Groundwater Monitoring Report
Spring 2007 Semiannual Sampling Event
Municipal Service Center
7101 Edgewater Drive
Oakland, California

May 31, 2007
001-09225-23

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

LFR ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

May 31, 2007 001-09225-23

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

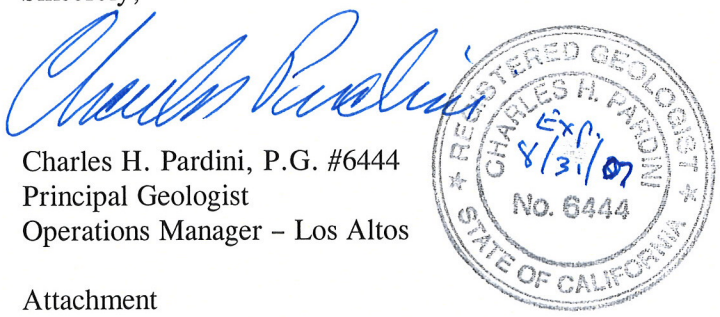
Subject: Groundwater Monitoring Report, Spring 2007 Semiannual Sampling Event, Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Dear Mr. Nair:

LFR Inc. (LFR) is pleased to present this report summarizing data collected during the spring 2007 semiannual groundwater monitoring event at the Municipal Service Center, located at 7101 Edgewater Drive in Oakland, California ("the Site"). These activities were performed in a manner consistent with previous sampling events conducted at the Site.

If you have any questions regarding this report, please call me at (650) 469-7224.

Sincerely,



Charles H. Pardini, P.G. #6444
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1.0 INTRODUCTION

This report presents the results of the spring 2007 semiannual groundwater monitoring event conducted from April 3 through April 5, 2007 ("the current monitoring event") at the Municipal Service Center (MSC), located at 7101 Edgewater Drive in Oakland, California ("the Site"; Figure 1). LFR Inc. (LFR) conducted monitoring activities at the Site in accordance with Assignment No. GO5-LFR-15.

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 2007.

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 of the 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 periodically 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 (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 Corporation. The extraction system was completed in April 2006, and the system began operation in mid-May 2006. Groundwater extracted from the seven wells was treated through an oil/water separator, followed by three 2,000-pound liquid-phase activated carbon units in series, and discharged into the local storm drain via a National Pollutant Discharge Elimination System permit. Quarterly remediation system performance reports were submitted separately from this monitoring report to the Alameda County Environmental Health Department and to the Regional Water Quality Control Board – San Francisco Bay Region (RWQCB).

3.0 SPRING 2007 SEMIANNUAL MONITORING ACTIVITIES

3.1 Field Activities

The field activities, which included depth-to-groundwater/product measurement and well sampling, were conducted in accordance with the City of Oakland MSC Schedule and Protocol Table presented in Appendix A. As requested by the City of Oakland, the sampling event also included the collection of samples from eight of nine additional groundwater monitoring wells. Well RW-A1 was not accessible at the time of the monitoring event and therefore was not sampled.

On April 3, 2007, 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, TBW-4, TBW-6, RW-A1, RW-A2, OB-A1, RW-B1 through RW-B4, RW-C1 through RW-C5, RW-C8, OB-C1, OB-D1, and OB-D. Monitoring wells MW-3 and MW-4 have been abandoned and sealed (Ninyo & Moore 2004) and, therefore, are no longer included in the sampling plan. Wells TBW-2 and RW-C7 were covered by heavy 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-groundwater 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 5, 2007, LFR personnel collected groundwater samples from wells MW-1, MW-2, and MW-5 through MW-17. LFR also collected groundwater samples from wells RW-A2, RW-B1 through RW-B4, RW-C1, RW-C3, and RW-C5. Well RW-A1 was not accessible at the time of the monitoring event and therefore was not

sampled. Using a clean, disposable polyvinyl chloride bailer for each well, a minimum of three well-casing volumes of water was purged from each of the 23 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, 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 that was 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 storage 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 (TPHg) using U.S. Environmental Protection Agency (U.S. EPA) Method 8015B; kerosene (TPHk), diesel (TPHd), and motor oil (TPHmo) using U.S. EPA Method 8015B, with 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 April 3, 2007, 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 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 7.99 feet mean sea level (msl) at TBW-3 to 1.25 feet msl at RW-B4 (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 approximately 0.038 foot/foot (ft/ft), and toward the southwest (measured between wells MW-6 and MW-17) at approximately 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 Groundwater Monitoring Report for the Site, and in more recent LFR monitoring reports.

4.2 Occurrence of Separate-Phase Hydrocarbons

Floating SPH was observed only in RW-C2 (0.28 foot) during this monitoring event. 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 the current monitoring event because the wells had been converted to extraction wells and the access port 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 2006 in wells TBW-1, RW-C2, and RW-C6 but was not present in these wells during the current monitoring event. During the September 2006 monitoring event, SPH was also measured in a thickness up to 0.01 foot at wells MW-6, TBW-4, RW-A2, RW-B1, RW-C3, and OB-D1, and sheen was observed at wells TBW-3, TBW-6, RW-C1, RW-C4, RW-C5, RW-C7, and OB-D2. 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 comprise Plume A did not contain measurable amounts of SPH during the current 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 (Tables D-1, D-2, D-3, and D-4, respectively).

For quality assurance/quality control (QA/QC), LFR collected a duplicate sample from wells MW-9 and MW-14 and analyzed for TPHg, TPHk, TPHd, TPHmo, BTEX, and

MTBE. Analytical results for these duplicate samples were very similar to the analytical results for the primary samples collected from MW-9 and MW-14.

4.3.1 Benzene

Benzene concentrations detected above laboratory analytical detection limits (LADL) were reported in groundwater samples collected from 12 of the 23 monitoring wells sampled during the current monitoring event. The maximum benzene concentration reported from groundwater samples collected during this monitoring event was 4,300 micrograms per liter (μg/l) in well RW-B3.

In its July 2004 monitoring report, Ninyo & Moore (2004) cited the following regulatory standards for benzene: the 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 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 this level at monitoring wells MW-1, MW-6, RW-B1, RW-B2, RW-B3, RW-B4, and RW-C5.

Benzene was also reported in groundwater samples collected from wells MW-2 (1.60 μg/l), MW-5 (9.3 μg/l), MW-9 (27 μg/l; 28 μg/l in duplicate sample), MW-11 (9.60 μg/l), and RW-C3 (13 μg/l). These concentrations are generally consistent with historical concentrations for these wells and are below the above-referenced standards.

4.3.2 Toluene

Toluene was reported in groundwater samples collected from 9 of the 23 wells sampled during the current monitoring event. The maximum toluene concentration reported from groundwater samples collected during this monitoring event was 2,700 μg/l in well RW-B2. The RWQCB ESL for Surface Water Bodies in a Marine Environment for toluene is 40 μg/l (RWQCB 2005; Table F). Toluene concentrations at the Site for this sampling event are above this level at monitoring wells RW-B2, RW-B3, RW-B4, and RW-C5.

Toluene was also reported in groundwater samples collected from wells MW-1 (7.2 μg/l), MW-9 (4.2 μg/l), MW-11 (0.73 μg/l), and RW-B1 (23 μg/l). Concentrations of toluene measured in these wells are below the regulatory action level of 40 μg/l (RWQCB ESLs).

4.3.3 Ethylbenzene

Ethylbenzene was reported in a groundwater samples collected from 9 of the 23 wells sampled during the current monitoring event. The maximum ethylbenzene concentration reported from groundwater samples collected during this monitoring event was 520 µg/l in wells RW-B3 and RW-C5. These concentrations are below the SFAEPZ Tier I Standard (29,000 µg/l), but exceed the RWQCB ESL for Surface Water Bodies in a Marine Environment of 30 µg/l (RWQCB 2005). Ethylbenzene concentrations at the Site for this sampling event are above the RWQCB ESL screening criteria at monitoring wells MW-5, RW-B2, RW-B3, RW-B4, RW-C3, and RW-C5.

Ethylbenzene was also reported in groundwater samples collected from wells MW-1 (3.6 µg/l), MW-11 (7.30 µg/l), and RW-B1 (9.4 µg/l). Concentrations of ethylbenzene measured in these wells are below the regulatory action level of 30 µg/l (RWQCB ESLs).

4.3.4 Total Xylenes

Total xylenes were reported in groundwater samples collected from 11 of the 23 monitoring wells sampled during the current monitoring event. The maximum concentration of total xylenes was 1,430 µg/l in a groundwater sample collected from well RW-B4. The regulatory action level for the RWQCB ESL for Surface Water Bodies in a Marine Environment for total xylenes is 100 µg/l. Total xylenes concentrations at the Site for this sampling event are above the RWQCB ESL screening criteria at monitoring wells RW-B2, RW-B3, RW-B4, and RW-C5.

Total xylenes were also reported in samples collected from wells MW-1 (5.7 µg/l), MW-5 (13 µg/l), MW-9 (5.3 µg/l), and MW-11 (2.4 µg/l). Concentrations of total xylenes measured in these wells are below the regulatory action level of 100 µg/l (RWQCB ESLs).

4.3.5 MTBE

MTBE concentrations above LADL were reported in groundwater samples collected from four of the 23 monitoring wells sampled during the current monitoring event. MTBE was detected in samples collected from wells MW-5 (38 µg/l), MW-7 (2.7 µg/l), MW-11 (11 µg/l), and RW-B1 (6.3 µg/l). All concentrations of MTBE detected in samples collected during this sampling event are below the RWQCB ESL for Surface Water Bodies in a Marine Environment for MTBE (180 µg/l).

4.3.6 TPHg

TPHg was reported in groundwater samples collected from 12 of the 23 wells sampled during the current monitoring event. The maximum TPHg concentration reported for this groundwater monitoring event was 16,000 µg/l in the groundwater sample collected

from well RW-B4. The SFAEPZ Tier I Standard Acceptable Threshold is 3,700 µg/l for TPHg (Ninyo & Moore 2004), and the RWQCB ESL for Surface Water Bodies in a Marine Environment for TPHg is also 3,700 µg/l. TPHg concentrations at the Site for this sampling event are above the RWQCB ESL screening criteria at monitoring wells RW-B2, RW-B3, RW-B4, and RW-C5.

TPHg was also detected in wells MW-1 (1,500 µg/l), MW-5 (3,100 µg/l), MW-6 (1,400 µg/l), MW-9 (240 µg/l), MW-11 (270 µg/l), MW-12 (160 µg/l), RW-B1 (220 µg/l), and RW-C3 (520 µg/l). Concentrations of TPHg are consistent with historical concentrations for the wells sampled under the current monitoring plan, and are below the SFAEPZ Tier I Standard Acceptable Threshold for TPHg and the RWQCB ESL for Surface Water Bodies in a Marine Environment for TPHg. Wells RW-B1, RW-B2, RW-B3, RW-B4, RW-C4, and RW-C5 have not been sampled for TPHg during any previous sampling events conducted at the Site.

4.3.7 TPHd

TPHd was reported in groundwater samples collected from 17 of the 23 monitoring wells sampled during the current monitoring event. Well MW-16 dewatered during purging; therefore, a groundwater sample could not be collected for TPHd analysis. Analytical results presented in Table 1 indicated that all of the reported TPHd concentrations included a footnote. Upon further review of the chromatograms, C&T, the analytical laboratory, noted that the distinctive diesel chromatographic pattern (diesel signature) was present in MW-6 at a concentration of 3,300 µg/l, but that the diesel signature was not present in the remaining 16 samples collected in which TPHd was reported. The samples either contained TPHg (five samples), TPHmo (six samples), or a combination of heavy and light end hydrocarbons, and/or the sample exhibited a chromatographic pattern that does not resemble the standard (five samples). The concentration of TPHd detected in well MW-6 is above both the SFAEPZ Tier I Standard Acceptable Threshold for TPHmo 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).

4.3.8 TPHmo

TPHmo was reported in groundwater samples collected from six of the 23 wells sampled during the current monitoring event. Well MW-16 dewatered during purging; therefore, a groundwater sample could not be collected for TPHmo analysis. TPHmo was detected at 880 µg/l in a sample from well RW-B3 and at 1,300 µg/l in a sample from well RW-C1. These concentrations are above both the SFAEPZ Tier I Standard Acceptable Threshold for TPHmo 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). Wells RW-B3 and RW-C1 have not been sampled for TPHmo during any previous sampling events conducted at the Site.

Other TPHmo concentrations detected were 360 µg/l in the samples collected from wells MW-12, RW-B4, and RW-C3, and 310 µg/l in the sample collected from well RW-C5.

4.3.9 TPHk

TPHk was reported in groundwater samples collected from 15 of the 23 monitoring wells sampled during the current monitoring event. Well MW-16 dewatered during purging; therefore, a groundwater sample could not be collected for TPHk analysis. Analytical results presented in Table 1 indicated that all of the TPHk concentrations contained a caveat. Upon further review of the chromatograms by C&T, it was noted that no kerosene was present in any of the samples collected. The samples contained either TPHg (six samples), TPHmo (seven samples), or a combination of heavy and light end hydrocarbons, and/or the sample exhibited a chromatographic pattern that does not resemble the standard (two samples).

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

The procedures used to extract and analyze the collected samples were reviewed by LFR personnel and were found to be within the appropriate holding times.

5.2 Blanks

One trip blank (TB-040307) and one field blank (MW-17-FB) were collected along with groundwater sample MW-17 and analyzed for TPHg, TPHk, TPHd, TPHmo, BTEX, and MTBE. Additionally, laboratory method blank results were reviewed for detection of target analytes. Toluene was detected in MW-17-FB at a concentration of 0.54 µg/l, which is slightly above the LADL of 0.50 µg/l. No target analytes were detected in TB-040307. These results indicate that sample collection methods may have introduced toluene into the sample matrix results, but that 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 TPHg, TPHd, TPHk, TPHmo, 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 TPHg, TPHd, TPHk, and TPHmo, 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 1.25 feet msl at well RW-B4 to 7.99 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 0.038 ft/ft gradient and toward the southwest in the southern portion of the Site at 0.023 ft/ft. 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 one well. The product thickness measured was 0.28 foot in well RW-C2, located in the vicinity of plume C. SPH was not detected in any other wells monitored during the current monitoring event.
- Benzene was detected above LADL in 12 of 23 wells sampled. The maximum concentration of benzene detected in shallow groundwater was 4,300 μg/l in well RW-B3. Concentrations of benzene were above both the SFAEPZ threshold and the RWQCB ESL for Surface Water Bodies in a Marine Environment of 71 μg/l in seven wells sampled.
- Toluene was detected above LADL in nine of 23 wells sampled. The maximum concentration of toluene detected in shallow groundwater was 2,700 μg/l in well RW-B2. Concentrations of toluene were above the RWQCB ESL for Surface Water Bodies in a Marine Environment of 40 μg/l in four of the wells sampled.
- Ethylbenzene was detected above LADL in nine of 23 wells sampled. The maximum concentration of ethylbenzene was detected in shallow groundwater at 520 μg/l in wells RW-B3 and RW-C5. The concentration is below the SFAEPZ

Tier I Standard (29,000 µg/l), but the detection of ethylbenzene in six of the wells sampled 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 11 of 23 wells sampled. The maximum concentration of xylenes detected in shallow groundwater was 1,430 µg/l in well RW-B4. Concentrations of total xylenes were above regulatory action levels for the RWQCB ESL for Surface Water Bodies in a Marine Environment for total xylenes (100 µg/l) in four of the wells sampled.
- MTBE was detected above LADL in four of 23 wells sampled. The maximum concentration of MTBE detected in shallow groundwater was 38 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.
- TPHg was detected in 12 of 23 wells sampled. The maximum concentration of TPHg detected in shallow groundwater was 16,000 µg/l in well RW-B4. Concentrations of TPHg were above the SFAEPZ acceptable threshold and RWQCB ESL for middle petroleum distillates of 3,700 µg/l in four of the samples collected.
- TPHd was detected above laboratory analytical detection limits in well MW-6 at a concentration of 3,300 µg/l. This concentration is above the RWQCB ESL for middle petroleum distillates of 640 µg/l. TPHd was not detected in the remaining 22 samples collected, as noted in Section 4.3.7.
- TPHmo was detected in six of 23 wells sampled at a maximum concentration of 880 µg/l in well RW-B3 and at a concentration of 1,300 µg/l in well RW-C1. These concentrations are above both the SFAEPZ acceptable threshold and the RWQCB ESL for middle petroleum distillates of 640 µg/l.
- TPHk was not detected above laboratory analytical limits in any of the 23 wells sampled, as noted in Section 4.3.9.
- Petroleum hydrocarbon concentrations were similar to previous sampling results, and, in general, concentrations of petroleum hydrocarbons are decreasing at the wells sampled under the well sampling schedule. Wells RW-A2, RW-B1 through RW-B4, RW-C1, RW-C3, and RW-C5 have not previously been sampled for petroleum hydrocarbons during any previous sampling events conducted at the Site.

