Groundwater Monitoring Report
Fall 2008 Semiannual Sampling Event
Municipal Service Center
7101 Edgewater Drive
Oakland, California

February 4, 2009
028-10060-00

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

LFR an ARCADIS company

February 4, 2009 028-10060-00

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, Fall 2008 Semiannual Sampling Event, Municipal Service Center, 7101 Edgewater Drive, Oakland, California

Dear Mr. Nair:

LFR Inc. is pleased to present this report summarizing data collected during the Fall 2008 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
Principal Geologist
Operations Manager – Los Altos

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CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by an LFR Inc. California Professional Geologist.*

E+C 8/31/09

2/10/09

Charles H. Pardini
Principal Geologist
California Professional Geologist (6444)

Date

* A professional geologist's certification of conditions comprises a declaration of his or her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations, and ordinances.

1.0 INTRODUCTION

This report presents the results of the Fall 2008 semiannual groundwater monitoring event conducted from November 18 through November 21, 2008 ("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. G08-LFR-01.

This report summarizes the monitoring activities conducted during the current monitoring event as well as the analytical results, distribution of contaminants in groundwater, conclusions, and recommendations. Also discussed are the anticipated semiannual monitoring activities to be performed in March/April 2009.

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' (Uribe's) "Test/Observation Well Installation Report, U & A Project 291-03," dated April 2, 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. Six additional extraction wells (RW-D6 through RW-D11) were installed within the Plume D area in March 2007 by URS Corporation. These six wells are 6 inches in diameter and installed to an approximate depth of 20 feet bgs. The well locations are shown on Figures 2 and 3. The plume 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 (NPDES) 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. Hydrogen peroxide has also been injected periodically into wells in the Plume C area since July 2004.

In addition, construction of an extraction system to remove separate-phase hydrocarbons (SPH) within the vicinity of Plume D began in March 2006. Seven existing 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 was discharged into the local storm drain via an NPDES permit. Extracted soil vapor was treated through a thermal oxidizer and discharged into the atmosphere via a permit issued by the Bay Area Air Quality Management District. Six additional wells were installed within the vicinity of Plume D in March 2007 (RW-D6, RW-D7, RW-D8, RW-D9, RW-D10, and RW-D11) and were connected to the extraction system on June 11, 2007. 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 FALL 2008 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. In addition, the City of Oakland requested that 11 remediation wells be sampled during the Fall 2008 sampling event to evaluate the effectiveness of the remedial activities conducted at the Site. The additional wells sampled in November 2008 were RW-A1, RW-A2, RW-B2, RW-B4, RW-C1, RW-C3, RW-C5, RW-D1, and RW-D4.

On November 18, 2008, 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-5, TBW-6, RW-A1, RW-A2, OB-A1, RW-B1 through RW-B4, RW-C1 through RW-C7, OB-C1, RW-D-1 through RW-D11, OB-D1, and OB-D2. A number of monitoring wells have been eliminated from the monitoring program. Monitoring wells MW-3 and MW-4 have been abandoned and sealed (Ninyo & Moore 2004). Wells TBW-1, TBW-2, TBW-3, and TBW-4 were abandoned and sealed by Baseline in June 2007. Wells TBW-5, RW-D1 through RW-D11, and RW-1 were converted to extraction wells.

The pumps from the active extraction wells were temporarily removed by OTG EnviroEngineering Solutions, Inc. (OTG) on November 17 and 18, 2008 so that depth-to-groundwater, depth-to-SPH, and groundwater sampling activities could be conducted. The oil/water interface probe was decontaminated 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 and remediation well locations are shown on Figures 2 and 3.

On November 18 through 21, 2008, LFR personnel collected groundwater samples from 12 monitoring wells (MW-1, MW-5, MW-6, MW-8 through MW-10, and MW-12 through MW-17) and 11 remediation wells (RW-A1, RW-A2, RW-B2, RW-B4, RW-C1, RW-C3, RW-C5, RW-D1, RW-D4, RW-D7, and RW-D10). Prior to sampling, a clean, disposable, polyvinyl chloride (PVC) sampling bailer was used to purge a minimum of three well-casing volumes of groundwater from all but five monitoring wells. Due to the large well-casing volumes, the remaining five wells were purged using clean, 2-inch-diameter submersible pumps. A minimum of one well-casing volume of water was purged from each of the active extraction wells (plume D wells) because these wells were continuously pumping groundwater until November 17 or 18. The wells were allowed to recover to at least 80 percent of their original static groundwater levels before sampling. Dissolved oxygen, temperature, pH, conductivity, and turbidity 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 the wells were purged, samples were collected using the disposable, PVC, 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 8260B
- TPH as kerosene (TPHk), TPH as diesel (TPHd), and TPH as 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 November 18, 2008, 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 "Second Quarter 2003 Monitoring Report, City of Oakland Municipal Service Center" (Uribe 2003).

