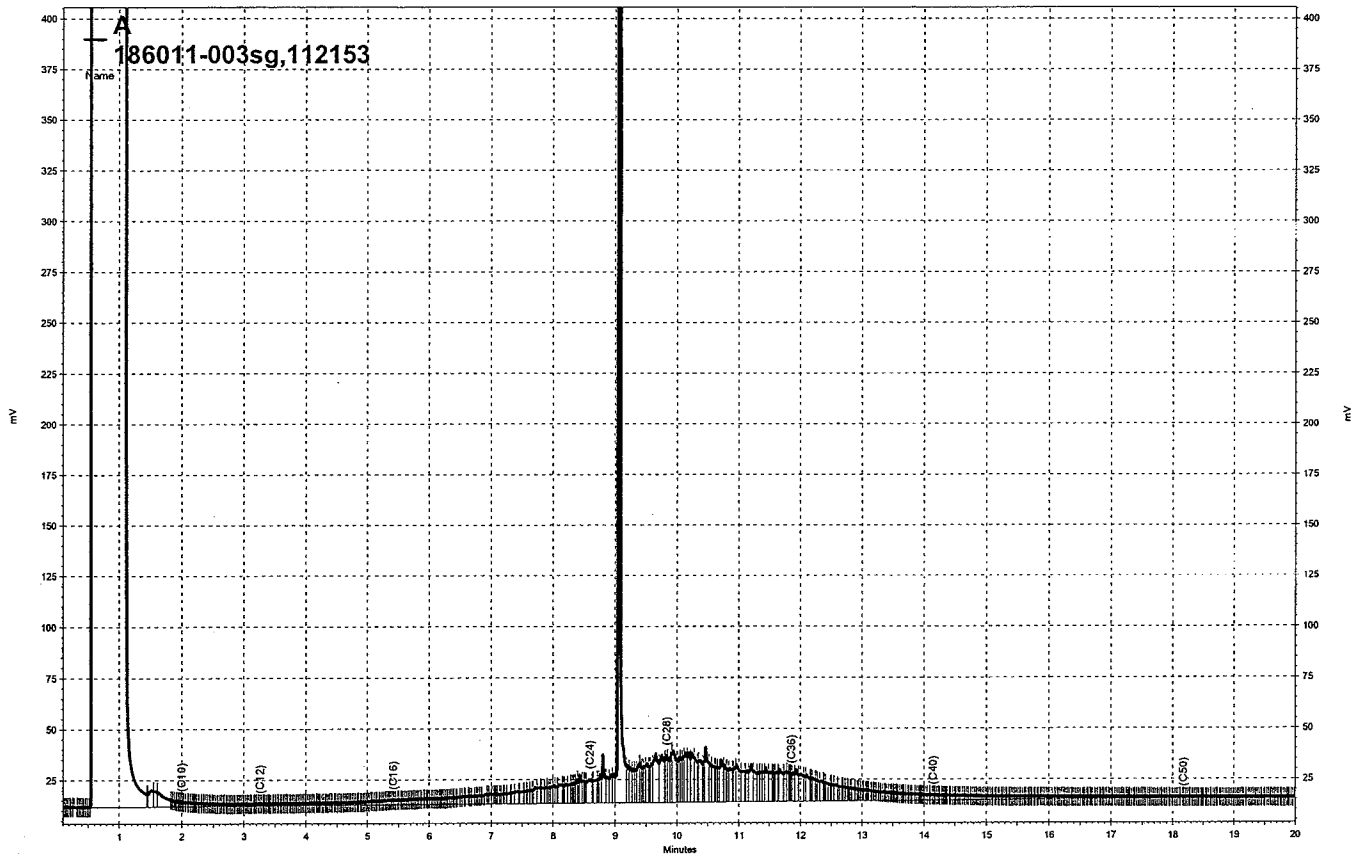
Surrogate	%REC	Limits
Hexacosane	97	65-130

Field ID: MW-15 Lab ID: 186011-005
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	87 H Y	50
Diesel C10-C24	300 H Y	50
Motor Oil C24-C36	760	300

Surrogate	%REC	Limits
Hexacosane	85	65-130

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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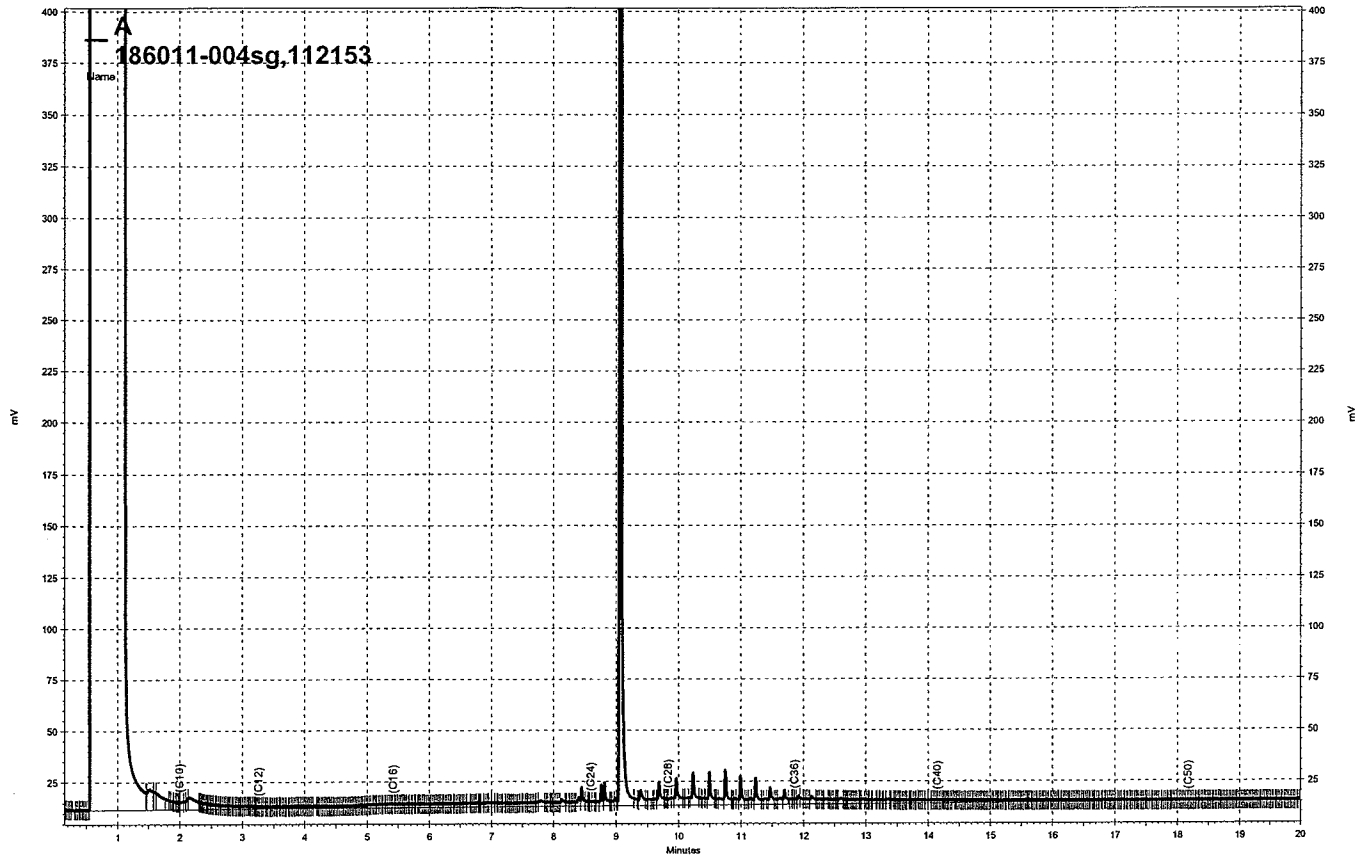
MW-16