Based on the results of the spring 2007 groundwater monitoring event, LFR has the following recommendations:

- Continue semiannual groundwater monitoring on site due to the elevated concentrations of TPHg, ethylbenzene, and TPHmo reported during the current monitoring event.
- Continue monitoring SPH, which was present in one monitoring well at the Site at a thickness of 0.28 foot.

- Continue in situ remediation using hydrogen peroxide and continue 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.

———. 2005. Environmental Screening Level for Surface Water Bodies in a Marine Environment.

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														
10/4/89	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	<200B	<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
9/6/06	10.05	4.98	5.07	8260B	SGC	3,400 H L	400 L	3,100 H	480	4.2	1.0	<0.5	1.9	<0.5
4/5/07	10.05	3.56	6.49	8260B	SGC	500 L Y	<300	490 L Y	1,500 Y	170	7.2	3.6	5.7	<1.3
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	---

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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)
5/13/96	10.47	6.32	4.15	8020		---	---	---	---	2	<0.5	<0.5	<0.5	---
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	200B	<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
9/6/06	10.47	9.31	1.16	---	---	---	---	---	---	---	---	---	---	---
4/5/07	10.47	9.21	1.26	8260B	SGC	<50	<300	<50	<50	1.60	<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	---	---	---	---	---	---	---	---	---

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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)
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	500B	<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
9/6/06	11.15	6.21	4.94	8260B	SGC	340 Y	<300	400 Y	2,000	8.3	1.1	8.2	6.8	50
4/5/07	11.15	5.31	5.84	8260B	SGC	340 L Y	<300	310 L Y	3,100 Y	9.3	<2.0	230	13	38

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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)
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	---
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: NM	---	---	---	---	---	---	---	---	---
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	200B	<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.	---	---	---	---	---	---	---	---	---
9/6/06	10.98	5.42	5.56	8260B	SPH: 0.01 ft.	180 Y	<300	200 Y	1,300	330	3.9	<1.7	3.7	4.8
9/6/06	10.98	---	---	8260B	Dup	2,400 H L	<300	2,300 H	1,200	350	3.6	<1.3	3.4	4.7
4/4/07	10.98	4.37	6.61	8260B	SGC	3,300	<300	3,000 H	1,400 H Y	520	<4.2	<4.2	<4.2	4.5

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)
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	---		---	---	---	---	---	---	---	---	---
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	600B	<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
9/6/06	11.51	6.67	4.84	---	---	---	---	---	---	---	---	---	---	---
4/5/07	11.51	6.13	5.38	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	2.7
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

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)
11/11/98	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
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
9/6/06	12.22	9.50	2.72	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/3/07	12.22	9.58	2.64	8260B	SGC	<50	<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

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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)
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
9/6/06	10.77	8.44	2.33	8260B	SGC	210 Y	<300	150 Y	240	58	5.3	<0.5	5.68	<0.5
4/3/07	10.77	8.28	2.49	8260B	SGC	180 H Y	<300	140 H	240 Z	27	4.2	<0.5	5.32	<0.5
4/3/07	10.77	---	---	8260B	Dup	190 H Y	<300	160 H	260 Z	28	4.5	<0.5	5.87	<0.5
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
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
9/6/06	10.59	9.01	1.58	8260B	SGC	98 H Y	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/4/07	10.59	8.99	1.60	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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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)
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	500B	<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
9/6/06	11.60	6.46	5.14	---	---	---	---	---	---	---	---	---	---	---
4/5/07	11.60	5.60	6.00	8260B	SGC	66 Y	<300	55 Y	270 Y	9.60	0.73	7.30	2.40	11
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
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	300B	<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
9/6/06	10.43	7.43	3.00	8260B	SGC	230 Y	<300	200 Y	120	<0.5	<0.5	<0.5	<0.5	<0.5
4/5/07	10.43	6.58	3.85	8260B	SGC	340 H Y	360 H L	230 H Y	160 Y	<0.5	<0.5	<0.5	<0.5	<0.5

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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)
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	300B	<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
9/6/06	11.34	10.53	0.81	8260B	SGC	150 H Y	730	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/4/07	11.34	9.73	1.61	8260B	SGC	58 H Y	<300	<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	---	---	---	---	---	---
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
9/6/06	10.05	7.70	2.35	8260B	SGC	140 H Y	<300	79 H Y	60	<0.5	<0.5	<0.5	<0.5	0.51
4/4/07	10.05	7.52	2.53	8260B	SGC	100 H Y	<300	50 H Y	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/4/07	10.05	---	---	8260B	Dup	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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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)
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
9/6/06	12.36	9.98	2.38	8260B	SGC	220 H Y	400	80 H Y	<50	<0.5	<0.5	<0.5	2.1	<0.5
4/3/07	12.36	10.05	2.31	8260B	SGC	130 H Y	<300	63 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: NM	---	---	---	---	---	---	---	---	---
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: NM	---	---	---	---	---	---	---	---	---
8/16/01	13.57	11.94G	---	---	SPH: NM	---	---	---	---	---	---	---	---	---
12/15/01	13.57	NM	---	---	SPH: NM	---	---	---	---	---	---	---	---	---
4/3/02	13.57	12.88	0.69	---		---	---	---	---	---	---	---	---	---
6/21/02	12.22	NM	---	---	SPH: NM	---	---	---	---	---	---	---	---	---
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
9/6/06	12.22	---	---	---	Dry	---	---	---	---	---	---	---	---	---
4/4/2007 [5]	12.22	10.72	1.50	8260B	SGC	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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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)
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	400B	<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
9/6/06	9.86	9.85	0.01	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/3/07	9.86	7.67	2.19	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	---	---	---	---		---	---	---	---	---	---	---	---	---
9/6/06	---	---	---	---		---	---	---	---	---	---	---	---	---
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: NM	---	---	---	---	---	---	---	---	---
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	700B	<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	---	---	---	---	---	---	---	---	---

Table 1
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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)
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	---	---	---	---	---	---	---	---	---
9/6/06	---	NM	---	---	SPH: None	---	---	---	---	---	---	---	---	---
4/4/07	---	8.26	---	---	---	---	---	---	---	---	---	---	---	---
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]	---	---		---	---	---	---	---	---	---	---	---
9/6/06	---	NM[4]	---	---	SPH: None	---	---	---	---	---	---	---	---	---
4/4/07	---	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: NM	---	---	---	---	---	---	---	---	---
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	400B	<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	---	---	---	---	---	---	---	---	---
9/6/06	9.92	3.42	6.50	---	SPH:0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	9.92	1.93	7.99											

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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)
TBW-4														
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	700B	<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	---	---	---	---	---	---	---	---	---
9/6/06	---	3.37	---	---	SPH:0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	---	1.88	---	---	---	---	---	---	---	---	---	---	---	---
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	400B	<100	30,000	2,900	100	1,500	5,100	<1
12/15/01	10.22	9.09	1.13	---	SPH: 0.36 ft.	---	---	---	---	---	---	---	---	---
4/3/2002 [6]														
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]	---	---		---	---	---	---	---	---	---	---	---
9/6/06	10.22	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
4/4/07	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	---		---	---	---	---	---	---	---	---	---

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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)
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
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	---	---	---	---	---	---	---	---	---
9/6/06	9.49	4.33	5.16	---	SPH:0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	9.49	3.08	6.41	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---
9/6/06	10.09	3.52	6.57	---	SPH: None	---	---	---	---	---	---	---	---	---
4/3/07	10.09	2.93	7.16	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---
9/6/06	9.67	3.19	6.48	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	9.67	1.70	7.97	8260B	SGC	200 Y	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
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	---	---	---	---	---	---	---	---	---
9/7/06	---	4.49	---	---		---	---	---	---	---	---	---	---	---
4/4/07	---	2.72	---	---	---	---	---	---	---	---	---	---	---	---

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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-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	---	---	---	---	---	---	---	---	---
9/6/06	11.22	7.39	3.83	---	SPH:0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	11.22	7.06	4.16	8260B	SGC	130 L	<300	100 H	220	410	23	9.4	16	6.3
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	---	---	---	---	---	---	---	---	---
8/31/05	11.23	7.14	4.09	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	11.23	6.09	5.14	---	SPH: None	---	---	---	---	---	---	---	---	---
9/6/06	11.23	7.39	3.84	---	SPH: None	---	---	---	---	---	---	---	---	---
4/4/07	11.23	9.84	1.39	8260B	SGC	500 L Y	<300	500 L	11,000	3,400	2,700	190	1,100	<10
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	---	---	---	---	---	---	---	---	---
9/6/06	11.14	9.61	1.53	---	SPH: None	---	---	---	---	---	---	---	---	---
4/4/07	11.14	9.84	1.30	8260B	SGC	3,600 L Y	880	4,000 L	7,900	4,300	130	520	357	<31
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	---	---	---	---	---	---	---	---	---
9/6/06	11.29	9.69	1.60	---	SPH: None	---	---	---	---	---	---	---	---	---
4/4/07	11.29	10.04	1.25	8260B	SGC	3,500 Y	360	4,000 L	16,000	3,200	150	460	1,430	<8.3
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	---	---	---	---	---	---	---	---	---
9/6/06	10.44	6.71	3.73	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/5/07	10.44	6.66	3.78	8260B	---	220 H Y	1,300	63 H Y	<50	<0.50	<0.50	<0.50	<0.50	<0.50

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)
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	---	---	---	---	---	---	---	---	---
9/6/06	10.58	8.19	2.39	---	SPH: 0.12 ft.	---	---	---	---	---	---	---	---	---
4/4/07	10.58	8.28	2.30	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---
9/6/06	10.71	8.10	2.61	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/5/07	10.71	7.97	2.74	8260B	SPH: None	540 H L Y	360 H L	430 H L Y	520	13	14	32	54	<0.5
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	---	---	---	---	---	---	---	---	---
9/6/06	11.32	8.16	3.16	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	11.32	8.50	2.82	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---
9/6/06	10.79	8.03	2.76	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	10.79	8.27	2.52	8260B	SGC	3,800 Y	310	4,100 L	12,000	3,400	170	520	1,300	<25
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.	---	---	---	---	---	---	---	---	---
9/6/06	10.31	7.96	2.35	---	SPH: 0.18ft.	---	---	---	---	---	---	---	---	---
4/4/07	10.31	NM[4]	---	---	---	---	---	---	---	---	---	---	---	---

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Summary of Groundwater Analytical Data, Petroleum Hydrocarbons
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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-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]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	10.12	8.34	1.78	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	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.	---	---	---	---	---	---	---	---	---
9/6/06	---	NM[4]	---	---	Buried	---	---	---	---	---	---	---	---	---
4/4/07	10.39	7.78	2.61	---	---	---	---	---	---	---	---	---	---	---
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]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	10.18	NM[2]	---	---	No Access	---	---	---	---	---	---	---	---	---
4/4/07	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]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	10.33	NM[2]	---	---	No Access	---	---	---	---	---	---	---	---	---
4/4/07	10.33	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
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]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	10.07	NM[2]	---	---	No Access	---	---	---	---	---	---	---	---	---
4/4/07	10.07	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---

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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)
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)]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	10.22	NM[(2)]	---	---	No Access	---	---	---	---	---	---	---	---	---
4/4/07	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)]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	9.99	NM[(2)]	---	---	No Access	---	---	---	---	---	---	---	---	---
4/4/07	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	---	---	---	---	---	---	---	---	---
9/6/06	9.46	8.31	1.15	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	9.46	7.77	1.69	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---
9/6/06	9.95	8.39	1.56	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
4/4/07	9.95	7.94	2.01	---	---	---	---	---	---	---	---	---	---	---
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)]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	---	NM[(2)]	---	---	No Access	---	---	---	---	---	---	---	---	---
4/4/07	---	NM[(2)]	---	---	---	---	---	---	---	---	---	---	---	---

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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)
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
9/7/06	---	---	---	8260B		<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
4/3/07	---	---	---	8260B		<50	<300	<50	<50	<0.5	0.54	<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	---	---	---	---	---
4/3/07	---	---	---	8260B	Trip Blank 1	---	---	---	---	<0.5	<0.5	<0.5	<0.5	<0.5

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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)

Notes:

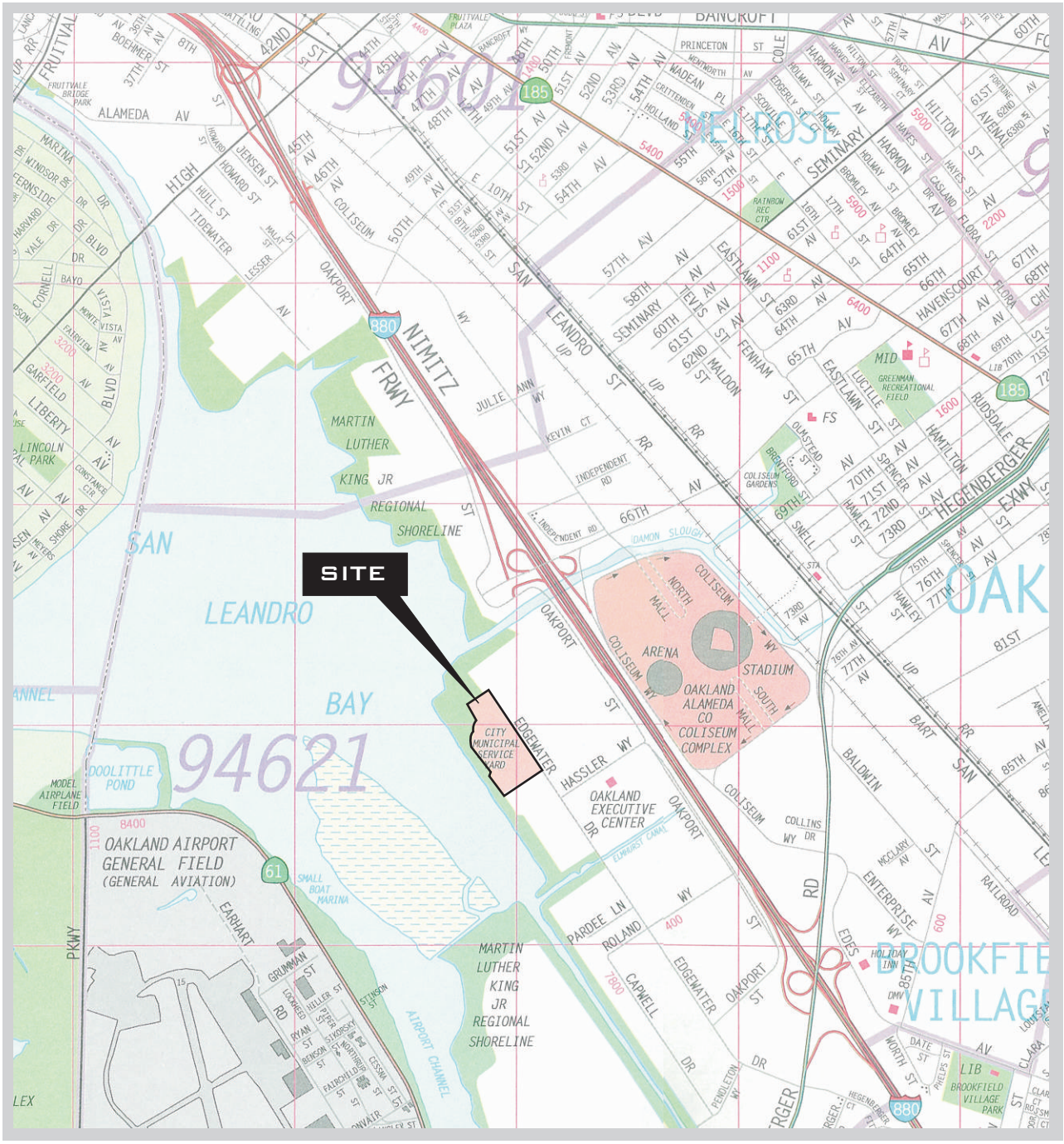
Groundwater elevations corrected for the presence of free product according to the calculation: GW Elevation = TOC - DTW + (0.8 x SPH thickness)

(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.
(5) = Well dewatered, field staff unable to collect all samples.
(6) = Well has active remediation unit/recovery.