Groundwater elevations in the monitoring wells ranged from 4.92 feet mean sea level (msl) at MW-6 to -0.60 foot msl at MW-2 (Figure 2). Groundwater flow direction, measured between wells MW-1 and MW-10, is toward the northwest in the northern section of the Site at approximately 0.012 foot/foot (ft/ft), and toward the southwest (measured between wells MW-11 and MW-15) at approximately 0.009 ft/ft in the southern portion of the Site. A groundwater high (groundwater elevation of 5.71 feet msl) is observed in the vicinity of remediation well RW-A2 (Plume A), located in the southern portion of the Site. 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). In addition, a depression in the groundwater surface was observed in vicinity of the plume D remediation wells. 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 in well OB-C1 (approximately 0.03 foot) during this monitoring event. Globules of product were also noted during bailing of MW-6. The results of the SPH assessment are presented in Table 1. Plumes B, C, and D showed a significant decrease in lateral extent of SPH compared to the April 2004 monitoring event. The monitoring wells in the Plume A area continue to not contain measurable amounts of SPH. The pumps were removed from the Plume D extraction wells so that the wells would be accessible during the current monitoring event. These wells did not contain measurable amounts of SPH. Similarly, the four monitoring wells that comprise Plume B did not contain measurable amounts of SPH during the current monitoring event. The lateral extent of plume C is depicted on Figure 3 in the vicinity of OB-C1.

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-10 and RW-C5 and analyzed for TPHg, TPHk, TPHd, TPHmo, BTEX, and MTBE. Analytical results for the duplicate samples were the same as those for the primary samples collected from well MW-10 and consistent with those for the primary samples collected from well RW-C5.

4.3.1 Benzene

Benzene concentrations detected above laboratory analytical detection limits (LADL) were reported in groundwater samples collected from 5 of the 12 monitoring wells and 10 of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum benzene concentration in November 2008 was detected in well MW-6 at 96 micrograms per liter (μg/l). In the remediation wells, the maximum benzene concentration was detected in well RW-B2 at 3,200 μg/l.

Benzene was also reported in groundwater samples collected from wells MW-1 (2.4 μg/l), MW-5 (11 μg/l), MW-10 (11 μg/l in the primary and duplicate samples), MW-16 (21 μg/l), RW-A1 (8.8 μg/l), RW-B4 (3,100 μg/l), RW-C1 (6.4 μg/l), RW-C3 (1.1 μg/l), RW-C5 (2,900 μg/l; 2,700 μg/l in the duplicate sample), RW-D1 (270 μg/l), RW-D4 (210 μg/l), RW-D7 (100 μg/l), and RW-D10 (2.7 μg/l).

The benzene concentrations detected during the November 2008 sampling event were generally consistent with historical concentrations for most monitoring and remediation wells with the exception of MW-6, which displayed a significant decrease from 500 μg/l in May 2008 to 96 μg/l in November 2008. Remediation wells RW-A1, RW-D1, RW-D4, RW-D7, and RW-D10 were sampled for the first time during the November 2008 sampling event; therefore, a trend has not yet been established.

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 Screening Levels Marine Habitats for benzene is 71 μg/l (RWQCB 2008; Table F-2b).

Benzene concentrations were above the SFAEPZ Tier I Standard for benzene and RWQCB ESL for benzene (71 µg/l for both regulatory limits) in one monitoring well (MW-6) and six remediation wells (RW-B2, RW-B4, RW-C5, RW-D1, RW-D4 and RW-D7). Benzene was not detected above the ESL in any monitoring wells bounding the Site and San Leandro Bay ("the Bay"), indicating that elevated benzene concentrations are not migrating off site to the Bay.

4.3.2 Toluene

Toluene was reported in groundwater samples collected from four of the 12 monitoring wells and seven of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum toluene concentration in November 2008 was detected in MW-6 at 1.9 µg/l. In the remediation wells, the maximum toluene concentration was detected in RW-B2 at 2,100 µg/l.

Toluene was also reported in groundwater samples collected from wells MW-1 (0.52 µg/l), MW-5 (1.7 µg/l), MW-16 (1.7 µg/l), RW-B4 (100 µg/l), RW-C5 (91 µg/l; 78 µg/l in the duplicate sample), RW-D1 (85 µg/l), RW-D4 (17 µg/l), RW-D7 (54 µg/l), and RW-D10 (0.69 µg/l).

The RWQCB ESL for Surface Water Screening Levels Marine Habitats for toluene is 40 µg/l (RWQCB 2008; Table F-2b). No concentrations of toluene were detected in monitoring wells above the ESL of 40 µg/l during the November 2008 sampling event. Toluene was detected above the ESL in remediation wells RW-B2, RW-B4, RW-C5, RW-D1, and RW-D7.