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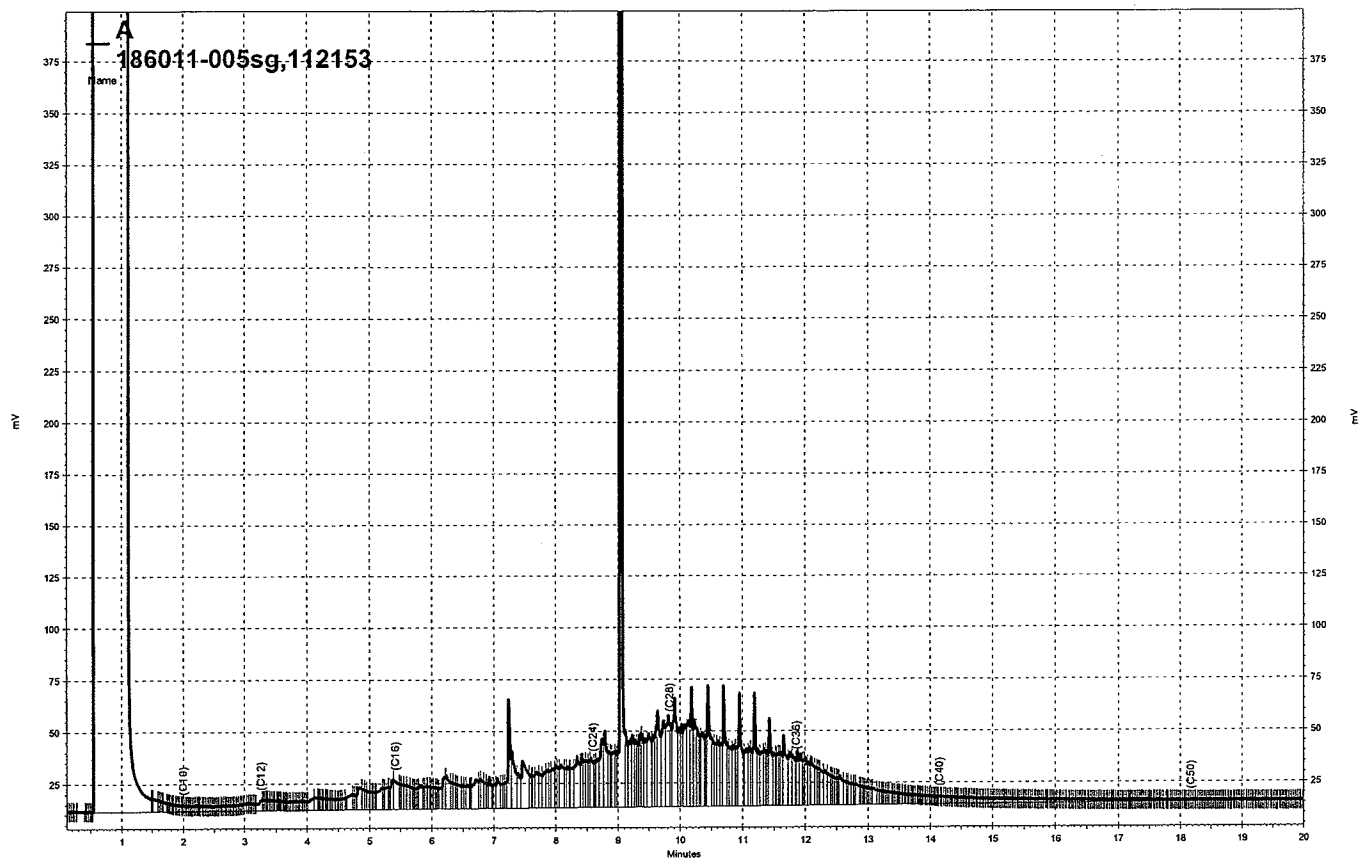
MW-E



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MW-15

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06
Diln Fac:	1.000	Prepared:	04/07/06
Batch#:	112153	Analyzed:	04/10/06

Field ID: MW-9 Lab ID: 186011-006
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	64 H Y	50
Diesel C10-C24	140 H Y	50
Motor Oil C24-C36	320	300

Surrogate	%REC	Limits
Hexacosane	89	65-130

Field ID: MW-14 Lab ID: 186011-007
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	50 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-130

Field ID: MW-13 Lab ID: 186011-008
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	180 H Y	50
Motor Oil C24-C36	910	300

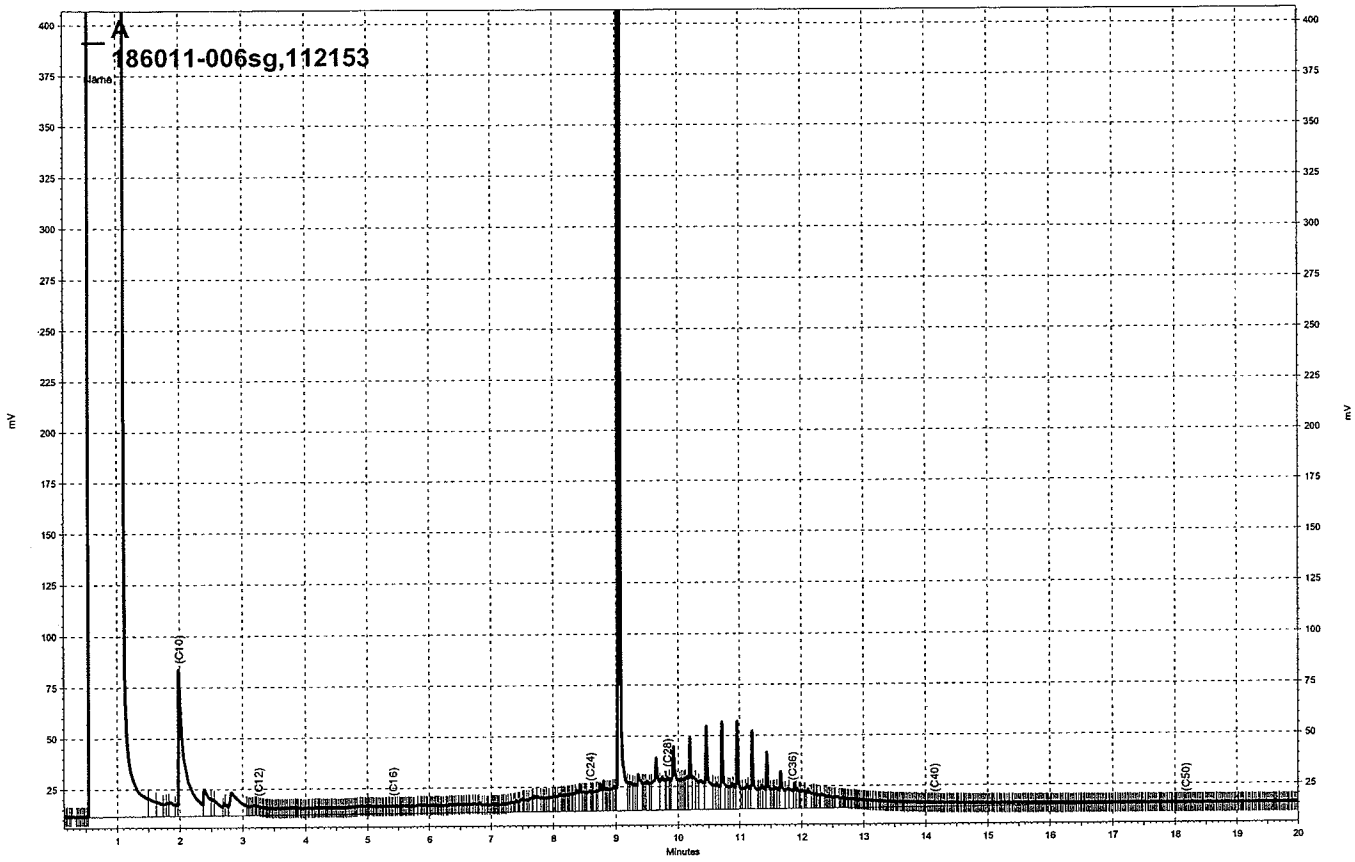
Surrogate	%REC	Limits
Hexacosane	82	65-130