--- = Not measured/analyzed

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
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
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.
B= Results flagged with "B" indicate motor oil was detected in the method blank.
C= Footnote assigned by Ninyo and Moore, not defined in their historical tables.
E= Footnote assigned by Ninyo and Moore, not defined in their historical tables.
H= Heavier hydrocarbons contributed to the quantitation.
J= Value qualified as "estimated"
L= Lighter hydrocarbons contributed to the quantitation.
Y= Sample exhibits chromatographic pattern that does not resemble standard.
Z= Sample exhibits unknown single peak or peaks



SOURCE: 2002 THOMAS GUIDE FOR ALAMEDA AND CONTRA COSTA COUNTIES

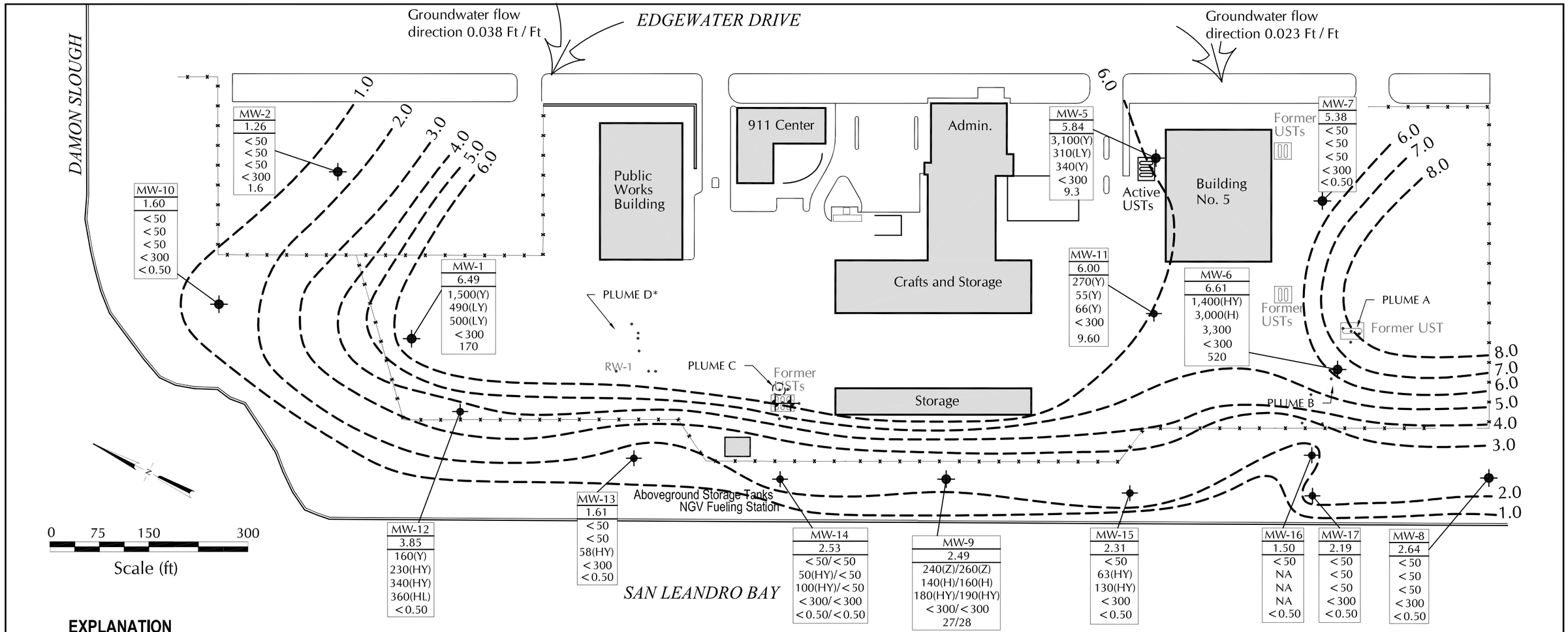
Site Vicinity Map

Municipal Service Center, 7101 Edgewater Drive, Oakland, California

LFR

Figure 1

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



EXPLANATION

MW-1	Monitoring well location
RW-1	Remediation well location
TBW-1	Tank Backfill Well
MW-3	Abandoned Well
NA	Not Available; Well dewatered
L	Lighter hydrocarbons contributed to the quantitation
Y	Sample exhibits chromatographic pattern that does not resemble standard
H	Heavier hydrocarbons contributed to the quantitation
Z	Sample exhibits unknown single peaks or peaks
B	Benzene
FT / FT	Foot per foot
	Fence
3.0	Groundwater elevation contour; dashed where inferred

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

* Wells TBW-5 , RW-D1, RW-D2, RW-D3, RW-D4, RW-D5, and OB-D2 (PLUME D), were converted to extraction wells and could not be accessed for DEPTH-TO-WATER and DEPTH-TO-SPH measurements.

SPH = Separate Phase Hydrocarbons
UST = Underground Storage Tank

Source: CAMBRIA

Groundwater Elevation Contour Map and Hydrocarbon Concentrations in Shallow Groundwater, April 2007

Municipal Service Center, Oakland, California

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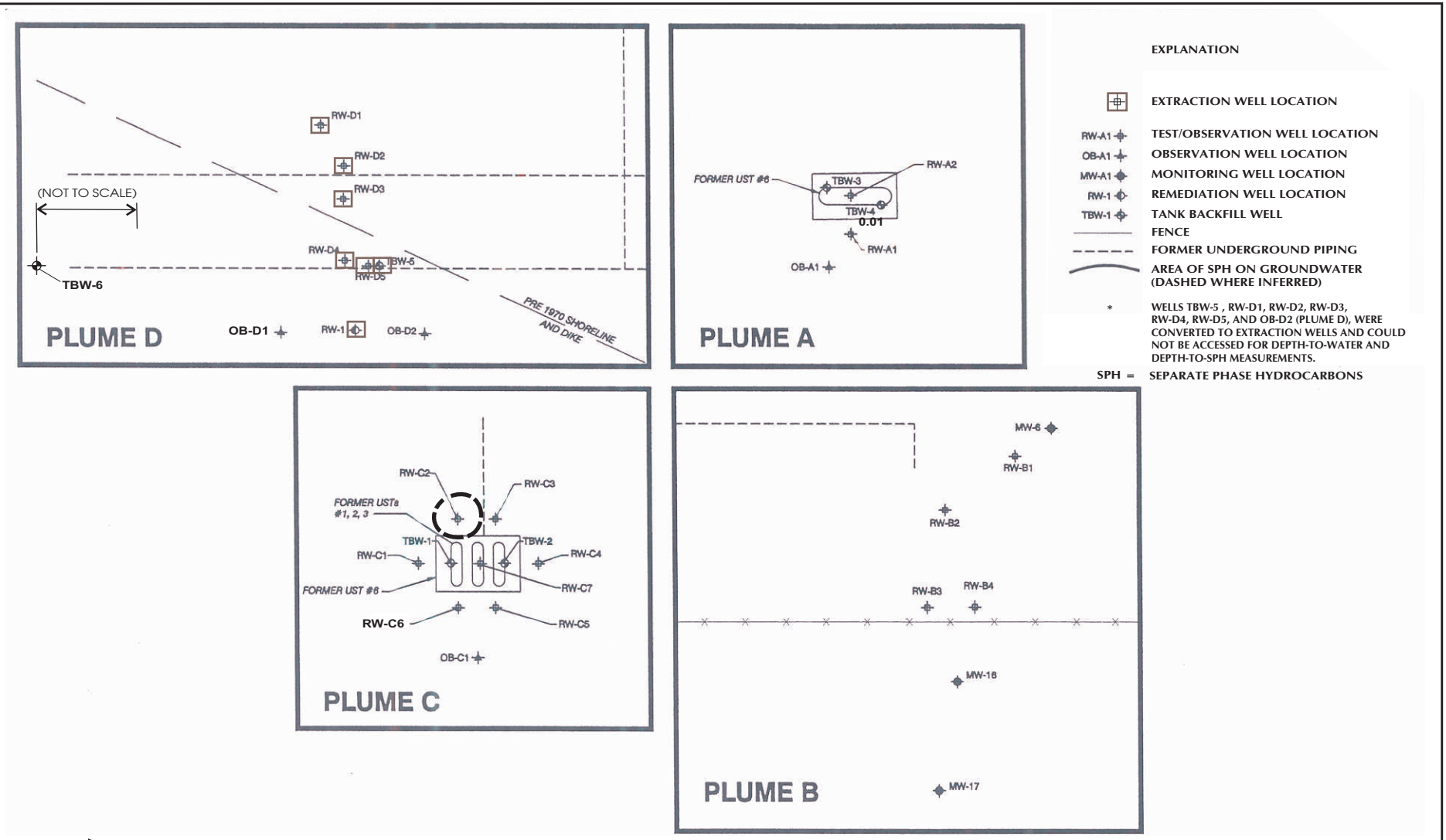
Figure 2

I:\Design\001\09225\11\000\dwg\GW Elev April 2007.dwg Jun 26,2007-3:17pm



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

DESIGN\001\09225\11\000\09225 Plume Detail rev2.CDR

Detail Plume Map

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

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WATER-LEVEL MEASUREMENTS LOG

Project No. 001-09225-23 Date 4/3/07 Page 1 of 2

Project Name MSC - 7101 EDGEWATER DR. Day: ☐ Sun ☐ Mon ☒ Tues ☐ Weds ☐ Thurs ☐ Fri ☐ Sat

Field Personnel James Gonzales, Michael Sullivan

General Observations

Time Opened: Time:

WELL NO.	WELL ELEVATION	DEPTH TO WATER 1	DEPTH TO WATER 2	~~DEPTH TO PRODUCT~~	WELL SECURE? Y	WELL SECURE? N	REMARKS (UNITS = FEET)
MW-1	0925	3.56	3.56	~~1145~~	1145		Sheen
2	1035	9.21	9.21	~~1410~~	1410		
3	—						not on map
4	—						not on map
5	1025	5.31	5.31		1400		
6	1015	4.~~38~~ 37	~~4.38~~ 4.37	~~4.36~~ 4.36	1335		check w/bailer no product visible
7	1020	6.13	6.13	—	1358		
8	1040	9.58	9.58		1432		
9	1050	8.28	8.28		1423		
10	1100	8.99	8.99		1414		
11	1050	5.60	5.60		1403		
12	1130	6.58	6.58	~~1328~~	1328		~~Cant Find~~
13	1054	9.73	9.73	~~1418~~	1418		
14	1052	7.52	7.52	~~1420~~	1420		
15	1048	10.05	10.05	~~1425~~	1425		
16	1045	10.72	10.72	~~1428~~	1428		
17	1047	7.67	7.67	~~1430~~	1430		
18	—						not on map
TBW-1	0940	8.26	8.26	~~1202~~	1202		
2	—						Covered by trash cans
3	1004	1.93	1.93	~~1351~~	1351		
4	1005	1.88	1.88	~~1353~~	1353		
5	—	See	Note				
6	0930	3.08	3.08	~~1147~~	1147		
RW-A1	1012	2.93	2.93	~~1347~~	1347		Cannot sample, truck over well, no room for bailer
A2	1010	1.70	1.70	~~1350~~	1350		
OB-A1	1014	2.72	2.72	~~1346~~	1346		
RW-B1	1016	7.06	7.06	~~1342~~	1342		
B2	1017	7.05	7.05	~~1340~~	1340		
B3	1018	9.84	9.84	~~1337~~	1337		
B4	1019	10.04	10.04	~~1335~~	1335		
RW-C1	0930	6.66	6.66	~~1205~~	1205		

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WATER-LEVEL MEASUREMENTS LOG

Project No. 001-09225-23 Date 4/3/07 Page 2 of 2

Project Name Oakland MSC Day: ☐ Sun ☐ Mon ☒ Tues ☐ Weds ☐ Thurs ☐ Fri ☐ Sat

Field Personnel MS/JAG

General Observations

Time Opened Time (Actual)

WELL NO.	WELL ELEVATION	DEPTH TO WATER 1	DEPTH TO WATER 2	DEPTH TO PRODUCT	WELL SECURE? Y	WELL SECURE? N	REMARKS (UNITS = FEET) .02
RW-C2	0956	8.28	8.28	8.00	1150		checked w/ bailer ≈ 0.~~20~~ ft of product in bail
C3	0957	7.97	7.97		1155		
C4	0944	8.50	8.50		1200		
C5	0952	8.27	8.27		1210		
C6	—						not on map
C7	~~0952~~						not available, covered by trashcans
OB-C1	0955	7.78	7.78		1212		dtw meter measured no product, bailer measured ~~1~~ .02 ft product
RW-D1	—	* see note					extraction well, open hole
D2	—	* see note					" "
D3	—	* see note					" "
D4	—	* see Note					" "
D5	—	10.79	10.79		1123		" "
OB-D1	0910	7.77	7.77	7.76	1125		checked w/ bailer, no visible product
OB-D2	0915	7.94	7.94		1130		
RW-1	—	* see note					extraction well, open hole
RW-C8	0950	7.78	7.78		1206		

* Note: Well ~~C8~~ dtw cannot be taken because ~~box~~ covered Sample port for SVE, engineer working on SVE system same day

WATER-QUALITY SAMPLING LOG

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Project No. 001-09225-23 Date 4/3/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-8 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type on site treatment Storage Location on site

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☐ Hand

Well No. MW-8 Depth of Water 9.58

Well Diameter: 2" Well Depth 15.32

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 5.74

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.92

5.74 x .20 =
1.148
9.58 + 1.15 =
10.73

80% DTW 10.73

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	~~Totalizer~~ Reading (mg/L)	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1445	—	9.58	—	—	—	—	—	—	Start Purge
1450	—	—	1.054	1.57	16.61	6.84	17.04		
1453	—	—	1.95	1.81	16.44	7.21	17.59		
1455	—	—	2.90	—	16.70	7.25	19.47		
1458	—	—	3.90	—	16.55	7.29	22.04		
1502		14.08			16.40	7.36	22.48		
1700		10.70							Sampled

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/3/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-16 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type Storage tank Storage Location On Site

Date Purge Water Disposed Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☐ Hand

Well No. MW-16 Depth of Water 10.72

Well Diameter: 2" Well Depth 12.80

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 2.08

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.33

80% DTW 11.13

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1515	—	10.72	0.30	—	17.21	7.19	1626		strong odor
1520									Purged dry wait for recharge
4/4/07 1502	—	12.53							Sample 3 VOAs

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/3/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-1S ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type Storage Location

Date Purge Water Disposed Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☐ Hand

Well No. MW-1S Depth of Water 10.15

Well Diameter: 2 Well Depth 20.32

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 10.17

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.6

80% DTW 12.18

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (mS/cm µmhos)	Turb (NTU)	Remarks
1605	–	10.15	4.6	–	17.87	7.38	10.67	turbid	
1614	–		3.2	–	17.96	7.25	10.86	"	
1622	–		4.8	–	17.84	7.23	10.00	"	
1630	–		5.4	–	17.96	7.21	9.38	"	
1635		10.20							Sample

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/3/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-9 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type — Storage Location

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. MW-9 Depth of Water 8.28

Well Diameter: 2" Well Depth 14.37

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 6.09

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume .9744 MS/cm

6.09 x 20% =
1.218
1.218 + 8.28

80% DTW 9.49

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (~~umhos~~)	Turb (NTU)	Remarks
1607	—	8.28	—	—	—	—	—	—	Start Purge
1610	—	—	1.0 gal	—	17.21	7.20	6.24		
1618	—	—	2.0 gal		17.44	7.19	5.89		
1628	—	—	3.0 gal		17.04	7.15	5.01		
1630	—	8.82	—		—	—	—		—
1635	—	—	—	—	—	—	—		Sample
1645	—	—	—	—		—	—		Duplicate

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales, Erica Kalve Sample No. RW-B4 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP —

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. RW-B4 Depth of Water 10.00

Well Diameter: 4in Well Depth 14.04

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 4.04

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.626

3 well casing volumes
2.626(3) = 7.878

4.04(0.20) = 0.808

0.808 + 10.00 = 10.808

80% DTW 10.808

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~ mS/cm	Turb (NTU)	Remarks
0931		10.00	—						Start purge
0942		—	2.75		17.98	6.73	7.99	cloudy	
0952		—	5.50		17.59	6.77	8.314	"	
1002		10.09	8.25		17.76	6.74	8.45	"	
1010		—	—		—	—	—	Sample	

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Erica Waltz Sample No. RW-B3 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type Storage Location

Date Purge Water Disposed Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

3.465 (3) = 10.394
3 well casing
5.33 (0.20) = 1.066
1.066 + 9.92 = 10.96

Well No. RW-B3 Depth of Water 9.92

Well Diameter: 4 Well Depth 15.25

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 5.33

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 3.465

80% DTW 10.96

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos/cm)	Turb (NTU)	Remarks
9:31		9.92							start purge
9:44		—	3.5		17.77	6.95	7.085	cloudy	
9:55		—	7.0		17.76	6.91	7.315	cloudy/grey	
10:05		10.15	10.05		18.06	6.88	7.391	cloudy	
10:15									sample

ENEW

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales, Erica Whiting Sample No. RW-B2 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP —

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. RW-B2 Depth of Water 7.09

Well Diameter: 4" Well Depth 14.19

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 7.1

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 4.615 (17 bailers)

4.615(3) = 13.845
3 well casings
7.1(0.20) = 1.42
1.42 + 7.09 = 8.51

80% DTW 8.51

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1035		7.09	—		—	—	—	—	Start Purge
1048		—	4.75		19.34	7.13	2.13	cloudy	
1101		—	9.50		19.45	7.61	2.69	cloudy	
1110		7.37	14.25		19.27	7.98	2.87	cloudy	
1115		—	—		—	—	—	—	Sample

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE — WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Erica Waltz Sample No. RW-B1 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP —

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

Purge Water Storage Container Type — Storage Location

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

S 66(3) = 16.98
3 well casings
8.71(0.20) = 1.742
1.742 + 7.09 = 8.822

Well No. RW-B1 Depth of Water 7.09

Well Diameter: 4" Well Depth 15.79

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.71

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 5.66 gals/cm

80% DTW 9.82

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1036		7.06	1						Start Purge
1049		—	5.66		19.87	6.82	3.857	very cloudy	
1102		—	11.32		19.03	7.29	4.648	Cloudy/brown	
1116		7.39	16.98		19.03	7.22	5.422	cloudy	
1120									Sample

Continue remarks on reverse, if needed.