4.3.3 Ethylbenzene

Ethylbenzene was reported in groundwater samples collected from two of the 12 monitoring wells and eight of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum ethylbenzene concentration in November 2008 was detected in MW-5 at 240 µg/l. In the remediation wells, the maximum ethylbenzene concentration was detected in RW-B4 and RW-D4 at 270 µg/l.

Ethylbenzene was also reported in groundwater samples collected from wells MW-16 (2.7 µg/l), RW-B2 (140 µg/l), RW-C3 (0.67 µg/l), RW-C5 (120 µg/l; 91 µg/l in the duplicate sample), RW-D1 (150 µg/l), RW-D7 (13 µg/l), and MW-D10 (5.6 µg/l).

The SFAEPZ Tier I Standard for ethylbenzene is 29,000 µg/l, and the RWQCB ESL for Surface Water Screening Levels Marine Habitats for ethylbenzene is 30 µg/l (RWQCB 2008; Table F-2b). No concentrations of ethylbenzene were detected in monitoring or remediation wells above the SFAEPZ Tier I Standard for ethylbenzene of 29,000 µg/l during the November 2008 sampling event. Also, no concentrations of ethylbenzene were detected in monitoring wells above the ESL of 30 µg/l during the

November 2008 sampling event. Ethylbenzene was detected above the ESL in remediation wells RW-B2, RW-B4, RW-C5, RW-D1, and RW-D4.

4.3.4 Total Xylenes

Total xylenes were reported in groundwater samples collected from five of the 12 monitoring wells and eight of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum total xylenes concentration in November 2008 was detected in MW-5 at 6.5 µg/l. In the remediation wells, the maximum total xylenes concentration was detected in RW-D7 at 830 µg/l.

Total xylenes were also reported in samples collected from wells MW-1 (1.3 µg/l), MW-6 (1.2 µg/l), MW-15 (1.78 µg/l), MW-16 (1.1 µg/l), RW-B2 (720 µg/l), RW-B4 (679 µg/l), RW-C1 (0.51 µg/l), RW-C5 (437 µg/l; 358 µg/l in the duplicate sample), RW-D1 (710 µg/l), RW-D4 (280 µg/l), and RW-D10 (17.71 µg/l).

The RWQCB ESL for Surface Water Screening Levels Marine Habitats for total xylenes is 100 µg/l (RWQCB 2008; Table F-2b). No concentrations of total xylenes were detected in monitoring wells above the ESL of 100 µg/l during the November 2008 sampling event. Total xylenes were detected above the ESL in remediation wells RW-B2, RW-B4, RW-C5, RW-D1, RW-D4, and RW-D7.

4.3.5 MTBE

MTBE was reported in groundwater samples collected from two of the 12 monitoring wells and one of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum MTBE concentration in November 2008 was detected in MW-5 at 20 µg/l. In the remediation wells, the maximum MTBE concentration was detected in RW-A1 at 4.5 µg/l.

MTBE was also reported in a sample collected from well MW-6 at 5.7 µg/l.

The RWQCB ESL for Surface Water Screening Levels Marine Habitats for MTBE is 180 µg/l (RWQCB 2008; Table F-2b). No concentrations of MTBE were detected in monitoring or remediation wells above the ESL of 180 µg/l during the November 2008 sampling event.

4.3.6 TPHg

TPHg was reported in groundwater samples collected from five of the 12 monitoring wells and seven of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum TPHg concentration in November 2008 was detected in MW-5 at 2,600 µg/l. In the remediation wells, the maximum TPHg concentration was detected in RW-B2 at 7,900 µg/l.

TPHg was also detected in wells MW-1 (210 µg/l), MW-6 (450 µg/l), MW-12 (59 µg/l), MW-16 (150 µg/l), RW-B4 (6,000 µg/l), RW-C5 (5,800 µg/l; 3,900 in the duplicate sample), RW-D1 (5,100 µg/l), RW-D4 (7,600 µg/l), RW-D7 (3,400 µg/l), and RW-D10 (640 µg/l).

The SFAEPZ Tier I Standard is 3,700 µg/l for TPHg (Ninyo & Moore 2004), and the RWQCB ESL for Surface Water Screening Levels Marine Habitats for TPHg is 210 µg/l (RWQCB 2008; Table F-2b). No concentrations of TPHg were detected in monitoring wells above the SFAEPZ Tier I Standard for TPHg of 3,700 µg/l during the November 2008 sampling event. TPHg was detected above the SFAEPZ Tier I Standards in five remediation wells (RW-B2, RW-B4, RW-C5, RW-D1, and RW-D4). TPHg was detected above the ESL of 210 µg/l in three monitoring wells (MW-1, MW-5, and MW-6) and seven remediation wells (RW-B2, RW-B4, RW-C5, RW-D1, RW-D4, RW-D7, and RW-D10).