Field ID: MW-10 Lab ID: 186011-009
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	82	65-130

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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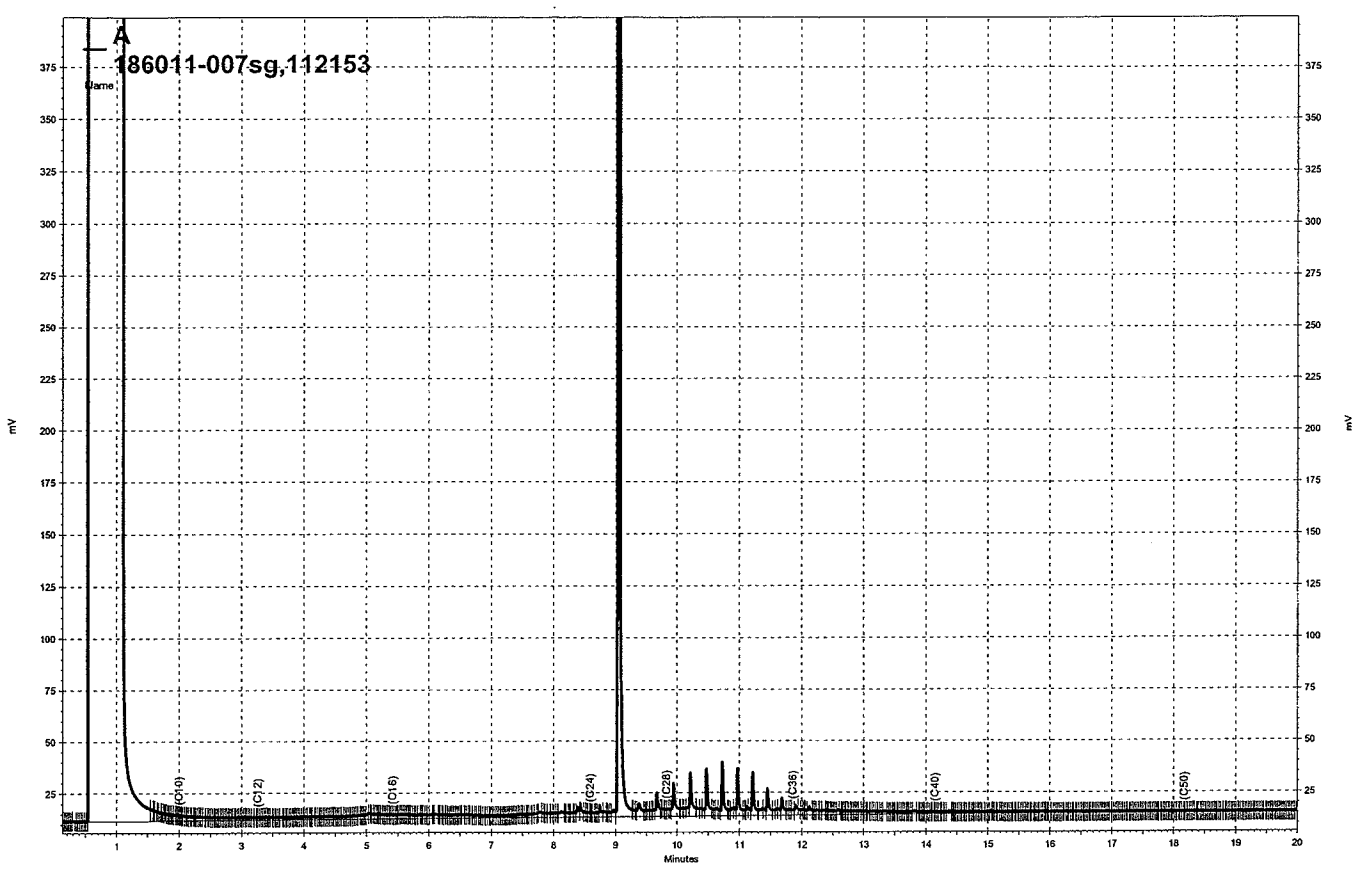
MW-9



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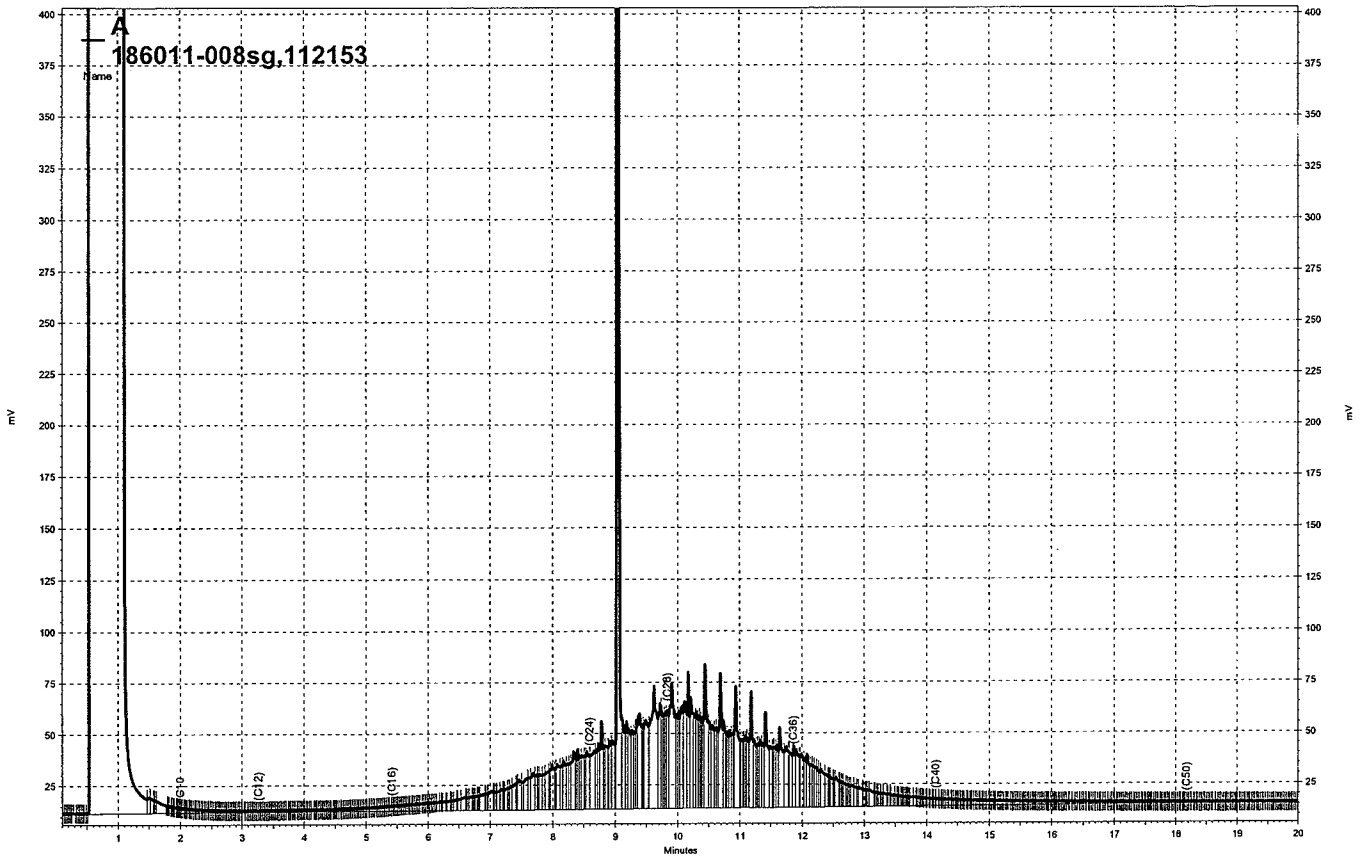
MW-14