LFR LEVINE·FRICKE — WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Erica Kalve Sample No. MW-6 ☒ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier — ☒ Hand —

Well No. MW-6 Depth of Water 4.34

Well Diameter: 2" Well Depth 14.11

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 9.73

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.557 gal/cm

1.557(3) = 4.67

9.73(0.20) = 1.946

1.946 + 4.34 = 6.326

80% DTW 6.326

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1250		—							Field Blank
1300		4.34							Start Purge
1307		—	1.5		19.84	6.72	1.519	cloudy, lots of globules of product	
1314		—	3.0		17.41	6.95	2.444	cloudy	
1323		7.31	4.5		17.29	7.16	2.570	cloudy	
1337		6.76							
1345		6.52							
1352		6.38							
1359		6.31							
1405		—							Sample

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. RW-A2 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP —

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. RW-A2 Depth of Water 1.74

Well Diameter: Well Depth 13.23

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 11.49

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 7.46 (3 volumes)

11.49 x .20 = 2.29

2.29 x 1.74 = 4.04

80% DTW 4.04

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~ mS/cm	Turb (NTU)	Remarks
1315		1.74							Start Purge
1327		—	7.5 gal		17.78	7.20	0.571	cloudy	
1338			15.0 gal		17.56	6.79	0.465	cloudy	
1351		1.75	22.5 gal		17.60	6.76	0.471		
1355								Sample	

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. — ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. MW-13 Depth of Water 9.82

Well Diameter: 2" Well Depth 19.58

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 9.76

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.56 (~6 bailers)

80% DTW 11.72

9.76 x .20 =
1.952

1.952 + 9.82 =

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (mS/cm) ~~(umhos)~~	Turb (NTU)	Remarks
1533	—	9.82							Start Purge
1540	—	—	1.5 gal		18.54	7.33	5.51	cloudy	
1545	—	—	3.0 gal		19.04	7.20	5.97	"	
1553	—	—	4.5 gal		18.41	7.18	6.01		
1559		10.59							
1600								Sample	

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE — WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of ____

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Erica Kalve ~~Sample~~ No. MW-14 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☒ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed ✓ Where Disposed purge-water disposed on-site

MW-14-DUP

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ____ ☒ Hand ____

~~1338~~

7.11(0.20) = 1.422

1.422 + 7.51 = 8.932

Well No. MW-14 Depth of Water 7.51

Well Diameter: 2" Well Depth 14.62

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 7.11

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.139 mg/cm

80% DTW 9.932

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1458		7.51							Start purge
1515		<	1.25		19.09	7.38	9,592	Cloudy	
1521		~	2.50		17.93	7.42	9,624	Cloudy-dark grey	
1526		7.91	3.75		17.54	7.40	9,226	cloudy	
1530									collect sample
1535									collect dup

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Erica Kalve Sample No MW-10 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type Storage Location

Date Purge Water Disposed Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. MW-10 Depth of Water 9.05

Well Diameter: 2 Well Depth 13.98

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 4.93

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.79

4.93(0.20) = 0.986

9.05 + 0.986 = 10.036

80% DTW

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond. (mS/cm ~~umhos~~)	Turb (NTU)	Remarks
1619		9.05							start purge
1623		–	0.75		16.86	7.44	1.924	cloudy	
1625		–	1.50		16.17	7.35	1.623	cloudy	
1627		9.47	2.25		16.31	7.31	1.539	cloudy	
1635									sample

Continue remarks on reverse, if needed.

LFR LEVINE·FRICKE — WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Erica Waltz Sample No. RW-C3 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP —

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. RW-C3 Depth of Water 7.97

Well Diameter: 4" Well Depth 14.23

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 6.26

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 4 1.069 mS/cm

6.26 (0.20) = 1.252

1.252 + 7.97 =

9.22

80% DTW

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (umhos)	Turb (NTU)	Remarks
1657		7.97							start purge
1704		—	4.0		18.24	6.97	5.891	cloudy	brown
1714		—	5.75		17.69	7.03	3.888	brown cloudy	bailed dry
4/5/07 1205		8.08							Sample

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/4/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. RW-C5 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP —

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☐ Hand

Well No. RW-C5 Depth of Water 8.27

Well Diameter: 4" Well Depth 14.04

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 5.77

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 3.75 (15 bailers)

5.77 X .20 = 1.15

1.15 + 8.27 = 9.42

80% DTW 9.42

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (mS/cm ~~µmhos~~)	Turb (NTU)	Remarks
~~1700~~ 1705		8.27							Start purge
1710		—	3.75		17.45	6.68	7.06		
1718		—	7.50		17.45	6.69	7.07		
1726		—	11.25		17.40	6.72	7.08		
1730		~~8.27~~	—						
1735			—						Sample

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/5/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-2 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

6.43 X .20 =
1.28
1.28 + 9.24 =

Well No. MW-2 Depth of Water 9.24

Well Diameter: 2" Well Depth 15.67

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 6.43

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.02 (≈4 bailers)

80% DTW 10.52

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~ mS/cm	Turb (NTU)	Remarks
0950		9.24							start purge
0952		—	≈1.0gal		17.73	6.06	25.58	cloudy	
0955		—	≈2.0gal		17.71	6.29	26.08	"	
0958			≈3.0gal		17.80	6.33	26.25		
1005		9.26							
1010								Sample	
			JAG						

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/5/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-1 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. MW-1 Depth of Water 3.51

Well Diameter: 2" Well Depth 15.69

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 12.18

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.94 (≈ 8 gallons)

12.18 X .20 =
2.436

2.436 + 3.51

80% DTW 5.94

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1023		3.51							Start purge
1025		—	≈2.0 gal		17.70	7.06	8.44	cloudy	
1030		—	≈4.0 gal		17.76	7.04	10.13	"	
1034		—	≈6.0 gal		17.93	7.01	11.07	"	
1035		13.31			—	—	—	wait	for recharge
1215		5.29	—	—	—	—	—	—	
1220		—	—	—	—	—	Sample		

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/5/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-12 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. MW-12 Depth of Water 6.59

Well Diameter: 2" Well Depth 14.42

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 7.83

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.25

7.83 x .20 = 1.56

1.56 + 6.59 =

80% DTW 8.15

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1058		6.59							Start Purge
1100		—	≈1.25 gal		16.70	7.58	3.11	cloudy	
1103		—	≈2.5 gal		16.47	7.52	3.06	"	
1106			≈4.0 gal		16.44	7.54	3.34	"	
1109		—	≈5.25 gal		16.43	7.50	3.40	"	
1110		6.95							
1115								Sample	

Continue remarks on reverse, if needed.

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WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/5/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. — ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP —

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. MW-7 Depth of Water 6.13

Well Diameter: 2" Well Depth 14.17

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.04

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.28 (≈5 bailers)

8.04 X.20 = 1.608

1.61 + 6.13 =

80% DTW 7.74

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1246		6.13							Start purge
1249		—	1.25gal		18.15	6.71	234	clear	
1251		—	2.5gal		17.72	6.63	2.17	cloudy	
1254		—	3.75gal		17.62	6.63	2.20	cloudy	
1255		7.05							
1300								Sample	

Stop

Continue remarks on reverse, if needed.

LFR LEVINE·FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/5/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. — ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. ☐ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☐ Hand

8.92 X .20 =
1.78
1.78 + 5.33

Well No. MW-5 Depth of Water 5.33

Well Diameter: 2" Well Depth 14.25

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.92

☐ 4" (0.65 gal/feet). ☐ 6" (1.47 gal/feet) Well Volume 1.43 = 6 bailers

80% DTW 7.11

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond ~~(µmhos)~~ mS/cm	Turb (NTU)	Remarks
1323		5.33							start purge
1325		—	~1.5 gal		17.39	7.10	1.21	clear	
1329		—	~3.0 gal		16.95	7.05	1.20	"	
1332					16.92	7.03	1.15	"	
1335		5.37							
1340						Sample			

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 001-09225-23 Date 4/5/07 Page 1 of 1

Project Name Oakland MSC Sampling Location 7101 Edgewater Drive

Sampler's Name Michael Sullivan and James Gonzales Sample No. MW-11 ☐ FB

Sampling Plan By Erica Kalve Dated 4/2/07 C.O.C. No. — ☐ DUP

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

Purge Water Storage Container Type — Storage Location —

Date Purge Water Disposed — Where Disposed purge-water disposed on-site

Analyses Requested	No. and Type of Bottles Used
8260 for TPHg/BTEX/MTBE	3 VOAs with HCl
8015 for TPHd/ TPHmo/TPHk	1L Amber, no-preservative

Lab Name Curtis and Tompkins, Emeryville; contact Tracy Babjar at 510-204-2223

Delivery By ☐ Courier ☒ Hand

Well No. MW-11 Depth of Water 5.62

Well Diameter: 2" Well Depth 19.27

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 13.65

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.18 ≈ 9 gals

80% DTW 8.35

13.65 X .20 = 2.73

2.73 + 5.62 =

1350 MW-11-FB

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	Totalizer Reading	Temperature (C°)	pH (SU)	Cond (µmhos)	Turb (NTU)	Remarks
1353		5.62	—		—	—	—	✓	Start purge
1356		—	≈2.25gal		17.90	6.60	4.57	clear	
1400		—	≈4.5gal		18.12	6.63	5.43	"	
1404		—	≈6.75		17.92	6.66	5.20	cloudy	
1405		7.75							
1410							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

Laboratory Job Number 193911

LFR Levine Fricke 1900 Powell Street Emeryville, CA 94608	Project : 001-09225-23 Location : MSC Oakland Level : II

Sample ID	Lab ID
MW-17	193911-001
MW-8	193911-002
MW-9	193911-003
MW-15	193911-004
MW-9-DUP	193911-005
MW-17-FB	193911-006
TB-0403-07	193911-007

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.

Signature: _____ Date: 4-17-07
Project Manager

Signature: _____ Date: 4-18-07
Operations Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193911**
Client:	**LFR Levine Fricke**
Project:	**001-09225-23**
Location:	**MSC Oakland**
Request Date:	**04/04/07**
Samples Received:	**04/04/07**

This hardcopy data package contains sample and QC results for seven water samples, requested for the above referenced project on 04/04/07. The samples were received cold and intact. All data were e-mailed to Erica Kalve on 04/10/07.

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

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

193911

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

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

PROJECT NO.: 001-09225-23
SECTION NO.:
DATE: 4/3/07
SAMPLER'S INITIALS: MWS/OAG
PROJECT NAME: MSC Oakland
SAMPLER (Signature): [signature]
SERIAL NO.: № 203880

Analyses: TPHd (EPA 8015M) (8260), TPHmo (EPA 8015M) (8015), TPHg (EPA 8015M) (8260), BTEX (EPA 8021/602) (8260), VOCs (EPA 8260/624), Metals (EPA 6010/7000), MTBE (8260), TPHk (8015), Silica gel (pre EX)

	SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	Soil	Water	TPHd	TPHmo	TPHg	BTEX	VOCs	Metals	MTBE	TPHk	Silica gel	Standard	RUSH	HOLD
-1	MW-17	4/3/07	1835		4		X	X	X	X	X			X	X	X	X		
-2	MW-8	4/3/07	1700		4		X	X	X	X	X			X	X	X	X		
-3	MW-9	4/3/07	1635		4		X	X	X	X	X			X	X	X	X		
-4	MW-15	4/3/07	1635		4		X	X	X	X	X			X	X	X	X		
-5	MW-9-DUP	4/3/07	1645		4		X	X	X	X	X			X	X	X	X		
-6	MW-17-FB	3/4/07	1705		4		X	X	X	X	X			X	X	X	X		
-7	TB-040307	—	—								X						X		

REMARKS

*VOCs: ☒ 8260 List ☐ 8240 List ☐ 8010 List ☐ 624 List

**Metals: ☐ CAM17 ☐ RCRA ☐ LUFT

MWS

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

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

RELINQUISHED BY: 1
(SIGNATURE) [signature] (DATE) 4/3/07
(PRINTED NAME) Michael Sullivan (TIME) 1900
(COMPANY) LFR

RELINQUISHED BY: 2
(SIGNATURE) (DATE)
(PRINTED NAME) (TIME)
(COMPANY)

RELINQUISHED BY: 3
(SIGNATURE) (DATE)
(PRINTED NAME) (TIME)
(COMPANY)

ANALYTICAL LABORATORY: C&T

FAX RESULTS TO: Erica Kalve
SEND HARDCOPY TO: "
SEND EDD TO: EMV.LABEDDS.COM

RECEIVED BY: 1
(SIGNATURE) [signature] (DATE) 4-04-2007
(PRINTED NAME) Charles Kennedy (TIME) 16:00
(COMPANY) C&T Labs

RECEIVED BY: 2
(SIGNATURE) (DATE)
(PRINTED NAME) (TIME)
(COMPANY)

RECEIVED BY (LABORATORY): 3
(SIGNATURE) (DATE)
(PRINTED NAME) (TIME)
(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#: 193911 Date Received: 4.04.2007 Number of Coolers: 1
Client: LFR Project: MSC Oakland

A. Preliminary Examination Phase
Date Opened: 4.04.2007 By (print): Charles Kennedy (sign) Charles Kennedy

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: N/A
2. Were custody seals on outside of cooler? ..... (YES) NO
   How many and where? 1 over lip of cooler Seal date: 4.03.07 Seal name: Unreadable
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
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 Ice still solid Temperature: No Temp Blank Samples Cold

B. Login Phase
Date Logged In: 4.04.2007 By (print): Charles Kennedy (sign) Charles Kennedy

1. Describe type of packing in cooler: Ziploc & VOA's in 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 #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/03/07
Units:	ug/L	Received:	04/04/07
Diln Fac:	1.000	Prepared:	04/06/07
Batch#:	123929	Analyzed:	04/08/07

Field ID: MW-17 Lab ID: 193911-001
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	61-134

Field ID: MW-8 Lab ID: 193911-002
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	71	61-134

Field ID: MW-9 Lab ID: 193911-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	140 H	50
Diesel C10-C24	180 H Y	50
Motor Oil C24-C36	ND	300

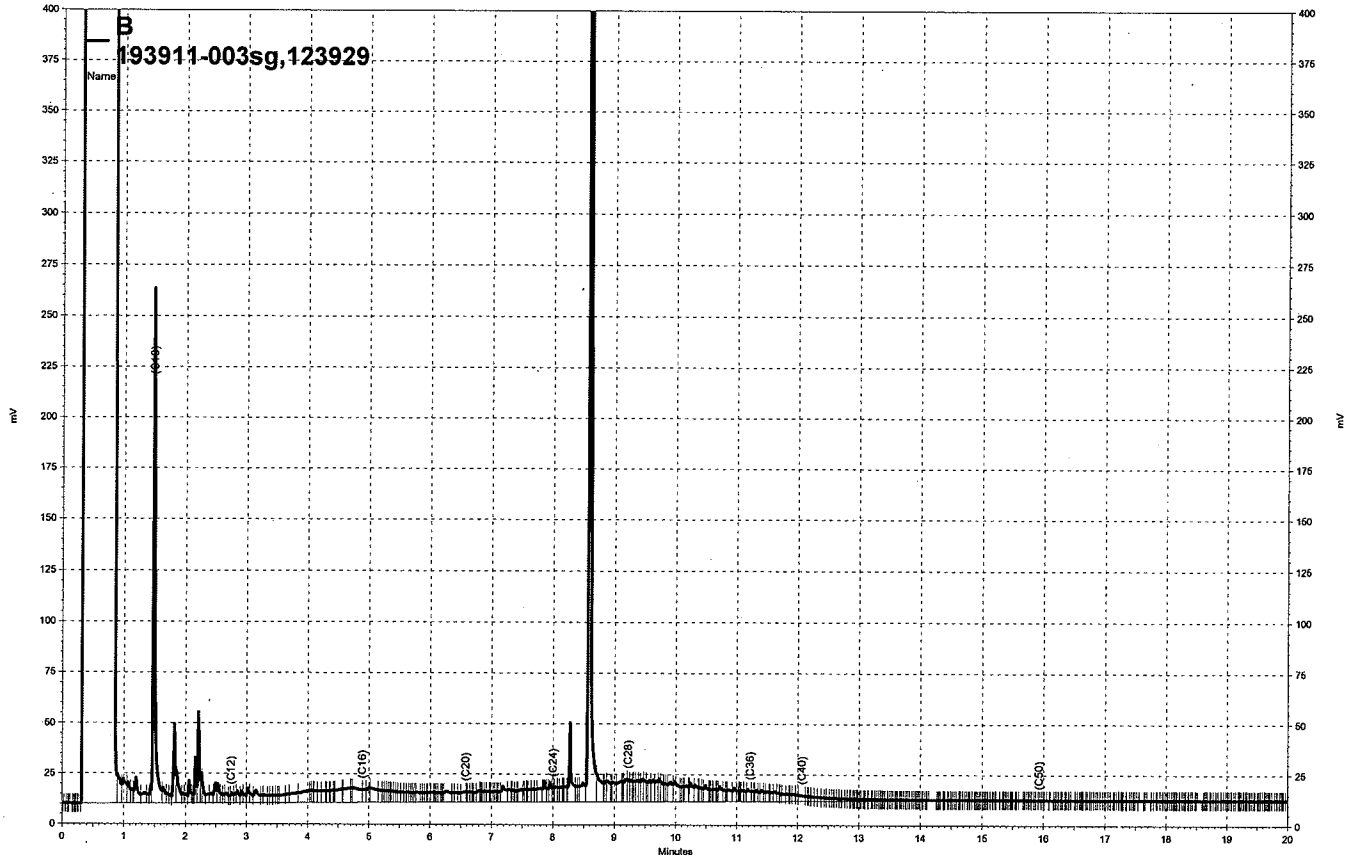
Surrogate	%REC	Limits
Hexacosane	75	61-134