TPHg was not detected above the ESL in any monitoring wells bounding the Site and the Bay, indicating that elevated benzene concentrations are not migrating off site to the Bay.

4.3.7 TPHd

TPHd was reported in groundwater samples collected from eight of the 12 monitoring wells and all 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum TPHd concentration in November 2008 was detected in MW-16 at 52,000 µg/l. In the remediation wells, the maximum TPHd concentration was detected in RW-D4 at 55,000 µg/l.

TPHd was also detected in wells MW-1 (110 µg/l), MW-5 (660 µg/l), MW-6 (1,500 µg/l), MW-12 (170 µg/l), MW-13 (120 µg/l), MW-14 (150 µg/l), MW-15 (110 µg/l), RW-A1 (56 µg/l), RW-A2 (590 µg/l), RW-B2 (190 µg/l), RW-B4 (3,100 µg/l), RW-C1 (290 µg/l), RW-C3 (720 µg/l), RW-C5 (3,700 µg/l; 3,400 µg/l in the duplicate sample), RW-D1 (11,000 µg/l), RW-D7 (54,000 µg/l), and RW-D10 (1,000 µg/l).

The SFAEPZ Tier I Standard is 640 µg/l for TPHd (middle distillates; Uribe 2003), and the RWQCB ESL for Surface Water Screening Levels Marine Habitats for TPH (middle distillates) is 210 µg/l (RWQCB 2008; Table F-2b). TPHd concentrations were above the SFAEPZ Tier I Standard of 640 µg/l in three monitoring wells (MW-5, MW-6, and MW-16) and seven remediation wells (RW-B4, RW-C3, RW-C5, RW-D1, RW-D4, RW-D7, and RW-D10). TPHd concentrations were above the ESL of 210 µg/l in three monitoring wells (MW-5, MW-6, and MW-16) and nine remediation wells (RW-A2, RW-B4, RW-C1, RW-C3, RW-C5, RW-D1, RW-D4, RW-D7, and RW-D10).

MW-16 is the only well bounding the Site and the Bay that exceeded regulatory standards. The TPHd concentration measured in this well significantly increased from the TPHd concentration measured in October 2007 (2,300 µg/l).

4.3.8 TPHmo

TPHmo was reported in groundwater samples collected from three of the 12 monitoring wells and eight of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum TPHmo concentration in November 2008 was detected in MW-16 at 110,000 µg/l. In the remediation wells, the maximum TPHmo concentration was detected in RW-D7 at 59,000 µg/l.

TPHmo was also detected in wells MW-13 (630 µg/l), MW-14 (660 µg/l), RW-B4 (2,900 µg/l), RW-C1 (1,200 µg/l), RW-C3 (1,600), RW-C5 (430 µg/l; less than 300 µg/l in the duplicate sample), RW-D1 (4,900 µg/l), RW-D4 (9,700 µg/l), and RW-D10 (650 µg/l).

The SFAEPZ Tier I Standard is 640 µg/l for TPHmo (middle distillates; Uribe 2003), and the RWQCB ESL for Surface Water Screening Levels Marine Habitats for TPH (middle distillates) is 210 µg/l (RWQCB 2008; Table F-2b). TPHmo concentrations were above the SFAEPZ Tier I Standard of 640 µg/l in two monitoring wells (MW-14 and MW-16) and seven remediation wells (RW-B4, RW-C1, RW-C3, RW-D1, RW-D4, RW-D7, and RW-D10). TPHmo concentrations were above the ESL of 210 µg/l in three monitoring wells (MW-13, MW-14, and MW-16) and eight remediation wells (RW-B4, RW-C1, RW-C3, RW-C5, RW-D1, RW-D4, RW-D7, and RW-D10).

MW-14 and MW-16 are the only wells bounding the Site and the Bay that exceeded regulatory standards. The TPHmo concentrations measured in these wells significantly increased from the TPHmo concentrations measured in October 2007 (4,300 µg/l and less than 300 µg/l, respectively).

4.3.9 TPHk

TPHk was reported in groundwater samples collected from 5 of the 12 monitoring wells and 10 of the 11 remediation wells sampled during the current monitoring event. In the monitoring wells, the maximum TPHk concentration in November 2008 was detected in MW-16 at 31,000 µg/l. In the remediation wells, the maximum TPHk concentration was detected in RW-D4 at 46,000 µg/l.

TPHk was also detected in wells MW-1 (87 µg/l), MW-5 (690 µg/l), MW-6 (1,200 µg/l), MW-12 (120 µg/l), RW-A2 (160 µg/l), RW-B2 (150 µg/l), RW-B4 (930 µg/l), RW-C1 (76 µg/l), RW-C3 (170 µg/l), RW-C5 (3,300 µg/l; 3,100 µg/l in the duplicate sample), RW-D1 (9,400 µg/l), RW-D7 (43,000 µg/l), and RW-D10 (760 µg/l).