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MW-13

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06
Diln Fac:	1.000	Prepared:	04/07/06
Batch#:	112153	Analyzed:	04/10/06

Field ID: MW-7 Lab ID: 186011-010
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-130

Field ID: MW-5 Lab ID: 186011-012
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	850 H	50
Diesel C10-C24	840 L Y	50
Motor Oil C24-C36	ND	300

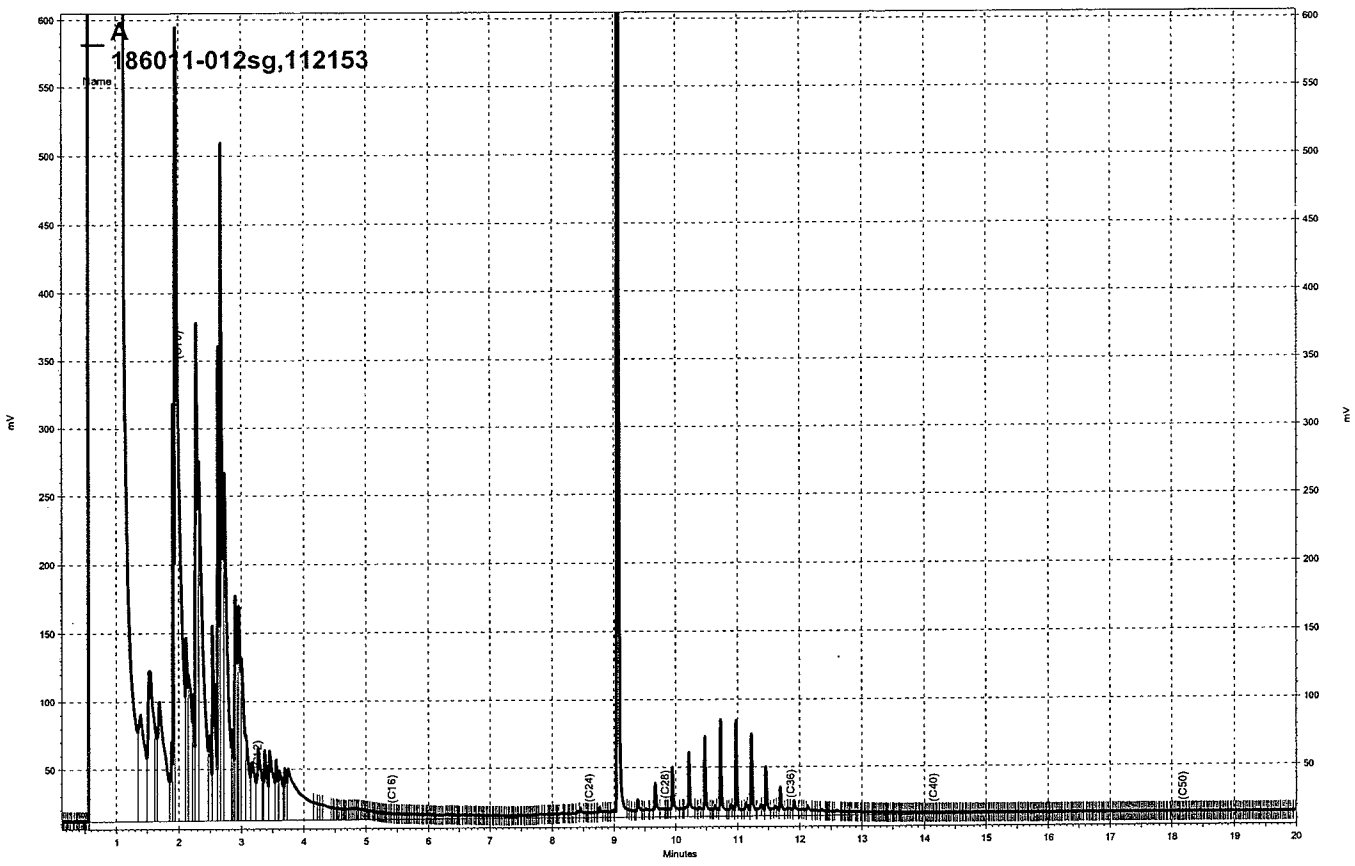
Surrogate	%REC	Limits
Hexacosane	82	65-130

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC334902

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-130

H= Heavier hydrocarbons contributed to the quantitation
L= Lighter hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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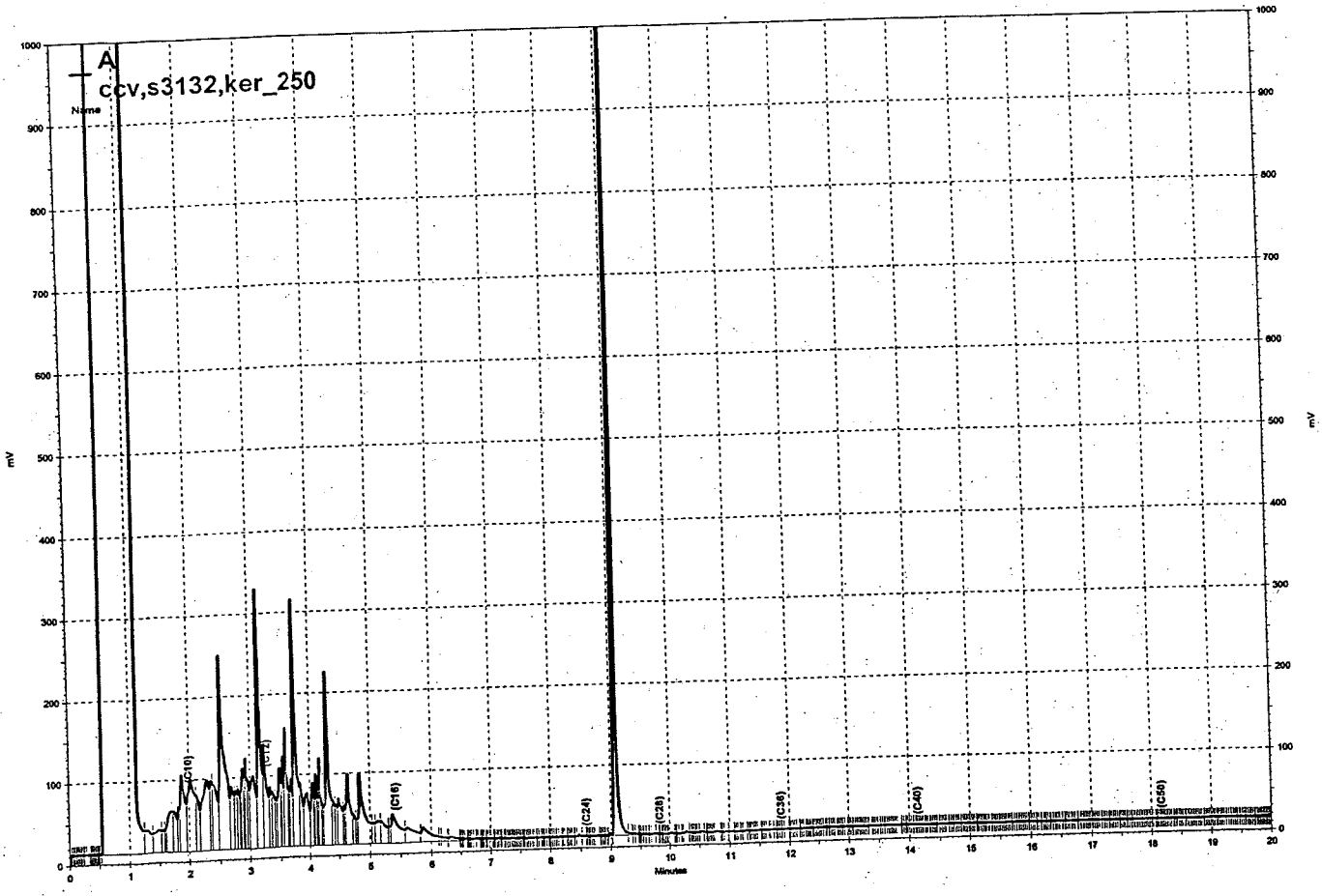
MW-5