Field ID: MW-15 Lab ID: 193911-004
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	63 H Y	50
Diesel C10-C24	130 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	76	61-134

H= Heavier 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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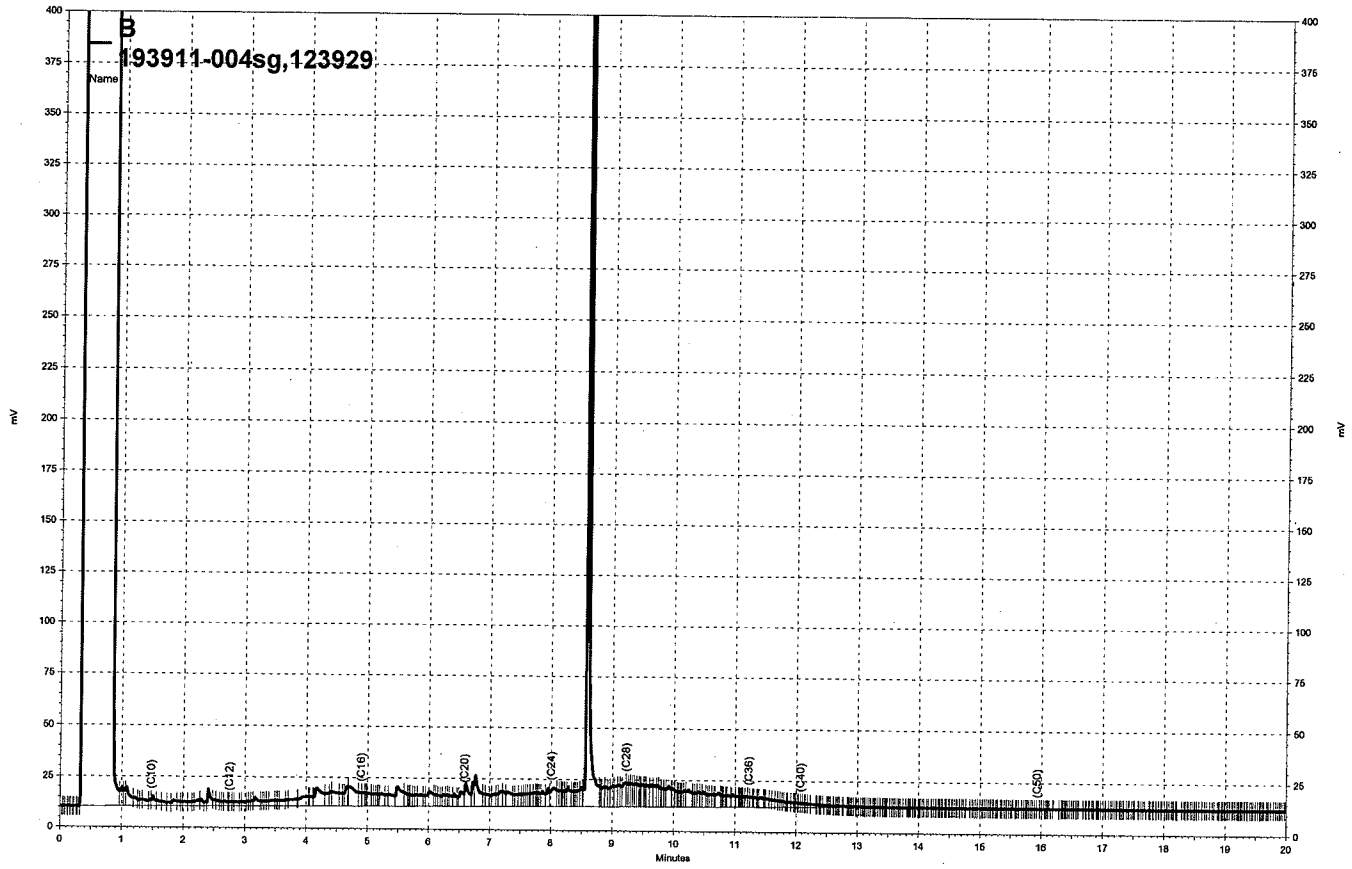

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/03/07
Units:	ug/L	Received:	04/04/07
Diln Fac:	1.000	Prepared:	04/06/07
Batch#:	123929	Analyzed:	04/08/07

Field ID: MW-9-DUP
Type: SAMPLE
Lab ID: 193911-005
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	160 H	50
Diesel C10-C24	190 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	61-134

Field ID: MW-17-FB
Type: SAMPLE
Lab ID: 193911-006
Cleanup Method: EPA 3630C

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

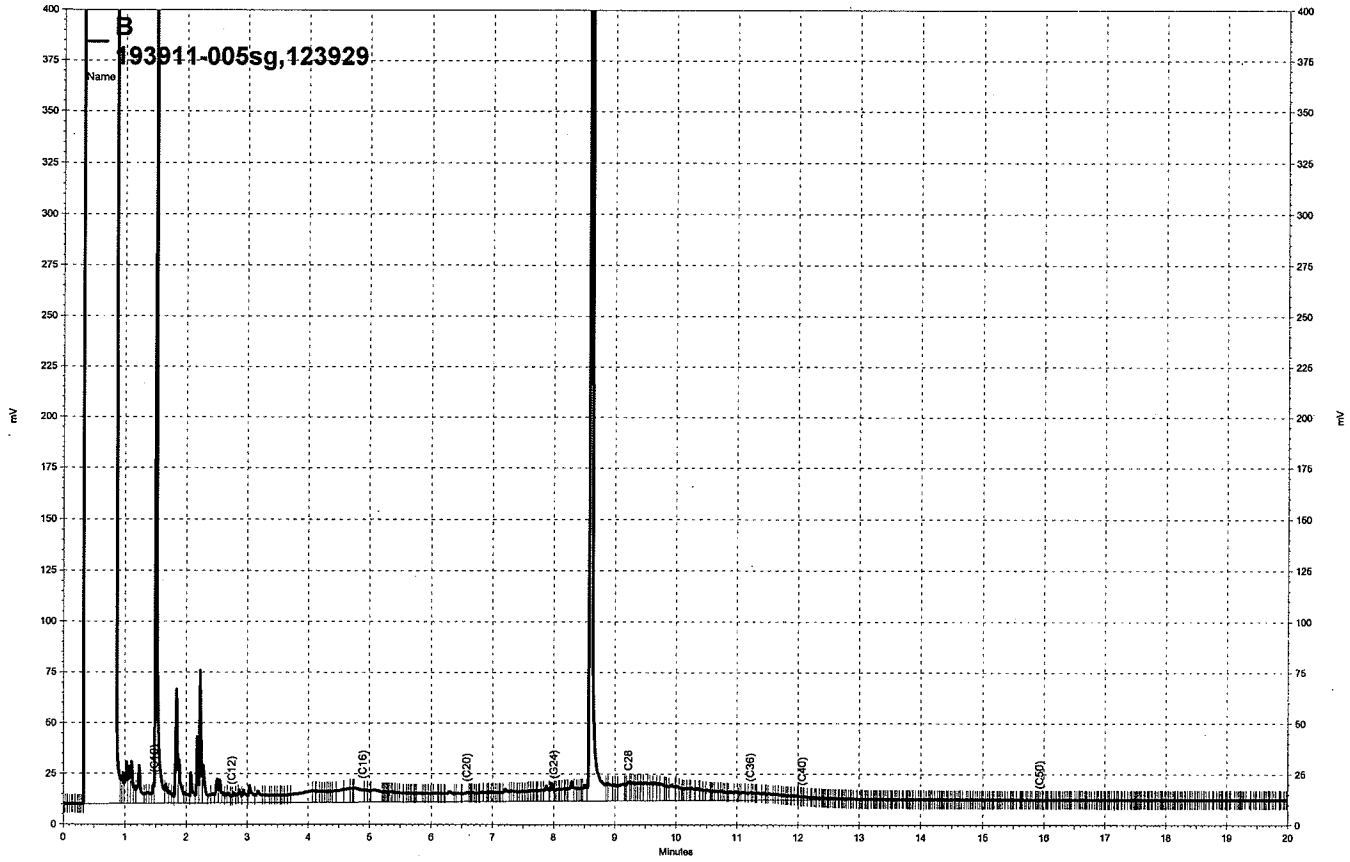
Surrogate	%REC	Limits
Hexacosane	89	61-134

Type: BLANK
Lab ID: QC382679
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	88	61-134

H= Heavier 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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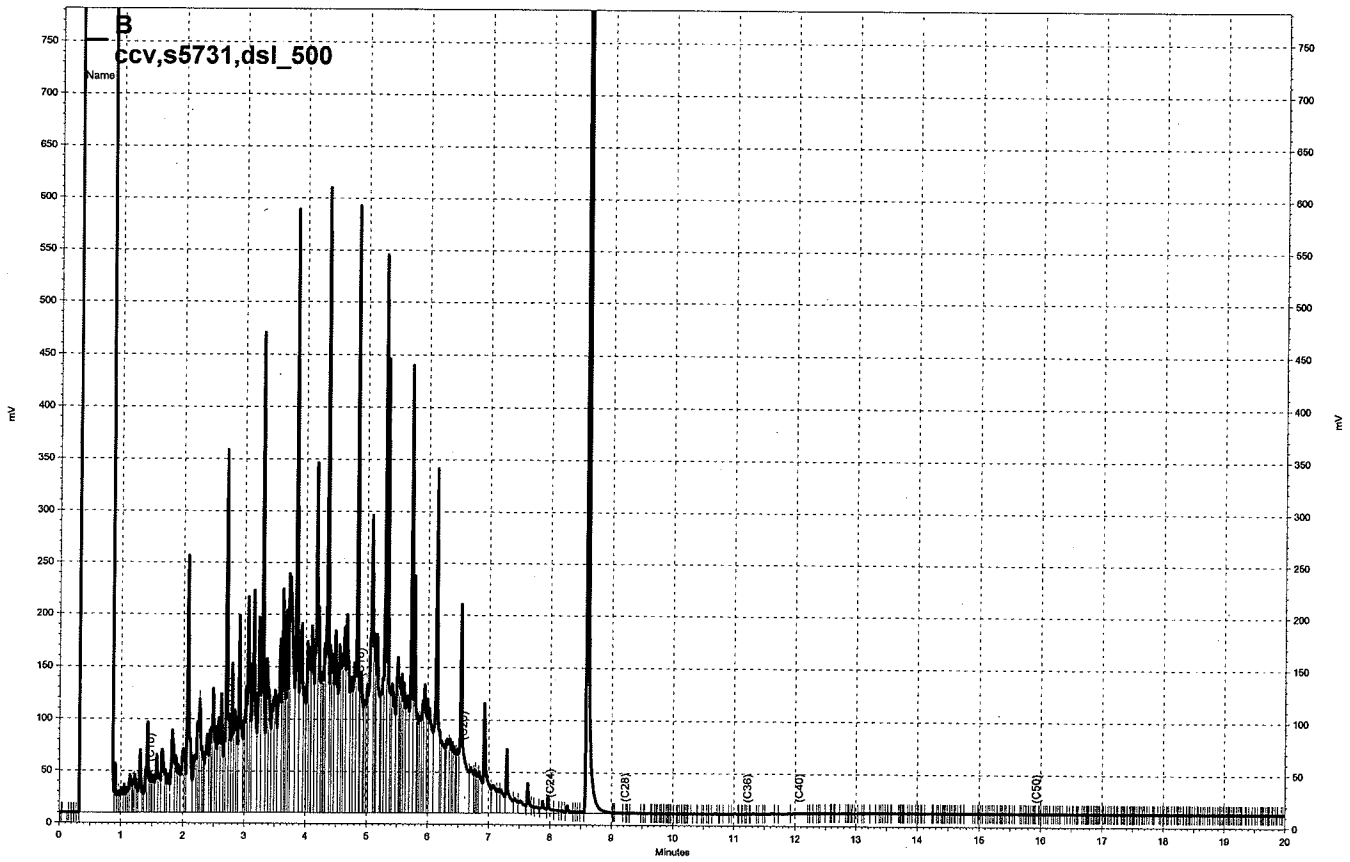

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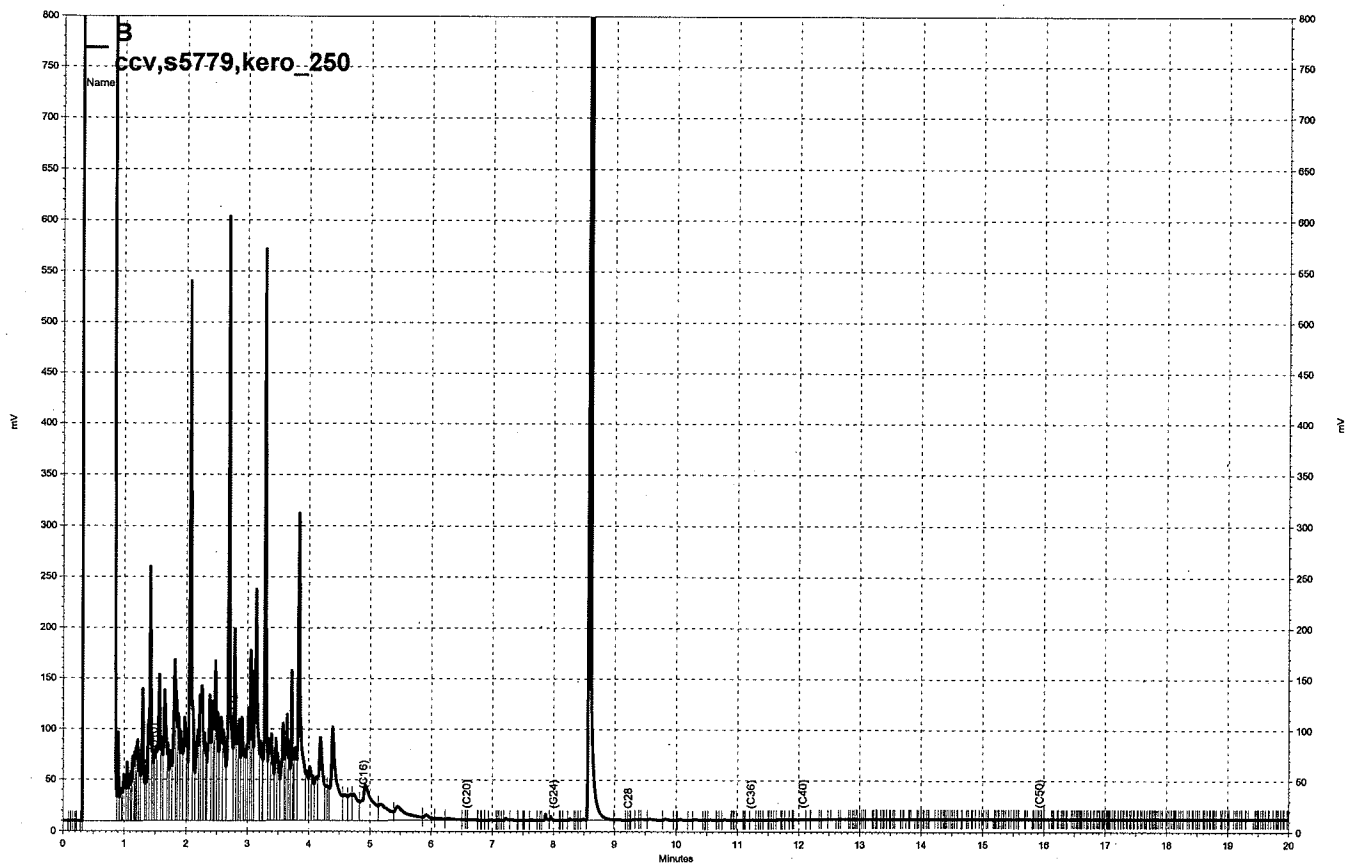