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 for all but one sample. RW-C3 had to be re-analyzed for total extractable hydrocarbons after the laboratory observed an unacceptable surrogate recovery. This re-analysis occurred after the holding time expired.

5.2 Blanks

Three field blanks (MW-17-FB, RW-C1-FB, and MW-9-FB) were collected along with corresponding groundwater samples and were analyzed for TPHg, TPHk, TPHd, TPHmo, BTEX, and MTBE. Additionally, laboratory method blank results were reviewed for detection of target analytes. No target analytes were detected in any of the three field blanks. These results indicate that sample collection methods were effective, and that transportation and laboratory procedures were not a source of contamination.

5.3 Laboratory Control Samples

Laboratory quality control samples 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 but one of the surrogates were within the acceptable laboratory recovery limits. RW-C3, was re-analyzed for total extractable hydrocarbons as noted above in Section 5.1 due to the low surrogate recovery noted by the analytical laboratory.

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

The following summarizes the data collected during the Fall 2008 sampling event and presents the recommendations for the Spring 2009 monitoring period.

- Groundwater elevations ranged from 4.92 feet msl at MW-6 to -0.60 foot msl at MW-2. The direction of shallow groundwater flow is toward the northwest in the northern section of the Site at a 0.012 ft/ft gradient and toward the southwest in the southern portion of the Site at 0.009 ft/ft. A groundwater high was observed in the vicinity of well RW-A2 (Plume A) in the southern portion of the Site. This groundwater high is probably the result of higher subsurface permeability in areas of excavation backfill. A depression in the groundwater surface was observed in the vicinity of the plume D extraction wells due to the active groundwater extraction in the area.
- SPH was observed in two wells: OB-C1 (approximately 0.03 foot) and MW-6 (small globules). SPH was not detected in any other wells monitored during the current monitoring event.
- Benzene was detected above LADL in 15 of the 23 of wells sampled. The maximum concentration of benzene detected in shallow groundwater was 3,200 μg/l in well RW-B2. The concentration of benzene is above both the SFAEPZ Tier I Standard and the RWQCB ESL for Surface Water Screening Levels Marine Habitats of 71 μg/l in seven of the wells sampled. None of the wells bounding the Site and the Bay exceeded either regulatory screening level.
- Toluene was detected above LADL in 11 of the 23 wells sampled. The maximum concentration of toluene detected in shallow groundwater was 2,100 μg/l in well RW-B2. Concentrations of toluene were above the RWQCB ESL for Surface Water Screening Levels Marine Habitats of 40 μg/l in five of the wells in which it was present.
- Ethylbenzene was detected above LADL in 10 of the 23 wells sampled. The maximum concentration of ethylbenzene was detected in shallow groundwater at 270 μg/l in wells RW-B4 and RW-D4. No ethylbenzene concentrations exceeded the SFAEPZ Tier I Standard (29,000 μg/l). Concentrations of ethylbenzene did exceed the RWQCB ESL for Surface Water Screening Levels Marine Habitats of 30 μg/l in five of the wells sampled.
- Total xylenes were detected above LADL in 13 of the 23 wells sampled. The maximum concentration of xylenes detected in shallow groundwater was 830 μg/l in well RW-D7. Concentrations of total xylenes were above regulatory action levels for the RWQCB ESL for Surface Water Screening Levels Marine Habitats for total xylenes (100 μg/l) in six of the wells sampled.
- MTBE was detected above LADL in 3 of the 23 wells sampled. The maximum concentration of MTBE detected in shallow groundwater was 20 μg/l in well MW-5. No concentrations of MTBE exceeded the RWQCB ESL for Surface Water

Screening Levels Marine Habitats for MTBE of 180 µg/l during the November 2008 event.

- TPHg was detected in 12 of the 23 wells sampled. The maximum concentration of TPHg detected in shallow groundwater was 7,900 µg/l in well RW-B2. Concentrations of TPHg were above the SFAEPZ Tier I Standard of 3,700 µg/l in five of the wells sampled. TPHg concentrations were above the RWQCB ESL for Surface Water Screening Levels Marine Habitats of 210 µg/l in 10 of the wells sampled.
- TPHd was detected above LADL in 19 of the 23 wells sampled. The maximum concentration detected was present in well RW-D4 at a concentration of 55,000 µg/l. TPHd concentrations were above the SFAEPZ Tier I Standard for TPHd of 640 µg/l (middle distillates; Uribe 2003) in 10 of the wells sampled. TPHd concentrations were above the RWQCB ESL for Surface Water Screening Levels Marine Habitats for TPHd (middle distillates) of 210 µg/l in 12 wells sampled.
- TPHmo was detected in 11 of the 23 wells sampled and had a maximum concentration of 110,000 µg/l in well MW-16. TPHmo concentrations were above the SFAEPZ Tier I Standard for TPHd (middle distillates) of 640 µg/l in nine of the wells sampled. TPHmo concentrations were above the RWQCB ESL for Surface Water Screening Levels Marine Habitats for TPHd (middle distillates) of 210 µg/l (middle distillates) in 11 wells sampled.
- TPHk was detected above laboratory analytical limits in 15 of the 23 wells sampled. The maximum concentration of TPHk detected was present in well RW-D4 (46,000 µg/l).