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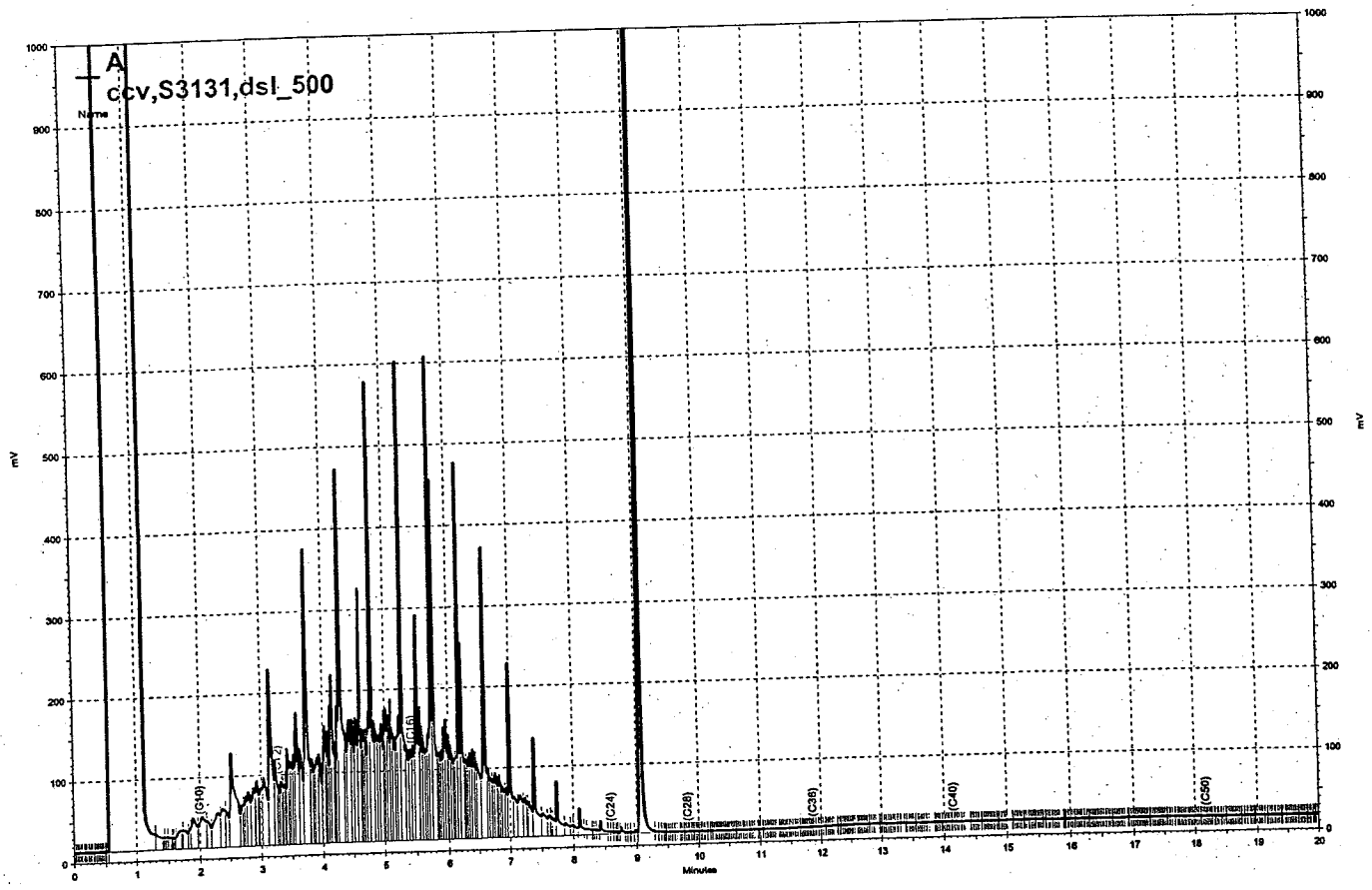
Kerosene



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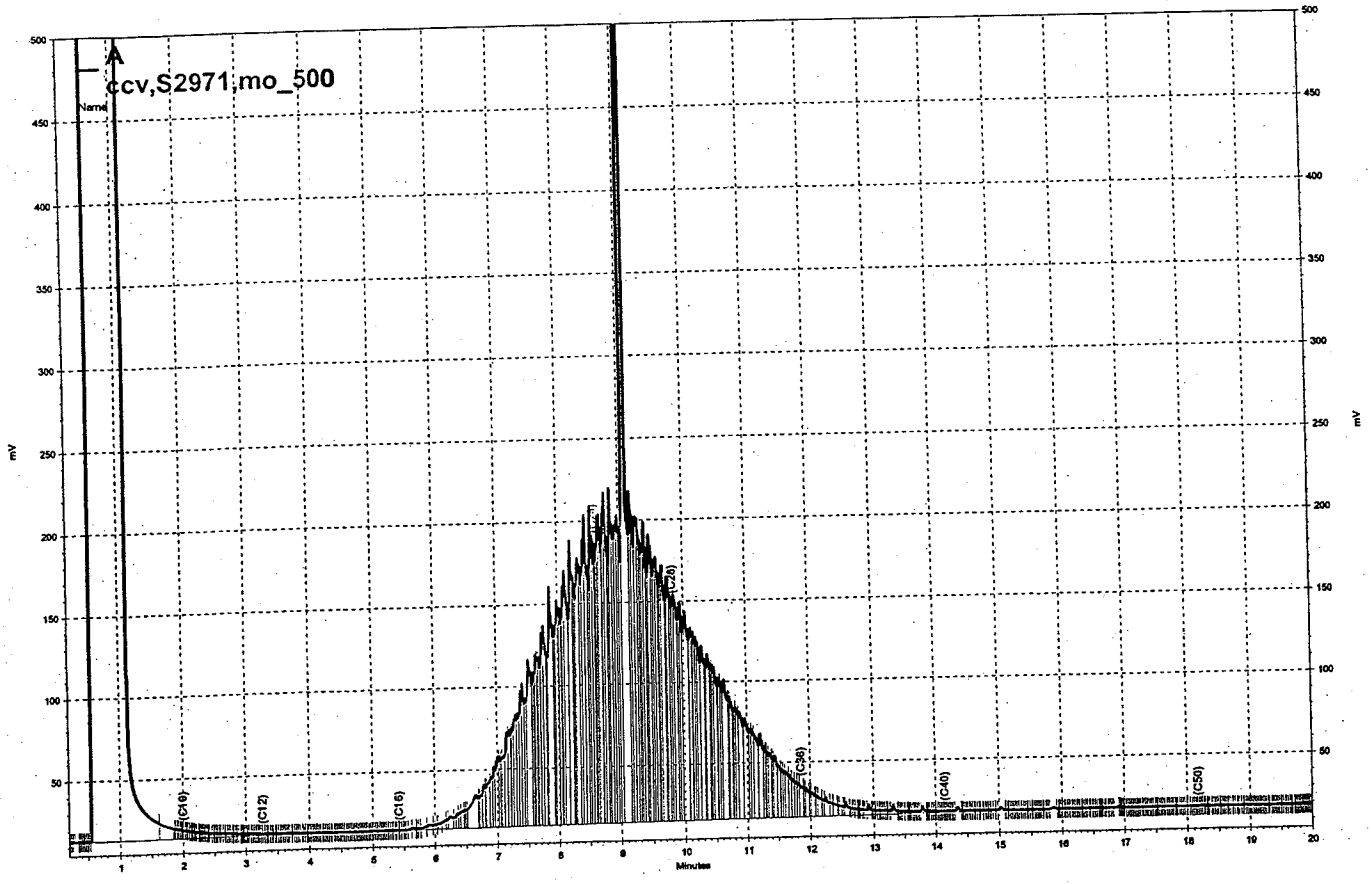
Diesel