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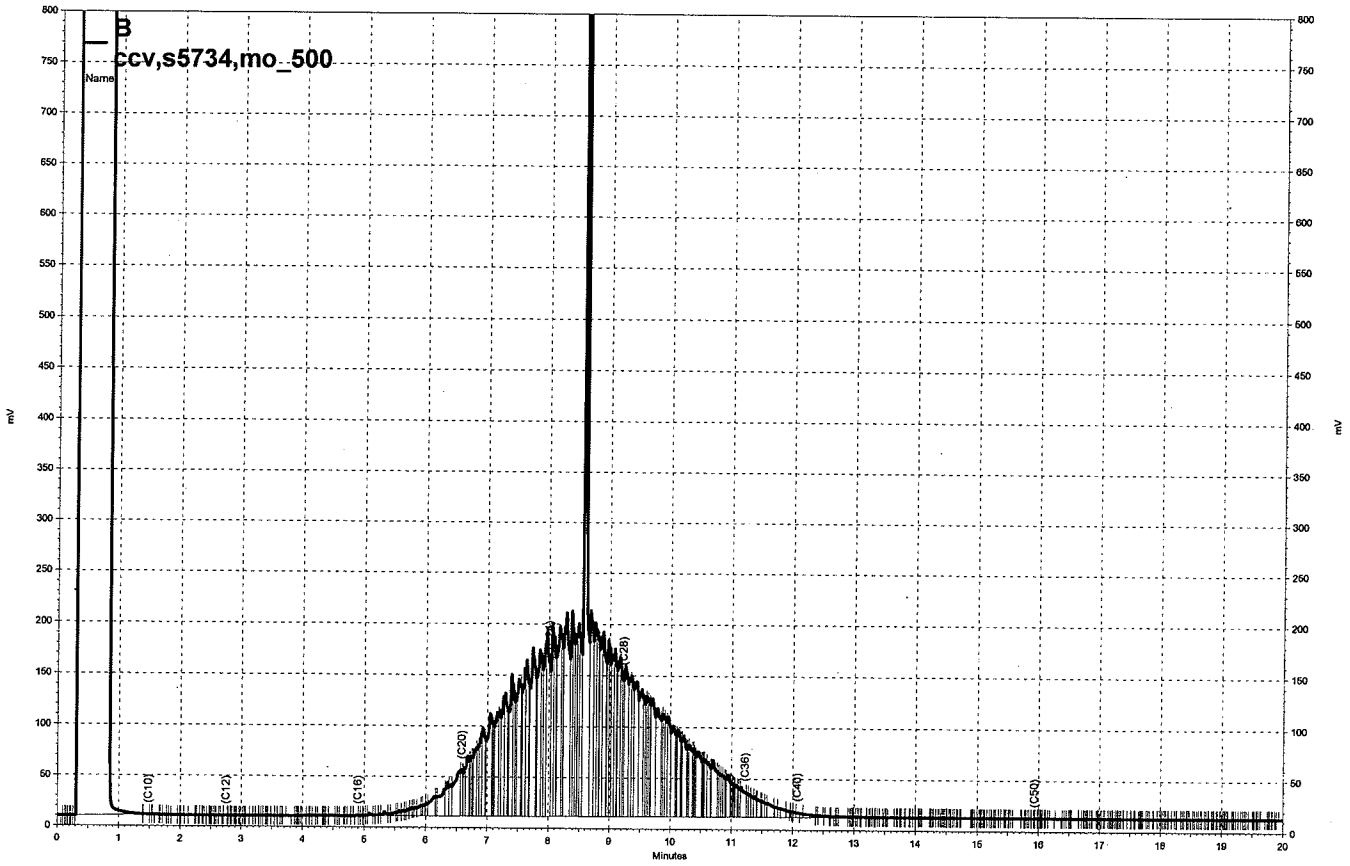

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Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123929
Units:	ug/L	Prepared:	04/06/07
Diln Fac:	1.000	Analyzed:	04/08/07

Type: BS
Lab ID: QC382680
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,623	105	58-130

Surrogate	%REC	Limits
Hexacosane	97	61-134

Type: BSD
Lab ID: QC382681
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,447	98	58-130	7	27

Surrogate	%REC	Limits
Hexacosane	92	61-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/03/07
Units:	ug/L	Received:	04/04/07
Diln Fac:	1.000	Analyzed:	04/05/07
Batch#:	123851		

Field ID: MW-17 Lab ID: 193911-001
Type: SAMPLE

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	98	80-123
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	93	80-122

Field ID: MW-8 Lab ID: 193911-002
Type: SAMPLE

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	100	80-123
1,2-Dichloroethane-d4	102	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-122

Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/03/07
Units:	ug/L	Received:	04/04/07
Diln Fac:	1.000	Analyzed:	04/05/07
Batch#:	123851		

Field ID: MW-9 Lab ID: 193911-003
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	240 Z	50
MTBE	ND	0.50
Benzene	27	0.50
Toluene	4.2	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	4.7	0.50
o-Xylene	0.62	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	105	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-122

Field ID: MW-15 Lab ID: 193911-004
Type: SAMPLE

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	0.88	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	104	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-122

Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/03/07
Units:	ug/L	Received:	04/04/07
Diln Fac:	1.000	Analyzed:	04/05/07
Batch#:	123851		

Field ID: MW-9-DUP
Type: SAMPLE
Lab ID: 193911-005

Analyte	Result	RL
Gasoline C7-C12	260 Z	50
MTBE	ND	0.50
Benzene	28	0.50
Toluene	4.5	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	5.2	0.50
o-Xylene	0.67	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	92	80-122

Field ID: MW-17-FB
Type: SAMPLE
Lab ID: 193911-006

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	0.54	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	104	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	93	80-122

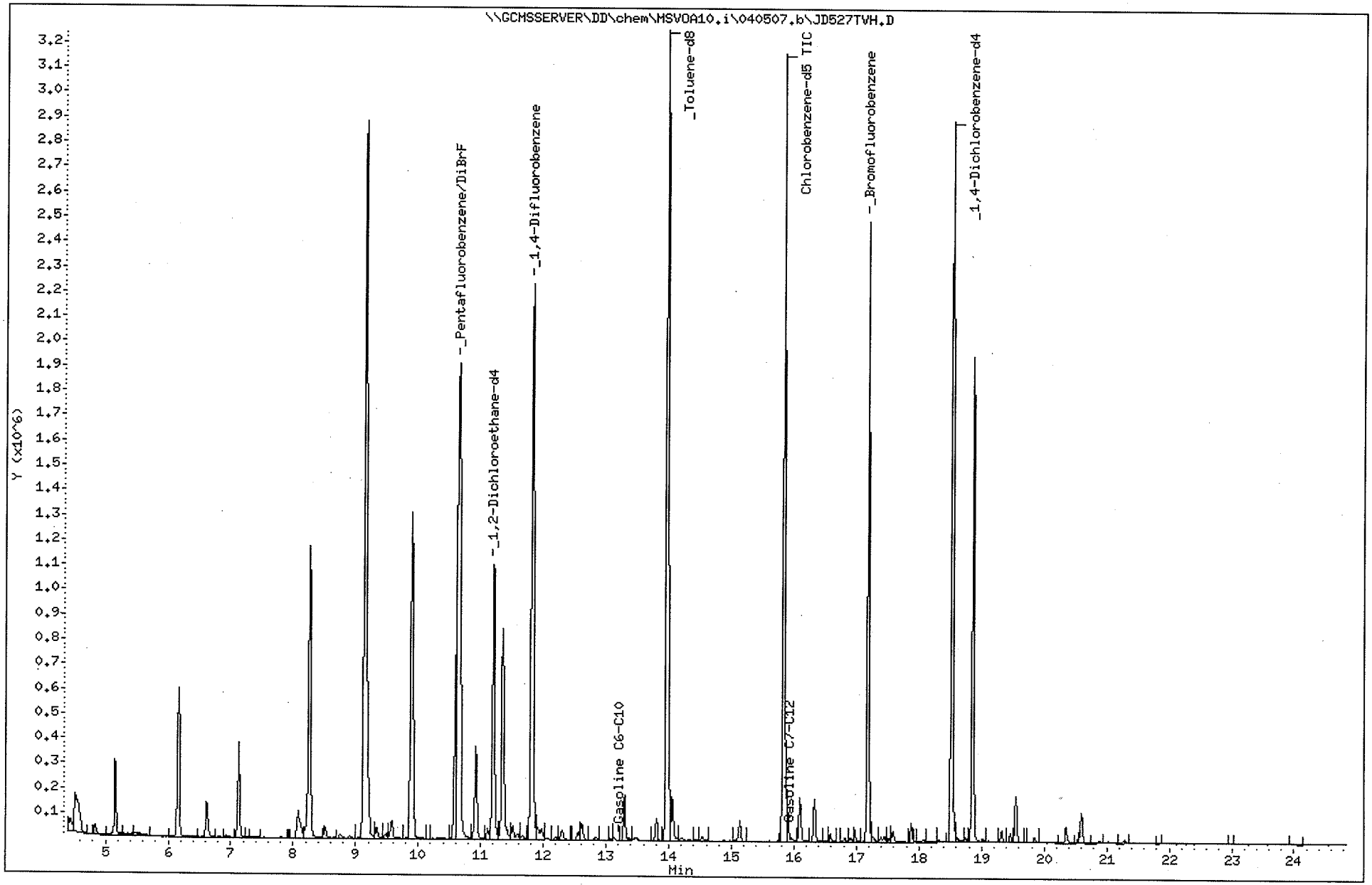
Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\040507.b\JD527TVH.D
Date : 05-APR-2007 21:47
Client ID: DYNA P&T
Sample Info: S,193911-005

Instrument: MSVOA10.i

Operator: VOC
Column diameter: 2.00

Column phase:



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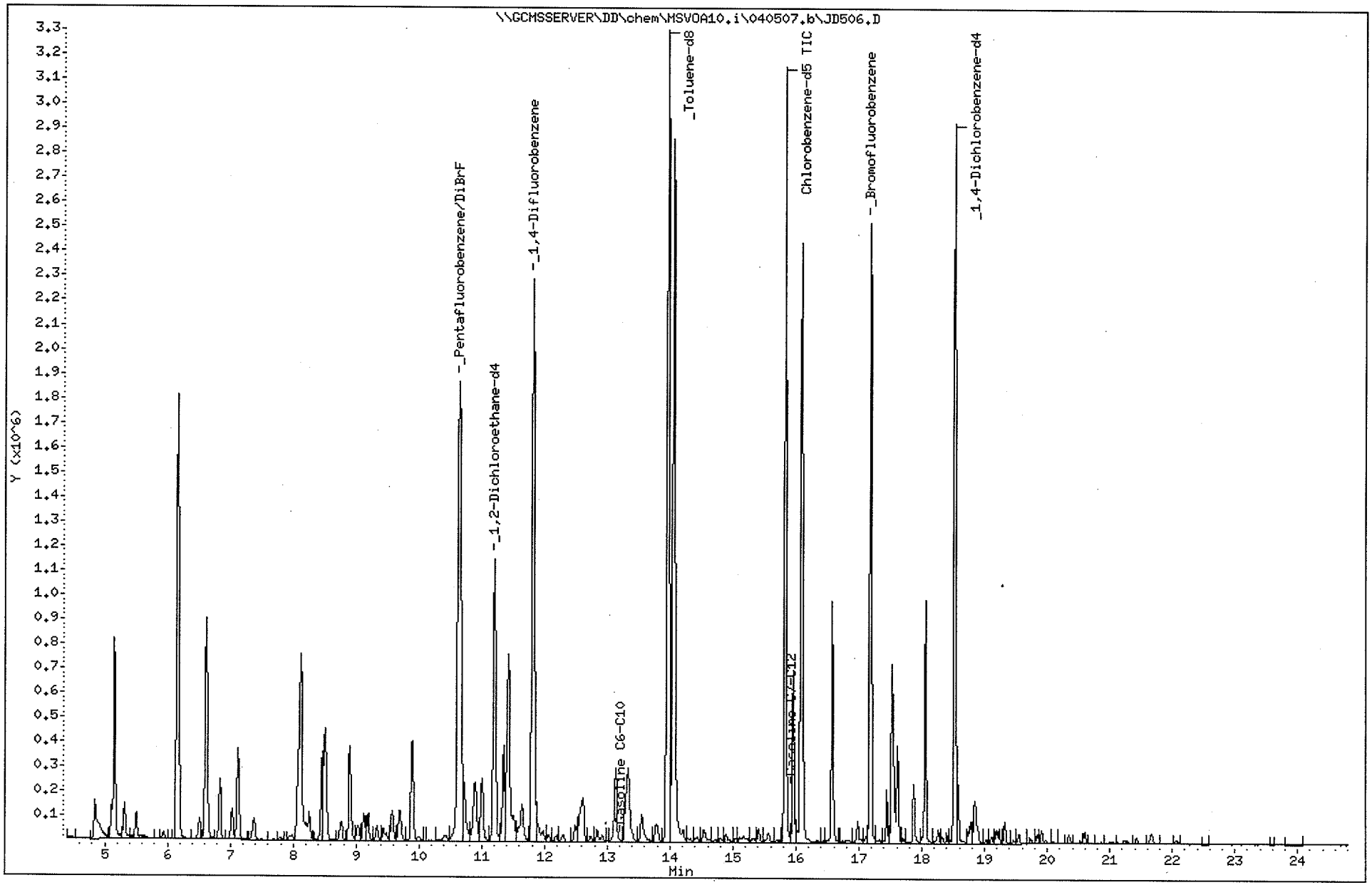
Date : 05-APR-2007 10:28
Client ID:
Sample Info: CCV,S5628,0.01/100

Instrument: MSVOA10.i

Operator: VOA
Column diameter: 2.00

Column phase:



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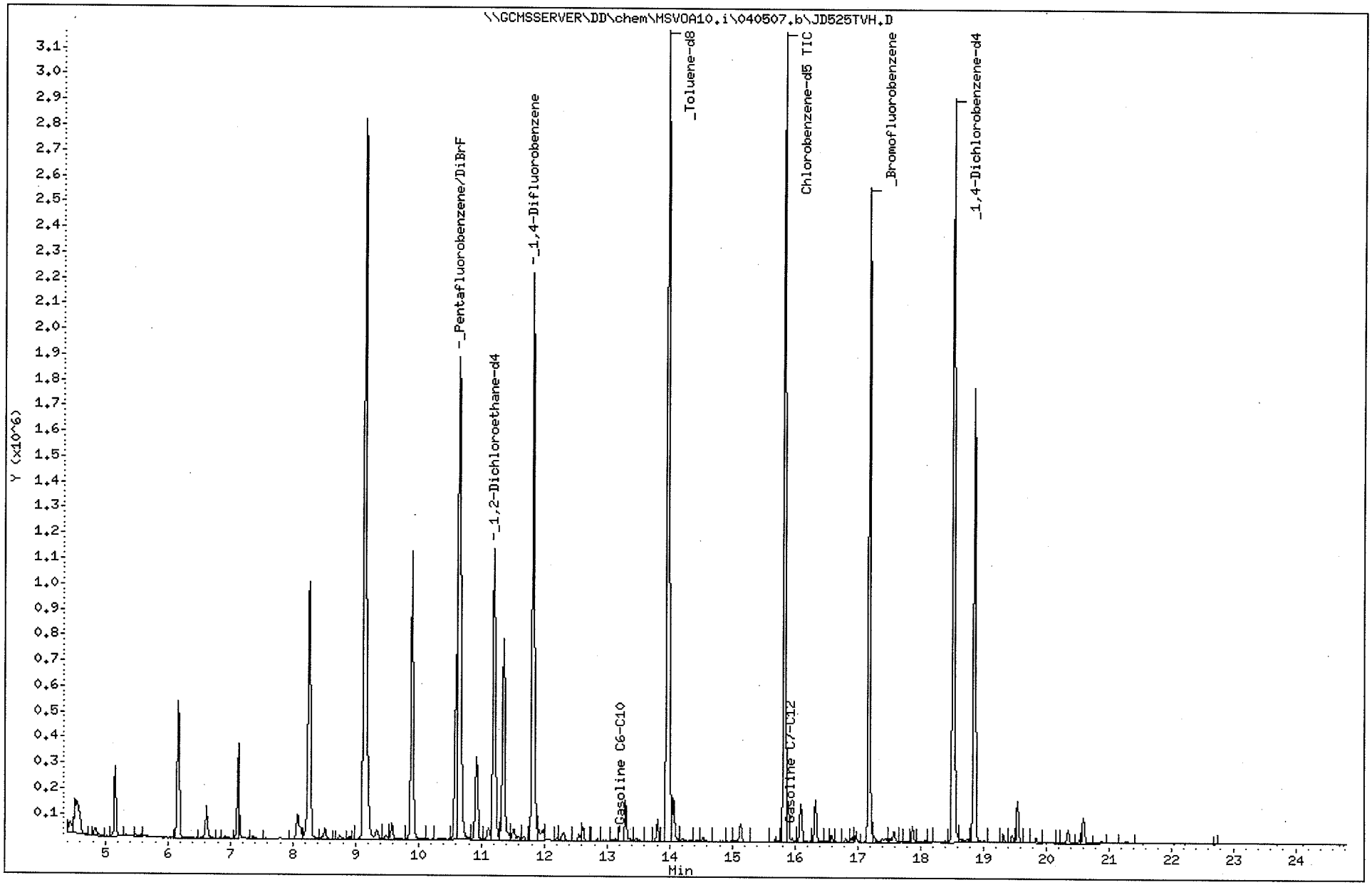
Date : 05-APR-2007 20:42
Client ID: DYNA P&T
Sample Info: S,193911-003