Based on the results of the Fall 2008 groundwater monitoring event, LFR makes the following recommendations:

- Continue semiannual groundwater monitoring on site due to the elevated concentrations of TPHg, TPHd, TPHmo, and benzene reported during the current monitoring event.
- Continue monitoring SPH, which was present in two monitoring wells at the Site.
- Continue in situ remediation using hydrogen peroxide and continue groundwater extraction.
- Work with OTG to prepare a summary of remediation activities at each free-product plume area, assess free-product recovery and dual-phase extraction progress in the Plume D area, and assess the effectiveness of hydrogen peroxide treatment in the Plume A, B, and C areas. This remedial progress evaluation will be included in the second 2009 semiannual groundwater monitoring report.

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

California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB). 2008. Screening for Environmental Concerned Sites with Contaminated Soil and Groundwater. Interim Final – November 2007 (Revised May 2008). May.

LFR Inc. (LFR). 2008. Groundwater Monitoring Report, Spring Semiannual, Municipal Service Center 7101 Edgewater Drive, Oakland, California, Assignment No. G03-N&M-10. May 31.

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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
10/2/07	10.05	5.59	4.46	8260B	SGC	600 Y	<300	710 Y	460 Y	6.1	1.1	<0.5	1.2	<0.5
3/20/08 [(8)]	10.05	3.53	6.52	8260B	SGC	1,000 Y	<300	960	1,600 Y	53	4.1	1.2	6.3	<0.5
11/21/08 [(10)]	10.05	5.48	4.57	8260B	SGC	110 Y	<300	87 Y	210 Y	2.4	0.52	<0.50	1.3	<0.50

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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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-2														
10/4/89	10.47	---	---	8020		---	---	---	<30	<0.3	<0.3	<0.3	<0.3	---
10/4/89	10.47	---	---	8240		---	---	---	---	2	<2.0	<2.0	<2.0	---
4/27/93	10.47	---	---	8020		---	---	---	<1,000	<1.0	<1.0	<1.0	<1.0	---
4/19/95	10.47	---	---	8020		---	---	---	<50	1.8	<0.5	<0.5	<0.5	---
7/27/95	10.47	6.22	4.25	8020		---	---	---	<50	2.3	<0.5	<0.5	<0.5	---
11/20/95	10.47	7.49	2.98	8020		---	---	---	<50	2.2	<0.5	<0.5	<0.5	---
2/12/96	10.47	6.68	3.79	8020		---	---	---	<50	1.7	<0.5	<0.5	0.5	---
5/13/96	10.47	6.32	4.15	8020		---	---	---	---	2	<0.5	<0.5	<0.5	---
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	1.6	<0.5	<0.5	<0.5	<0.5
10/2/07	10.47	10.81	-0.34	---	---	---	---	---	---	---	---	---	---	---
3/20/08 [(8)]	10.47	12.36	-1.89	8260B	SGC	<50	<300	<50	<50	1.5	<0.5	<0.5	<0.5	<0.5
11/18/08	10.47	11.07	-0.60	8260B	---	---	---	---	---	---	---	---	---	---
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	---

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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	---	---	---	---	---	---	---	---	---
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	---		---	---	---	---	---	---	---	---	---

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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
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
4/5/06 [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	2000	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
10/2/07	11.15	6.51	4.64	8260B	SGC	400 Y	<300	440	3,000 Y	11	1.4	100	6.8	46
3/20/08 [8]	11.15	5.37	5.78	8260B	SGC	1,400 Y	<300	1,400	4,100 Y	8.4	1.7	270	12	23
11/21/08 [10]	11.15	6.51	4.64	8260B	SGC	660 Y	<300	690 Y	2,600	11	1.7	240	6.5	20
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.	---	---	---	---	---	---	---	---	---

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
8/24/99	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
10/2/07	10.98	7.25	3.73	8260B	SGC	2,400	340 Y	2000	890 Y	270	3.8	5.5	3	7.8
3/20/08 [8]	10.98	6.59	4.39	8260B	SPH: Residual Product noted while bailing/ SGC	7,200	820	5,900	1,100 Y	500	3.5	5.9	3.1	7.7
11/21/08 [10]	10.98	6.06	4.92	8260B	SPH: Residual Product noted while bailing/ SGC	1,500 Y	<300	1,200 Y	450 Y	96	1.9	<0.50	1.2	5.7
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	---		---	---	---	---	---	---	---	---	---