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Motor oil

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-21	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	112153
Units:	ug/L	Prepared:	04/07/06
Diln Fac:	1.000	Analyzed:	04/10/06

Type: BS
Lab ID: QC334903
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,339	94	61-133

Surrogate	%REC	Limits
Hexacosane	84	65-130

Type: BSD
Lab ID: QC334904
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	3,039	122	61-133	26	31

Surrogate	%REC	Limits
Hexacosane	110	65-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06

Field ID:	MW-17	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112127
Lab ID:	186011-002	Analyzed:	04/07/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-120
1,2-Dichloroethane-d4	96	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-122

Field ID:	MW-16	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112127
Lab ID:	186011-003	Analyzed:	04/07/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06

Field ID:	MW-8	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112127
Lab ID:	186011-004	Analyzed:	04/07/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-122

Field ID:	MW-15	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112187
Lab ID:	186011-005	Analyzed:	04/10/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	1.5	0.50
o-Xylene	0.87	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06

Field ID:	MW-9	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	112187
Lab ID:	186011-006	Analyzed:	04/10/06

Analyte	Result	RL
Gasoline C7-C12	160	100
MTBE	ND	1.0
Benzene	140	1.0
Toluene	5.2	1.0
Ethylbenzene	ND	1.0
m,p-Xylenes	4.1	1.0
o-Xylene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-122

Field ID:	MW-14	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112127
Lab ID:	186011-007	Analyzed:	04/07/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	1.7	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	96	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-122

ND= Not Detected
RL= Reporting Limit

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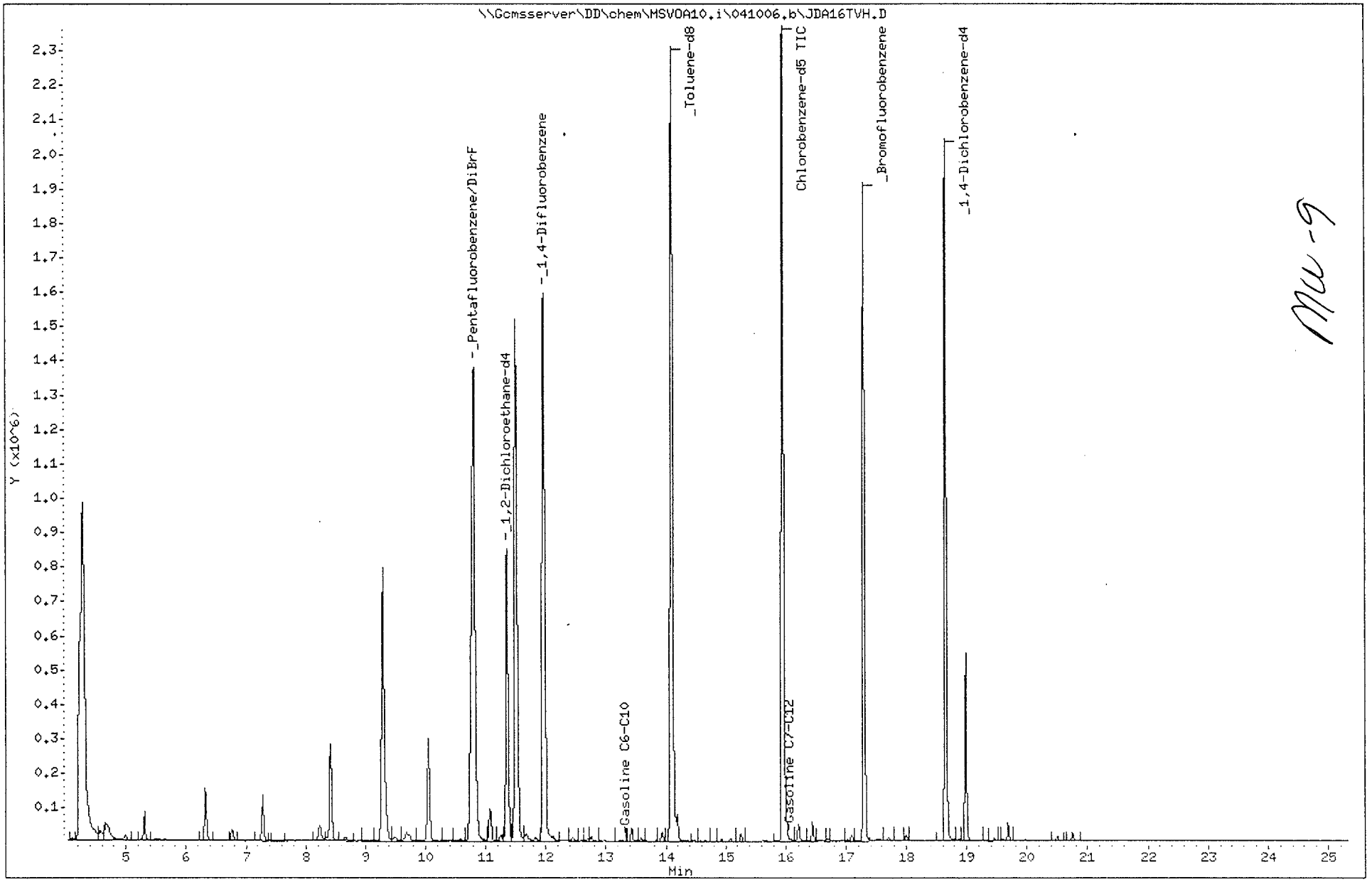
Date : 10-APR-2006 16:50
Client ID: DYNA P&T
Sample Info: S,186011-006

Instrument: MSVOA10.i

Operator: LW
Column diameter: 2.00

Column phase:



MW-9

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06

Field ID:	MW-13	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112127
Lab ID:	186011-008	Analyzed:	04/07/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-120
1,2-Dichloroethane-d4	96	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-122

Field ID:	MW-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112127
Lab ID:	186011-009	Analyzed:	04/07/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	2.1	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06

Field ID:	MW-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	112127
Lab ID:	186011-010	Analyzed:	04/07/06

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	2.7	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-122

Field ID:	MW-5	Diln Fac:	4.000
Type:	SAMPLE	Batch#:	112187
Lab ID:	186011-012	Analyzed:	04/10/06

Analyte	Result	RL
Gasoline C7-C12	3,400	200
MTBE	31	2.0
Benzene	14	2.0
Toluene	2.1	2.0
Ethylbenzene	280	2.0
m,p-Xylenes	13	2.0
o-Xylene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-120
1,2-Dichloroethane-d4	100	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-122