Instrument: MSVOA10.i

Operator: VOC
Column diameter: 2.00

Column phase:



Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/03/07
Units:	ug/L	Received:	04/04/07
Diln Fac:	1.000	Analyzed:	04/05/07
Batch#:	123851		

Type: BLANK Lab ID: QC382365

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	80-123
1,2-Dichloroethane-d4	101	79-134
Toluene-d8	103	80-120
Bromofluorobenzene	95	80-122

Z= Sample exhibits unknown single peak or peaks
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123851
Units:	ug/L	Analyzed:	04/05/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382366

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.20	93	71-120
Benzene	25.00	26.74	107	80-120
Toluene	25.00	26.12	104	80-120
Ethylbenzene	25.00	26.17	105	80-124
m,p-Xylenes	50.00	53.49	107	80-127
o-Xylene	25.00	26.38	106	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-122

Type: BSD Lab ID: QC382367

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.19	93	71-120	0	20
Benzene	25.00	25.31	101	80-120	5	20
Toluene	25.00	25.35	101	80-120	3	20
Ethylbenzene	25.00	25.67	103	80-124	2	20
m,p-Xylenes	50.00	52.57	105	80-127	2	20
o-Xylene	25.00	26.38	106	80-124	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	105	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123851
Units:	ug/L	Analyzed:	04/05/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382376

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	938.6	94	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	104	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-122

Type: BSD Lab ID: QC382377

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	910.7	91	70-130	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-123
1,2-Dichloroethane-d4	99	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Field ID:	TB-0403-07	Batch#:	123851
Lab ID:	193911-007	Sampled:	04/03/07
Matrix:	Water	Received:	04/04/07
Units:	ug/L	Analyzed:	04/05/07
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	107	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	97	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC382365	Batch#:	123851
Matrix:	Water	Analyzed:	04/05/07
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	101	79-134
Toluene-d8	103	80-120
Bromofluorobenzene	95	80-122

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	193911	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123851
Units:	ug/L	Analyzed:	04/05/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382366

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.20	93	71-120
Benzene	25.00	26.74	107	80-120
Toluene	25.00	26.12	104	80-120
Ethylbenzene	25.00	26.17	105	80-124
m,p-Xylenes	50.00	53.49	107	80-127
o-Xylene	25.00	26.38	106	80-124

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	102	80-120
Bromofluorobenzene	94	80-122

Type: BSD Lab ID: QC382367

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.19	93	71-120	0	20
Benzene	25.00	25.31	101	80-120	5	20
Toluene	25.00	25.35	101	80-120	3	20
Ethylbenzene	25.00	25.67	103	80-124	2	20
m,p-Xylenes	50.00	52.57	105	80-127	2	20
o-Xylene	25.00	26.38	106	80-124	0	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

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

Laboratory Job Number 193951

LFR Levine Fricke 1900 Powell Street Emeryville, CA 94608	Project : 001-09225-23 Location : MSC Oakland Level : II

Sample ID	Lab ID
MW-14	193951-001
MW-13	193951-002
MW-10	193951-003
MW-6	193951-004
RW-A2	193951-005
RW-B1	193951-006
RW-B2	193951-007
RW-B3	193951-008
RW-B4	193951-009
RW-C5	193951-010
MW-14-DUP	193951-011
MW-6-FB	193951-012
TB-040407	193951-013
MW-16	193951-014

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.

Signature: _____ Date: 5-17-07
Project Manager

Signature: _____ Date: 5.17.07
Operations Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193951**
Client:	**LFR Levine Fricke**
Project:	**001-09225-23**
Location:	**MSC Oakland**
Request Date:	**04/05/07**
Samples Received:	**04/05/07**

This hardcopy data package contains sample and QC results for twelve water samples, requested for the above referenced project on 04/05/07. The samples were received cold and intact. All data were e-mailed to Erica Kalve on 04/12/07.

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

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

193951

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

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

PROJECT NO.: 001-09225-23
SECTION NO.:
DATE: 4/5/07
SAMPLER'S INITIALS: JMG
SERIAL NO.: № 203879
PROJECT NAME: City of Oakland Municipal Service Center
SAMPLER (Signature): [signature]

	SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	Soil	Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (~~EPA 8015M~~) 8260	BTEX (~~EPA 8021/602~~) 8260	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	MTBE	TPHk	Silica Gel		Standard	RUSH:	HOLD	REMARKS
-1	[redacted]	4/4/07	1530		4		X	X	X	X	X			X	X			X			
-2	[redacted]		1600		4		X											X			
-3	[redacted]		1635		4		X											X			
-4	[redacted]		1405		4		X											X			
-5	RW-A2		1355		4		X											X			
-6	RW-B1		1120		4		X											X			
-7	[redacted]		1115		4		X											X			
-8	RW-B3		1015		4		X											X			
-9	RW-B4		1010		4		X											X			
-10	RW-C5		1735		4		X											X			
-11	MW-14-dup		1535		4		X											X			
-12	MW-6-FB		1200		4		X													X	
-13	TB-040407	↓			1		X													X	
-14	MW-16	↓	1502		3		X	↓	↓	↓	↓			↓	↓	↓					

REMARKS

*VOCs: ☐ 8260 List ☐ 8240 List ☐ 8010 List ☐ 624 List

**Metals: ☐ CAM17 ☐ RCRA ☐ LUFT

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

ANALYTICAL LABORATORY:

METHOD OF SHIPMENT: Hand Deliver
LAB REPORT NO.:
FAX COC CONFIRMATION TO: Erica Kalve
FAX RESULTS TO: [redacted] "
SEND HARDCOPY TO: " "
SEND EDD TO: EMV.LABEDDS.COM

	1	2	3
RELINQUISHED BY:	[signature] 4/5/07		
(SIGNATURE) (DATE)	James Gonzalez 0849		
(PRINTED NAME) (TIME)	[redacted]		
(COMPANY)			
RECEIVED BY: / **RECEIVED BY (LABORATORY):**	Robert Bradley [signature] 4-5-07		
(SIGNATURE) (DATE)	[signature] 0848		
(PRINTED NAME) (TIME)			
(COMPANY)			

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

Samples Cold & Intact

CHAIN of CUSTODY - ANALYSES FORM.CDR 5/2003

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#: 193951 Date Received: 04-05-2007 Number of Coolers: 1
Client: LFR Project: MSC Oakland

A. Preliminary Examination Phase
Date Opened: 04-05-2007 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: N/A
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: No Temp Blank Samples Cold

B. Login Phase
Date Logged In: 04-05-2007 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: VOA's in 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:
7.) Sample -014 did not have 1C Amber for TEHM ~~and~~ & analyses marked on COC

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07
Diln Fac:	1.000		

Field ID:	MW-14	Prepared:	04/06/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-001	Cleanup Method:	EPA 3630C
Batch#:	123929		

Analyte	Result	RL
Kerosene C10-C16	50 H Y	50
Diesel C10-C24	100 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	61-134

Field ID:	MW-13	Prepared:	04/06/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-002	Cleanup Method:	EPA 3630C
Batch#:	123929		

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	58 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	87	61-134

Field ID:	MW-10	Prepared:	04/06/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-003	Cleanup Method:	EPA 3630C
Batch#:	123929		

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

Surrogate	%REC	Limits
Hexacosane	91	61-134

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07
Diln Fac:	1.000		

Field ID:	MW-6	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-004	Cleanup Method:	EPA 3630C
Batch#:	123940		

Analyte	Result	RL
Kerosene C10-C16	3,000 H	50
Diesel C10-C24	3,300	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	110	61-134

Field ID:	RW-A2	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-005	Cleanup Method:	EPA 3630C
Batch#:	123940		

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	200 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	61-134

Field ID:	RW-B1	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-006	Cleanup Method:	EPA 3630C
Batch#:	123940		

Analyte	Result	RL
Kerosene C10-C16	100 H	50
Diesel C10-C24	130 L	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	61-134

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07
Diln Fac:	1.000		

Field ID:	RW-B2	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-007	Cleanup Method:	EPA 3630C
Batch#:	123940		

Analyte	Result	RL
Kerosene C10-C16	500 L	50
Diesel C10-C24	500 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	61-134

Field ID:	RW-B3	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-008	Cleanup Method:	EPA 3630C
Batch#:	123940		

Analyte	Result	RL
Kerosene C10-C16	4,000 L	50
Diesel C10-C24	3,600 L Y	50
Motor Oil C24-C36	880	300

Surrogate	%REC	Limits
Hexacosane	114	61-134

Field ID:	RW-B4	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-009	Cleanup Method:	EPA 3630C
Batch#:	123940		

Analyte	Result	RL
Kerosene C10-C16	4,000 L	50
Diesel C10-C24	3,500 Y	50
Motor Oil C24-C36	360	300

Surrogate	%REC	Limits
Hexacosane	110	61-134

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07
Diln Fac:	1.000		

Field ID:	RW-C5	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/09/07
Lab ID:	193951-010	Cleanup Method:	EPA 3630C
Batch#:	123940		

Analyte	Result	RL
Kerosene C10-C16	4,100 L	50
Diesel C10-C24	3,800 Y	50
Motor Oil C24-C36	310	300

Surrogate	%REC	Limits
Hexacosane	108	61-134

Field ID:	MW-14-DUP	Prepared:	04/08/07
Type:	SAMPLE	Analyzed:	04/10/07
Lab ID:	193951-011	Cleanup Method:	EPA 3630C
Batch#:	123940		

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

Surrogate	%REC	Limits
Hexacosane	113	61-134

Type:	BLANK	Prepared:	04/06/07
Lab ID:	QC382679	Analyzed:	04/08/07
Batch#:	123929	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	88	61-134

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07
Diln Fac:	1.000		

Type:	BLANK	Prepared:	04/08/07
Lab ID:	QC382714	Analyzed:	04/09/07
Batch#:	123940	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	119	61-134

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

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	123929
Units:	ug/L	Prepared:	04/06/07
Diln Fac:	1.000	Analyzed:	04/08/07

Type: BS
Lab ID: QC382680
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,623	105	58-130

Surrogate	%REC	Limits
Hexacosane	97	61-134

Type: BSD
Lab ID: QC382681
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,447	98	58-130	7	27

Surrogate	%REC	Limits
Hexacosane	92	61-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC382715	Batch#:	123940
Matrix:	Water	Prepared:	04/08/07
Units:	ug/L	Analyzed:	04/09/07

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,681	107	58-130

Surrogate	%REC	Limits
Hexacosane	98	61-134

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	123940
MSS Lab ID:	193890-002	Sampled:	04/03/07
Matrix:	Water	Received:	04/03/07
Units:	ug/L	Prepared:	04/08/07
Diln Fac:	1.000	Analyzed:	04/09/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC382716

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<9.451	2,500	2,866	115	57-134

Surrogate	%REC	Limits
Hexacosane	104	61-134

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC382717

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,693	108	57-134	6	32

Surrogate	%REC	Limits
Hexacosane	96	61-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	123940
MSS Lab ID:	193890-003	Sampled:	04/03/07
Matrix:	Water	Received:	04/03/07
Units:	ug/L	Prepared:	04/08/07
Diln Fac:	1.000	Analyzed:	04/09/07

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC382718

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<9.451	2,500	2,626	105	57-134

Surrogate	%REC	Limits
Hexacosane	99	61-134

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC382719

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,947	118	57-134	12	32

Surrogate	%REC	Limits
Hexacosane	109	61-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Field ID:	MW-14	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123902
Lab ID:	193951-001	Analyzed:	04/06/07

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	99	80-123
1,2-Dichloroethane-d4	102	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-122

Field ID:	MW-13	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123902
Lab ID:	193951-002	Analyzed:	04/06/07

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	98	80-123
1,2-Dichloroethane-d4	104	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	92	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Field ID:	MW-10	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123902
Lab ID:	193951-003	Analyzed:	04/06/07

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	101	80-123
1,2-Dichloroethane-d4	103	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	92	80-122

Field ID:	MW-6	Diln Fac:	8.333
Type:	SAMPLE	Batch#:	123902
Lab ID:	193951-004	Analyzed:	04/06/07

Analyte	Result	RL
Gasoline C7-C12	1,400 H Y	420
MTBE	4.5	4.2
Benzene	520	4.2
Toluene	ND	4.2
Ethylbenzene	ND	4.2
m,p-Xylenes	ND	4.2
o-Xylene	ND	4.2

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	104	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	91	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Field ID:	RW-A2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123902
Lab ID:	193951-005	Analyzed:	04/06/07

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	97	80-123
1,2-Dichloroethane-d4	101	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-122

Field ID:	RW-B1	Lab ID:	193951-006
Type:	SAMPLE		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	220	130	2.500	123902	04/06/07
MTBE	6.3	1.3	2.500	123902	04/06/07
Benzene	410	3.6	7.143	123947	04/09/07
Toluene	23	1.3	2.500	123902	04/06/07
Ethylbenzene	9.4	1.3	2.500	123902	04/06/07
m,p-Xylenes	8.2	1.3	2.500	123902	04/06/07
o-Xylene	7.8	1.3	2.500	123902	04/06/07

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	97	80-123	2.500	123902	04/06/07
1,2-Dichloroethane-d4	103	79-134	2.500	123902	04/06/07
Toluene-d8	100	80-120	2.500	123902	04/06/07
Bromofluorobenzene	93	80-122	2.500	123902	04/06/07

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Field ID: RW-B2 Lab ID: 193951-007
Type: SAMPLE

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	11,000	1,000	20.00	123902	04/06/07
MTBE	ND	10	20.00	123902	04/06/07
Benzene	3,400	36	71.43	123947	04/09/07
Toluene	2,700	36	71.43	123947	04/09/07
Ethylbenzene	190	10	20.00	123902	04/06/07
m,p-Xylenes	620	10	20.00	123902	04/06/07
o-Xylene	490	10	20.00	123902	04/06/07

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	98	80-123	20.00	123902	04/06/07
1,2-Dichloroethane-d4	104	79-134	20.00	123902	04/06/07
Toluene-d8	101	80-120	20.00	123902	04/06/07
Bromofluorobenzene	93	80-122	20.00	123902	04/06/07

Field ID: RW-B3 Diln Fac: 62.50
Type: SAMPLE Batch#: 123902
Lab ID: 193951-008 Analyzed: 04/06/07

Analyte	Result	RL
Gasoline C7-C12	7,900	3,100
MTBE	ND	31
Benzene	4,300	31
Toluene	130	31
Ethylbenzene	520	31
m,p-Xylenes	310	31
o-Xylene	47	31

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Field ID: RW-B4 Lab ID: 193951-009
Type: SAMPLE

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	16,000	830	16.67	123902	04/06/07
MTBE	ND	8.3	16.67	123902	04/06/07
Benzene	3,200	36	71.43	123947	04/09/07
Toluene	150	8.3	16.67	123902	04/06/07
Ethylbenzene	460	8.3	16.67	123902	04/06/07
m,p-Xylenes	1,300	8.3	16.67	123902	04/06/07
o-Xylene	130	8.3	16.67	123902	04/06/07

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	99	80-123	16.67	123902	04/06/07
1,2-Dichloroethane-d4	105	79-134	16.67	123902	04/06/07
Toluene-d8	100	80-120	16.67	123902	04/06/07
Bromofluorobenzene	94	80-122	16.67	123902	04/06/07

Field ID: RW-C5 Lab ID: 193951-010
Type: SAMPLE Diln Fac: 50.00

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	12,000	2,500	123902	04/06/07
MTBE	ND	25	123947	04/09/07
Benzene	3,400	25	123947	04/09/07
Toluene	170	25	123947	04/09/07
Ethylbenzene	520	25	123947	04/09/07
m,p-Xylenes	1,100	25	123947	04/09/07
o-Xylene	200	25	123947	04/09/07

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	99	80-123	123947	04/09/07
1,2-Dichloroethane-d4	108	79-134	123947	04/09/07
Toluene-d8	98	80-120	123947	04/09/07
Bromofluorobenzene	100	80-122	123947	04/09/07

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Field ID:	MW-14-DUP	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123902
Lab ID:	193951-011	Analyzed:	04/06/07

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	98	80-123
1,2-Dichloroethane-d4	103	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	90	80-122

Field ID:	MW-16	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123953
Lab ID:	193951-014	Analyzed:	04/09/07

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	101	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Type:	BLANK	Batch#:	123902
Lab ID:	QC382565	Analyzed:	04/06/07
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	97	80-123
1,2-Dichloroethane-d4	103	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-122

Type:	BLANK	Batch#:	123947
Lab ID:	QC382737	Analyzed:	04/09/07
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	NA	
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	97	80-123
1,2-Dichloroethane-d4	102	79-134
Toluene-d8	95	80-120
Bromofluorobenzene	96	80-122

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/04/07
Units:	ug/L	Received:	04/05/07