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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	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
4/5/06 [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
10/2/07	11.51	7.07	4.44	---	---	---	---	---	---	---	---	---	---	---
3/20/08 [8]	11.51	6.24	5.27	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	2.7
3/20/08 dup	---	---	---	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	2.6
11/18/08	11.51	7.40	4.11	---	---	---	---	---	---	---	---	---	---	---
MW-8														
11/20/96	12.22	---	---	8020		880	---	---	<50	0.66	<0.5	<0.5	<0.5	---
11/20/97	12.22	9.59	2.63	8020		200	---	---	<50	<0.5	<0.5	<0.5	<0.5	2
2/24/98	12.22	8.42	3.80	8020		<50	<500	<50	<50	<0.5	<0.5	<0.5	<0.5	---
6/8/98	12.22	9.57	2.65	8020		1,200	1,000	<50	<50	<0.5	<0.5	<0.5	<0.5	---
8/19/98	12.22	9.49	2.73	8020	SGC	<50	<250	<50	<50	1.6	3.4	1	2.8	<5.0
11/11/98	12.22	9.64	2.58	8020	SGC	<50	<200	<50	<50	0.9	0.8	0.6	2.3	<5.0
2/23/99	12.22	11.53	0.69	8020		700	1,500	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/27/99	12.22	9.65	2.57	8020		<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
8/24/99	12.22	9.62	2.60	8020	SGC	70	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/22/99	12.22	9.64	2.58	8020	SGC	57	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
1/18/00	12.22	8.31	3.91	8020	SGC	<50	<200	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0

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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
5/11/00	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]	---	---		---	---	---	---	---	---	---	---	---
4/5/06 [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
10/3/07	12.22	9.54	2.68	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/21/08 [8]	12.22	9.61	2.61	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/19/08 [10]	12.22	9.58	2.64	8260B	SGC	<50	<300	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
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

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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
5/17/01	10.77	9.88	0.89	---		---	---	---	---	---	---	---	---	---
5/18/01	10.77	---	---	8020	Filtered+SGC	<50	<200	<50	74	4.6	<0.5	<0.5	<0.5	<5.0
8/16/01	10.77	8.05	2.72		Filtered+SGC	<50	<200	<100	70	0.62	<0.5	<0.5	<0.5	<5
12/16/01	10.77	7.75	3.02	8021	SGC	1,400	4,100	<50	210	15	1.6	<0.5	2.2	<5
4/5/02	10.77	7.50	3.27	8021	SGC	870	1,000	---	1,498	367	11	2.1	7.8	<5
6/20/02	10.77	8.27	2.50	8021	SGC	<50	<300	<50	430	180	5.7	2.4	4.15	<2
9/18/02	10.77	8.25	2.52	8021	SGC	63 b,c	<300	60	250	49	5.8	<0.5	3.1	<2
4/22/03	10.77	7.25	3.52	8021B	SGC	<50	<300	<50	69	4.1 C	<0.5	<0.5	0.9	<2
4/28/04	10.77	---	---	---		---	---	---	---	---	---	---	---	---
10/27/04	10.77	NM[4]	---	---		---	---	---	---	---	---	---	---	---
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
10/3/07	10.77	8.58	2.19	8260B	SGC	110 Y	<300	110 Y Z	240 Y	1	2.4	<0.5	3.53	<0.5
3/20/08 [8]	10.77	8.46	2.31	8260B	SGC	170 Y	<300	150 Y	230	65	4.2	<0.5	5.13	<0.5
3/20/08 dup	---	---	---	8260B	SGC	190 Y	<300	180 Y	250	66	4.4	<0.5	5.5	<0.5
11/21/08 [10]	10.77	8.63	2.14	8260B	SGC	<50	<300	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
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

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
12/16/01	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
4/5/06 [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
10/3/07	10.59	9.78	0.81	8260B	SGC	<50	<300	<50	<50	30	<0.5	<0.5	<0.5	<0.5
3/21/08 [8]	10.59	10.20	0.39	8260B	SGC	<50	<300	<50	<50	3.9	<0.5	<0.5	<0.5	<0.5
11/19/08 [10]	10.59	9.55	1.04	8260B	SGC	<50	<300	<50	<50	11	<0.50	<0.50	<0.50	<0.50
11/19/08 dup	---	---	---	8260B	SGC	<50	<300	<50	<50	11	<0.50	<0.50	<0.50	<0.50
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
4/4/06 [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	9.6	0.7	7.3	2.4	11
10/2/07	11.60	6.83	4.77	---	---	---	---	---	---	---	---	---	---	---
3/20/08 [8]	11.60	6.83	4.77	8260B	SGC	<50	<300	<50	160	3.5	<0.5	5.4	0.92	13
11/18/08	11.60	7.00	4.60	---	---	---	---	---	---	---	---	---	---	---