ND= Not Detected
RL= Reporting Limit

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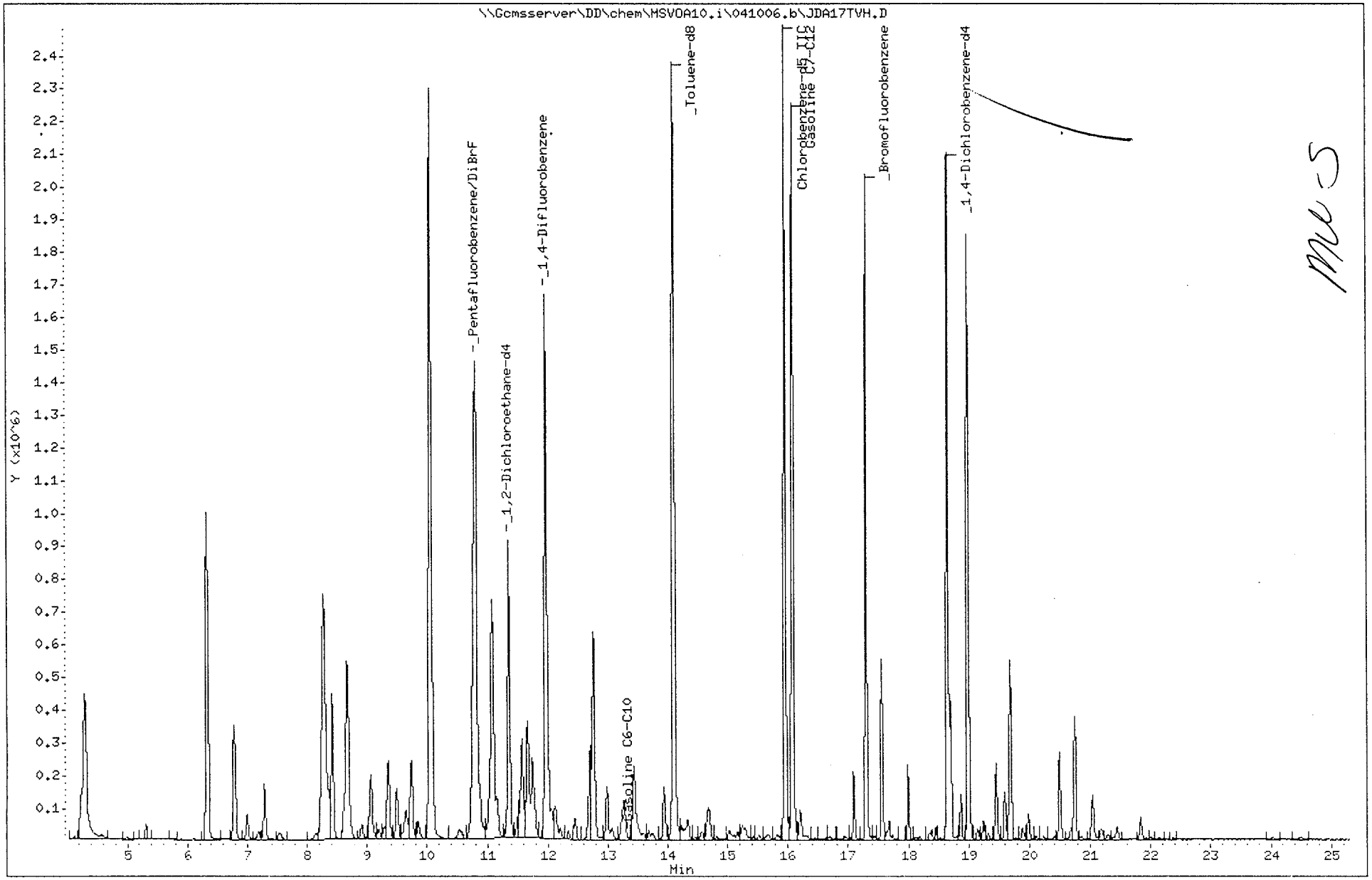
Date : 10-APR-2006 17:25
Client ID: DYNA P&T
Sample Info: S,186011-012

Instrument: MSVOA10.i

Operator: LW
Column diameter: 2.00

Column phase:



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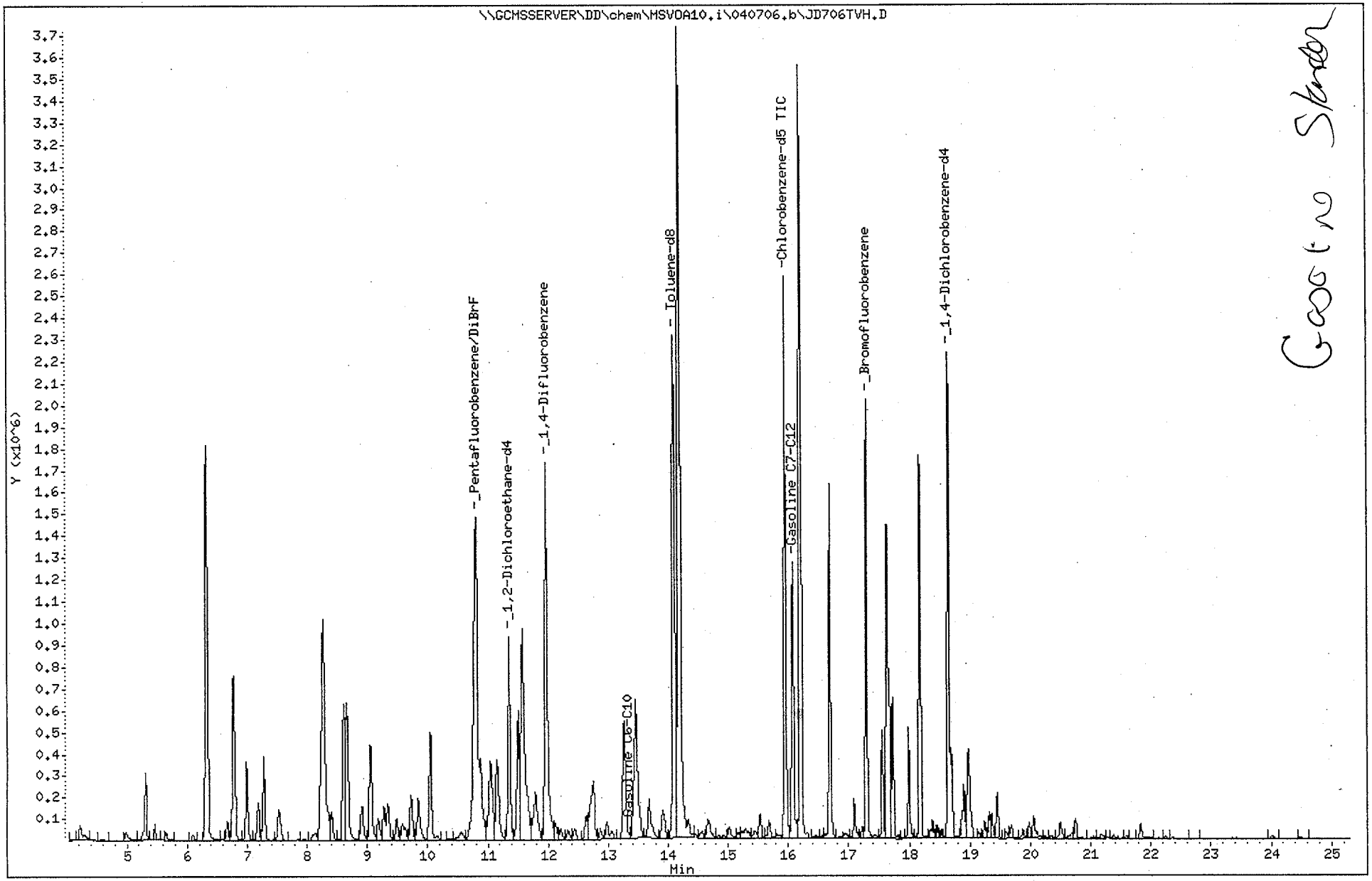
Date : 07-APR-2006 10:32
Client ID: DYNA P&T
Sample Info: CCV/BS,QC334774