Type:	BLANK	Batch#:	123953
Lab ID:	QC382755	Analyzed:	04/09/07
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	98	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	95	80-122

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

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123902
Units:	ug/L	Analyzed:	04/06/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382566

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	24.60	98	71-120
Benzene	25.00	26.59	106	80-120
Toluene	25.00	26.21	105	80-120
Ethylbenzene	25.00	27.21	109	80-124
m,p-Xylenes	50.00	55.14	110	80-127
o-Xylene	25.00	27.29	109	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	106	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-122

Type: BSD Lab ID: QC382567

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	24.27	97	71-120	1	20
Benzene	25.00	25.57	102	80-120	4	20
Toluene	25.00	26.00	104	80-120	1	20
Ethylbenzene	25.00	27.29	109	80-124	0	20
m,p-Xylenes	50.00	56.09	112	80-127	2	20
o-Xylene	25.00	27.47	110	80-124	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	102	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123902
Units:	ug/L	Analyzed:	04/06/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382568

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	966.9	97	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	105	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	94	80-122

Type: BSD Lab ID: QC382569

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	931.6	93	70-130	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	104	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123947
Units:	ug/L	Analyzed:	04/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382738

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.17	93	71-120
Benzene	25.00	24.40	98	80-120
Toluene	25.00	25.87	103	80-120
Ethylbenzene	25.00	27.27	109	80-124
m,p-Xylenes	50.00	53.58	107	80-127
o-Xylene	25.00	26.80	107	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-123
1,2-Dichloroethane-d4	101	79-134
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-122

Type: BSD Lab ID: QC382739

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.60	94	71-120	2	20
Benzene	25.00	24.11	96	80-120	1	20
Toluene	25.00	25.34	101	80-120	2	20
Ethylbenzene	25.00	27.29	109	80-124	0	20
m,p-Xylenes	50.00	53.99	108	80-127	1	20
o-Xylene	25.00	27.32	109	80-124	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	98	79-134
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123953
Units:	ug/L	Analyzed:	04/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382756

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.84	95	71-120
Benzene	25.00	25.48	102	80-120
Toluene	25.00	25.58	102	80-120
Ethylbenzene	25.00	26.66	107	80-124
m,p-Xylenes	50.00	54.48	109	80-127
o-Xylene	25.00	27.04	108	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-122

Type: BSD Lab ID: QC382757

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.74	95	71-120	0	20
Benzene	25.00	25.11	100	80-120	1	20
Toluene	25.00	25.13	101	80-120	2	20
Ethylbenzene	25.00	25.85	103	80-124	3	20
m,p-Xylenes	50.00	52.98	106	80-127	3	20
o-Xylene	25.00	25.78	103	80-124	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193951	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123953
Units:	ug/L	Analyzed:	04/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382758

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	956.3	96	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-122

Type: BSD Lab ID: QC382759

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	919.9	92	70-130	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	92	80-122

RPD= Relative Percent Difference

193951

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

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

PROJECT NO.: 001-09225-23
SECTION NO.:
DATE: 4/5/07
SAMPLER'S INITIALS: JAG
SERIAL NO.: № 203879
PROJECT NAME: City of Oakland Municipal Service Center
SAMPLER (Signature): [signature]

	SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	Soil	Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602) 8260	VOCs (EPA 8260/624) 8260	Metals (EPA 6010/7000)	MTBE	TPHk	Silica Gel	Standard	RUSH:	HOLD	REMARKS
-1	[redacted]	4/4/07	1530		4		X	X	X	X	X			X	X	↓	X			
-2	[redacted]	↓	1600		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-3	[redacted]	↓	1635		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-4	[redacted]	↓	1405		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-5	RW-A2	↓	1355		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-6	RW-B1	↓	1120		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-7	[redacted]	↓	1115		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-8	RW-B3	↓	1015		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-9	RW-B4	↓	1010		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-10	RW-C5	↓	1735		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-11	MW-14-dup	↓	1535		4		X	↓	↓	↓	↓			↓	↓	↓	X			
-12	MW-6-FB	↓	1200		4		X	↓	↓	↓	↓			↓	↓	↓			X	
-13	TB-040407	↓			1		X	↓	↓	↓	↓			↓	↓	↓			X	
-14	MW-16	↓	1502		3		X	↓	↓	↓	↓			↓	↓	↓				

TAT: Standard / RUSH / HOLD

REMARKS:
*VOCs: ☐ 8260 List ☐ 8240 List ☐ 8010 List ☐ 624 List
**Metals: ☐ CAM17 ☐ RCRA ☐ LUFT

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

METHOD OF SHIPMENT: Hand Deliver
LAB REPORT NO.:
FAX COC CONFIRMATION TO: Erica Kalve
FAX RESULTS TO: [redacted] "
SEND HARDCOPY TO: " "
SEND EDD TO: EMV.LABEDDS.COM

ANALYTICAL LABORATORY:

	1	2	3
RELINQUISHED BY: (SIGNATURE) / (DATE)	[signature] 4/5/07		
(PRINTED NAME) / (TIME)	James Gonzalez 0843		
(COMPANY)	LFR		
RECEIVED BY: (SIGNATURE) / (DATE)	Robert Butler 4-5-07		
(PRINTED NAME) / (TIME)	[signature] 8:48		
(COMPANY)			

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

Samples Cold & Intact

CHAIN of CUSTODY - ANALYSES FORM.CDR 5/2003

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#: 193951 Date Received: 04-05-2007 Number of Coolers: 1
Client: LFR Project: MSC Oakland

A. Preliminary Examination Phase
Date Opened: 04-05-2007 By (print): Charles Kennedy (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ... YES (NO)
   If YES, enter carrier name and airbill number: N/A
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: No Temp Blank Samples Cold

B. Login Phase
Date Logged In: 04-05-2007 By (print): Charles Kennedy (sign) [signature]

1. Describe type of packing in cooler: VOA's in 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:
7) Sample -014 did not have 1C Amber for TEHM ~~and~~ analyses marked on COC

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

Laboratory Job Number 193963

LFR Levine Fricke	Project : 001-09225-23
1900 Powell Street	Location : MSC Oakland
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
RW-C1	193963-001
MW-11	193963-002
MW-5	193963-003
MW-7	193963-004
MW-1	193963-005
MW-12	193963-006
MW-2	193963-007
RW-C3	193963-008
MW-11-FB	193963-009
TB-040507	193963-010

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.

Signature: _____ Project Manager Date: 5-17-07

Signature: _____ Operations Manager Date: 5.17.07

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**193963**
Client:	**LFR Levine Fricke**
Project:	**001-09225-23**
Location:	**MSC Oakland**
Request Date:	**04/06/07**
Samples Received:	**04/06/07**

This hardcopy data package contains sample and QC results for eight water samples, requested for the above referenced project on 04/06/07. The samples were received on ice and intact. All data were e-mailed to Erica Kalve on 04/12/07.

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

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

193963

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

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

PROJECT NO.:	SECTION NO.:	DATE:	SAMPLER'S INITIALS:	SERIAL NO.:
001-09225-23		4/6/07	JAG	№ 203878

PROJECT NAME: Oakland Municipal Service Center

SAMPLER (Signature): [signature]

	SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	Soil	Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602)	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	MTBE	TAHt	(Si.Ca gel)		Standard	RUSH:	HOLD	REMARKS
-1	RW-C1	4/5/07	1435		4		X	X	X	X	X			X	X			X			
-2	MW-11	↓	1410		4		↓	↓	↓	↓	↓			↓	↓	↓		X			
-3	MW ~~[illegible]~~-5	↓	1340		4		↓	↓	↓	↓	↓			↓	↓	↓		X			
-4	MW-7	↓	1300		4		↓	↓	↓	↓	↓			↓	↓	↓		X			
-5	MW-1	↓	1220		4		↓	↓	↓	↓	↓			↓	↓	↓		X			
-6	MW-12	↓	1115		4		↓	↓	↓	↓	↓			↓	↓	↓		X			
-7	MW-2	↓	1010		4		↓	↓	↓	↓	↓			↓	↓	↓		X			
-8	RW-C3	↓	1205		4		↓	↓	↓	↓	↓			↓	↓	↓		X			
-9	MW-11-FB	↓	1350		4		↓	↓	↓	↓	↓			↓	↓	↓				X	
-10	TB-040507	↓			1		↓	↓	↓	↓	↓			↓	↓	↓				X	

REMARKS:
*VOCs: ☐ 8260 List ☐ 8240 List ☐ 8010 List ☐ 624 List
**Metals: ☐ CAM17 ☐ RCRA ☐ LUFT

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

ANALYTICAL LABORATORY:

METHOD OF SHIPMENT: Hand Deliver
LAB REPORT NO.:
FAX COC CONFIRMATION TO: Erica Kalve
FAX RESULTS TO: " "
SEND HARDCOPY TO: " "
SEND EDD TO: EMV.LABEDDS.COM

RELINQUISHED BY: 1	RELINQUISHED BY: 2	RELINQUISHED BY: 3
(SIGNATURE) [signature] (DATE) 4/6/07	(SIGNATURE) (DATE)	(SIGNATURE) (DATE)
(PRINTED NAME) James Gonzales (TIME) 0956	(PRINTED NAME) (TIME)	(PRINTED NAME) (TIME)
(COMPANY) LFR	(COMPANY)	(COMPANY)

RECEIVED BY: 1	RECEIVED BY: 2	RECEIVED BY (LABORATORY): 3
(SIGNATURE) Anne Kathain (DATE) 4/6/07	(SIGNATURE) (DATE)	(SIGNATURE) (DATE)
(PRINTED NAME) A. Kathain (TIME) 9:56	(PRINTED NAME) (TIME)	(PRINTED NAME) (TIME)
(COMPANY) C&T	(COMPANY)	(COMPANY)

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Samples Cold & Intact

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07
Diln Fac:	1.000	Prepared:	04/10/07
Batch#:	124014	Analyzed:	04/11/07

Field ID: RW-C1 Lab ID: 193963-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	63 H Y	50
Diesel C10-C24	220 H Y	50
Motor Oil C24-C36	1,300	300

Surrogate	%REC	Limits
Hexacosane	103	61-134

Field ID: MW-11 Lab ID: 193963-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	55 Y	50
Diesel C10-C24	66 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	126	61-134

Field ID: MW-5 Lab ID: 193963-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	310 L Y	50
Diesel C10-C24	340 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	119	61-134

Field ID: MW-7 Lab ID: 193963-004
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	104	61-134

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07
Diln Fac:	1.000	Prepared:	04/10/07
Batch#:	124014	Analyzed:	04/11/07

Field ID: MW-1 Lab ID: 193963-005
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	490 L Y	50
Diesel C10-C24	500 L Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	114	61-134

Field ID: MW-12 Lab ID: 193963-006
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	230 H Y	50
Diesel C10-C24	340 H Y	50
Motor Oil C24-C36	360 H L	300

Surrogate	%REC	Limits
Hexacosane	106	61-134

Field ID: MW-2 Lab ID: 193963-007
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	103	61-134

Field ID: RW-C3 Lab ID: 193963-008
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	430 H L Y	50
Diesel C10-C24	540 H L Y	50
Motor Oil C24-C36	360 H L	300

Surrogate	%REC	Limits
Hexacosane	103	61-134

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07
Diln Fac:	1.000	Prepared:	04/10/07
Batch#:	124014	Analyzed:	04/11/07

Type: BLANK
Lab ID: QC383004

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	100	61-134

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

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09225-23	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	124014
Units:	ug/L	Prepared:	04/10/07
Diln Fac:	1.000	Analyzed:	04/11/07

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC383005

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,129	85	58-130

Surrogate	%REC	Limits
Hexacosane	91	61-134

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC383006

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,131	85	58-130	0	27

Surrogate	%REC	Limits
Hexacosane	87	61-134

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07

Field ID:	RW-C1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123953
Lab ID:	193963-001	Analyzed:	04/09/07

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	100	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	93	80-122

Field ID:	MW-11	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123953
Lab ID:	193963-002	Analyzed:	04/09/07

Analyte	Result	RL
Gasoline C7-C12	270 Y	50
MTBE	11	0.50
Benzene	9.6	0.50
Toluene	0.73	0.50
Ethylbenzene	7.3	0.50
m,p-Xylenes	2.4	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	98	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07

Field ID:	MW-5	Diln Fac:	4.000
Type:	SAMPLE	Batch#:	123996
Lab ID:	193963-003	Analyzed:	04/10/07

Analyte	Result	RL
Gasoline C7-C12	3,100 Y	200
MTBE	38	2.0
Benzene	9.3	2.0
Toluene	ND	2.0
Ethylbenzene	230	2.0
m,p-Xylenes	13	2.0
o-Xylene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	100	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	92	80-122

Field ID:	MW-7	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123953
Lab ID:	193963-004	Analyzed:	04/09/07

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	102	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07

Field ID:	MW-1	Diln Fac:	2.500
Type:	SAMPLE	Batch#:	123953
Lab ID:	193963-005	Analyzed:	04/10/07

Analyte	Result	RL
Gasoline C7-C12	1,500 Y	130
MTBE	ND	1.3
Benzene	170	1.3
Toluene	7.2	1.3
Ethylbenzene	3.6	1.3
m,p-Xylenes	4.4	1.3
o-Xylene	1.3	1.3

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	98	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-122

Field ID:	MW-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123953
Lab ID:	193963-006	Analyzed:	04/09/07

Analyte	Result	RL
Gasoline C7-C12	160 Y	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	102	80-123
1,2-Dichloroethane-d4	98	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07

Field ID:	MW-2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123953
Lab ID:	193963-007	Analyzed:	04/09/07

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	1.6	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	102	80-123
1,2-Dichloroethane-d4	99	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-122

Field ID:	RW-C3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	123953
Lab ID:	193963-008	Analyzed:	04/09/07

Analyte	Result	RL
Gasoline C7-C12	520	50
MTBE	ND	0.50
Benzene	13	0.50
Toluene	14	0.50
Ethylbenzene	32	0.50
m,p-Xylenes	34	0.50
o-Xylene	20	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	99	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	93	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	04/05/07
Units:	ug/L	Received:	04/06/07

Type:	BLANK	Batch#:	123953
Lab ID:	QC382755	Analyzed:	04/09/07
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	98	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	95	80-122

Type:	BLANK	Batch#:	123996
Lab ID:	QC382933	Analyzed:	04/10/07
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	99	80-123
1,2-Dichloroethane-d4	100	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-122

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123953
Units:	ug/L	Analyzed:	04/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382756

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.84	95	71-120
Benzene	25.00	25.48	102	80-120
Toluene	25.00	25.58	102	80-120
Ethylbenzene	25.00	26.66	107	80-124
m,p-Xylenes	50.00	54.48	109	80-127
o-Xylene	25.00	27.04	108	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-122

Type: BSD Lab ID: QC382757

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.74	95	71-120	0	20
Benzene	25.00	25.11	100	80-120	1	20
Toluene	25.00	25.13	101	80-120	2	20
Ethylbenzene	25.00	25.85	103	80-124	3	20
m,p-Xylenes	50.00	52.98	106	80-127	3	20
o-Xylene	25.00	25.78	103	80-124	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123953
Units:	ug/L	Analyzed:	04/09/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382758

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	956.3	96	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	96	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	91	80-122

Type: BSD Lab ID: QC382759

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	919.9	92	70-130	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	97	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	92	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123996
Units:	ug/L	Analyzed:	04/10/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382934

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.28	93	71-120
Benzene	25.00	25.66	103	80-120
Toluene	25.00	25.98	104	80-120
Ethylbenzene	25.00	26.73	107	80-124
m,p-Xylenes	50.00	53.94	108	80-127
o-Xylene	25.00	26.83	107	80-124

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	100	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	93	80-122

Type: BSD Lab ID: QC382935

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.64	95	71-120	2	20
Benzene	25.00	24.76	99	80-120	4	20
Toluene	25.00	24.68	99	80-120	5	20
Ethylbenzene	25.00	25.75	103	80-124	4	20
m,p-Xylenes	50.00	53.88	108	80-127	0	20
o-Xylene	25.00	26.33	105	80-124	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	100	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	93	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	193963	Location:	MSC Oakland
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09225-23	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	123996
Units:	ug/L	Analyzed:	04/10/07
Diln Fac:	1.000		

Type: BS Lab ID: QC382936

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	936.6	94	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-123
1,2-Dichloroethane-d4	99	79-134
Toluene-d8	101	80-120
Bromofluorobenzene	92	80-122

Type: BSD Lab ID: QC382937

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	910.7	91	70-130	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	98	79-134
Toluene-d8	100	80-120
Bromofluorobenzene	91	80-122

RPD= Relative Percent Difference

APPENDIX D

Historical Tables

Table D-1
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 D-2
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 D-3
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:

--- = Not measured/analyzed.
* = Note was indicated but not defined in historical data tables.
a = Analyzed for organic lead.
LUFT = Leaking Underground Fuel Tank

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

Table D-4
Summary of Groundwater Analytical Data, Additional Metals
Municipal Service Center, 7101 Edgewater Drive, Oakland, California
Concentrations expressed in milligrams per liter (mg/l)

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.