Instrument: MSVOA10.i

Operator: LW
Column diameter: 2.00

Column phase:



Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/06
Units:	ug/L	Received:	04/05/06

Type:	BLANK	Batch#:	112127
Lab ID:	QC334773	Analyzed:	04/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	100	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	95	80-122

Type:	BLANK	Batch#:	112187
Lab ID:	QC335048	Analyzed:	04/10/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	112127
Units:	ug/L	Analyzed:	04/07/06
Diln Fac:	1.000		

Type: BS Lab ID: QC334771

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.24	93	72-120
Benzene	25.00	26.64	107	80-120
Toluene	25.00	27.52	110	80-120
Ethylbenzene	25.00	28.27	113	80-120
m,p-Xylenes	50.00	56.78	114	80-121
o-Xylene	25.00	28.64	115	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-122

Type: BSD Lab ID: QC334772

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	21.54	86	72-120	8	20
Benzene	25.00	24.78	99	80-120	7	20
Toluene	25.00	25.29	101	80-120	8	20
Ethylbenzene	25.00	26.40	106	80-120	7	20
m,p-Xylenes	50.00	53.54	107	80-121	6	20
o-Xylene	25.00	27.11	108	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	92	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	112127
Units:	ug/L	Analyzed:	04/07/06
Diln Fac:	1.000		

Type: BS Lab ID: QC334774

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,004	100	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	100	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	90	80-122

Type: BSD Lab ID: QC334775

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,964	98	70-130	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	89	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	112187
Units:	ug/L	Analyzed:	04/10/06
Diln Fac:	1.000		

Type: BS Lab ID: QC335044

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,250	1,264	101	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-122

Type: BSD Lab ID: QC335045

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,250	1,203	96	70-130	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	186011	Location:	Oakland Edgewater
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-21	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	112187
Units:	ug/L	Analyzed:	04/10/06
Diln Fac:	1.000		

Type: BS Lab ID: QC335046

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	21.34	85	72-120
Benzene	25.00	25.10	100	80-120
Toluene	25.00	25.62	102	80-120
Ethylbenzene	25.00	26.62	106	80-120
m,p-Xylenes	50.00	54.51	109	80-121
o-Xylene	25.00	26.67	107	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-120
1,2-Dichloroethane-d4	99	80-130
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-122

Type: BSD Lab ID: QC335047

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	21.34	85	72-120	0	20
Benzene	25.00	24.69	99	80-120	2	20
Toluene	25.00	25.29	101	80-120	1	20
Ethylbenzene	25.00	26.47	106	80-120	1	20
m,p-Xylenes	50.00	53.52	107	80-121	2	20
o-Xylene	25.00	26.37	105	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	98	80-130
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-122

RPD= Relative Percent Difference

APPENDIX D

Historical Tables

Table 2
Summary of Groundwater Analytical Data, VOCs
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	Benzene (µg/l)	n-Butyl-benzene (µg/l)	sec-Butyl-benzene (µg/l)	tert-Butyl-benzene (µg/l)	Chloro-ethane (µg/l)	Chloro-form (µg/l)	Methyl Chloride (µg/l)	1,2-DCA (µg/l)	cis-1,2-DCE (µg/l)	1,2-DCP (µg/l)	Ethyl-benzene (µg/l)	Isopropyl-benzene (µg/l)	p-Isopropyl-toluene (µg/l)	MTBE (µg/l)	Napthalene (µg/l)	n-Propyl-benzene (µg/l)	Toluene (µg/l)	1,2,4-TMB (µg/l)	1,3,5-TMB (µg/l)	Xylenes (µg/l)
MW-5																				
2/27/01	180	9	4	ND	3	ND	ND	7	ND	3	260	23	6	1,100	43	68	7	1	11	53
MW-6																				
2/27/01	270	11	3	ND	<1	ND	ND	7	ND	<1	9	6.0	1.0	19.0	62	21	3	1	<1	3
8/20/01	E280	14	<1	<1	<1	3	2	<1	<1	<1	11	4.0	<1	14.0	E82	14	4	<1	<1	9
TBW-1																				
8/20/01	E530	30	<1	54	<1	4	10	<1	2	<1	E540	36	54	<1	E300	E120	79	E430	<1	E790
TBW-3																				
8/20/01	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	6	<1	<1	<1	5	<1	<1	<1	<1	3
TBW-5																				
8/20/01	E620	<1	<1	E160	<1	3	<1	<1	<1	<1	E730	40	E160	<1	E450	E140	E110	<1	<1	E3100

Notes:

cis-1,2-DCE = cis-1,2-dichloroethene
E = estimated concentration
MTBE = methyl tertiary-butyl ether
ND = Not detected.
VOCs = Volatile organic compounds by EPA Method 8260. Sample not subject to silica gel cleanup or filtration prior to analysis.
1,2-DCA = 1,2-dichloroethane
1,2-DCP = 1,2-dichloropropane
1,2,4-TMB = 1,2,4-trimethylbenzene
1,3,5-TMB = 1,3,5-trimethylbenzene

Table 3
Summary of Groundwater Analytical Data, SVOCs
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	Napthalene (µg/l)	Pyrene (µg/l)	Other SVOCs (µg/l)
MW-6			
2/27/01	19	ND	ND
8/20/01	52	<5	39
MW-9			
11/28/00	ND	ND	ND
MW-13			
11/28/00	ND	10	ND
MW-17			
11/28/00	ND	ND	ND
TBW-1			
8/20/01	140	8	387
TBW-3			
8/20/01	<5	<5	5
TBW-5			
8/20/01	220	<5	73

Notes:

SVOCs = Semivolatile organic compounds by EPA Method 8270
ND = Not detected

Samples not subject to silica gel cleanup or filtration before analysis.

Table 4
Summary of Groundwater Analytical Data, LUFT Metals
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Concentrations expressed in milligrams per liter (mg/l)

Well ID/ Date	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Nickel (mg/l)	Zinc (mg/l)	Notes
MW-2						
8/19/98	---	---	<100	---	---	a
MW-6						
2/28/01	<0.001	0.035	0.23	0.046	0.19	non-filtered
8/16/01	<0.001	0.020	0.12	0.032	0.11	
TBW-1						
8/16/01	<0.001	0.017	0.042	0.034	0.10	0.1
TBW-3						
8/16/01	<0.001	0.008	0.01	0.019	<0.02	
TBW-5						
8/16/01	<0.001	<0.005	0.01	0.008	0.03	

Notes:

LUFT metals by EPA Method 6010. Samples filtered in lab before analysis, unless noted otherwise.

--- = not measured/analyzed

a = analyzed for organic lead

LUFT = Leaking Underground Fuel Tank

Table 5
Summary of Groundwater Analytical Data, Additional Metals
Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Sample ID/ Date	Antimony (mg/l)	Arsenic (mg/l)	Beryllium (mg/l)	Copper (mg/l)	Selenium (mg/l)	Silver (mg/l)	Thallium (mg/l)
MW-6							
8/16/01	<0.01	0.033	<0.001	0.025	<0.01	<0.003	<0.01
TBW-1							
8/16/01	<0.01	0.015	<0.001	0.017	<0.01	<0.003	<0.01
TBW-3							
8/16/01	<0.01	0.009	<0.001	0.008	<0.01	<0.003	<0.01
TBW-5							
8/16/01	<0.01	0.020	<0.001	<0.005	<0.01	<0.003	<0.01

Notes:

Metals by EPA Method 6010. Samples filtered in lab before analysis, unless noted otherwise.
mg/l = milligrams per liter