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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-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
4/4/06 [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
10/2/07	10.43	8.14	2.29	8260B	SGC	290 Y	<300	230	160 Y	<0.5	<0.5	<0.5	<0.5	<0.5
3/19/08	10.43	6.45	3.98	8260B	SGC	620 Y	340	430	130 Y	<0.5	<0.5	<0.5	<0.5	<0.5
11/21/08 [10]	10.43	8.27	2.16	8260B	SGC	170 Y	<300	120 Y	59 Y	<0.50	<0.50	<0.50	<0.50	<0.50
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

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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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	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
4/5/06 (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
10/3/07	11.34	10.18	1.16	8260B	SGC	120 Y	460	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/20/08 (8)	11.34	9.54	1.80	8260B	SGC	53 Y	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/21/08 (10)	11.34	10.41	0.93	8260B	SGC	120 Y	630	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
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
4/5/06 (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
10/3/07	10.05	8.45	1.60	8260B	SGC	61 Y	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/20/08 (8)	10.05	7.80	2.25	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/21/08 (10)	10.05	8.45	1.60	8260B	SGC	150 Y	660	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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
4/5/06 (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	2.06	<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	2.38	<0.5
10/3/07	12.36	10.16	2.20	8260B	SGC	150 Y	550	<50	55 Y	<0.5	<0.5	<0.5	1.96	<0.5
3/20/08 (8)	12.36	10.08	2.28	8260B	SGC	88 Y	<300	<50	<50	<0.5	<0.5	<0.5	2.02	<0.5
11/19/08 (10)	12.36	10.28	2.08	8260B	SGC	110 Y	<300	<50	<50	<0.50	<0.50	<0.50	1.78	<0.50
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

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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
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	---	---	---	---	---	---	---	---	---
4/5/06 (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	---	---	---	---	---	---	---	---	---
4/4/07 (5)	12.22	10.72	1.5	8260B	SGC	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/3/07	12.22	10.92	1.3	8260B	SGC	2,300 Y	4300	1700	480 Y	31	1.7	4.5	1.6	<0.5
3/19/08 (9)	12.22	10.72	1.5	---	---	---	---	---	---	---	---	---	---	---
11/19/08 (10)	12.22	12.33	-0.11	8260B	SGC	52,000 Y	110,000	31,000	150 Y	21	1.7	2.7	1.1	<0.50
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
4/5/06 (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
10/3/07	9.86	7.97	1.89	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/3/07 dupe	---	---	---	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
3/20/08 (8)	9.86	6.70	3.16	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/19/08 (10)	9.86	9.53	0.33	8260B	SGC	<50	<300	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-18														
4/24/03	---	6.49		8021B	SGC	<50	<300	<50	<50	<0.5	<0.5	2.4	<0.5	<2

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7101 Edgewater Drive, Oakland, California
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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/28/04	---				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	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	---	NM	---	---		---	---	---	---	---	---	---	---	---
3/19/08	---	NM	---	---		---	---	---	---	---	---	---	---	---
11/18/08	---	NM	---	---		---	---	---	---	---	---	---	---	---
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)]	---	---		---	---	---	---	---	---	---	---	---

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Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
9/6/06	---	NM[4]	---	---	SPH: None	---	---	---	---	---	---	---	---	---
4/4/07	---	NM[4]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	---	NM	---	---		---	---	---	---	---	---	---	---	---
3/19/08	---	NM	---	---		---	---	---	---	---	---	---	---	---
11/18/08	---	NM	---	---		---	---	---	---	---	---	---	---	---
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											
10/2/07	---	NM	---	---	NA	---	---	---	---	---	---	---	---	---
3/19/08	---	NM	---	---	NA	---	---	---	---	---	---	---	---	---
11/18/08	---	NM	---	---	NA	---	---	---	---	---	---	---	---	---
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	---	---		---	---	---	---	---	---	---	---	---

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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/22/03	---	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	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	---	NM	---	---	NA	---	---	---	---	---	---	---	---	---
3/19/08	---	NM	---	---	NA	---	---	---	---	---	---	---	---	---
11/18/08	---	NM	---	---	NA	---	---	---	---	---	---	---	---	---
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.	---	---	---	---	---	---	---	---	---
4/3/02 [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]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	---	NM	---	---	SPH: viscous residual	---	---	---	---	---	---	---	---	---
3/19/08	---	NM	---	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	10.22	9.32	0.9	---	---	---	---	---	---	---	---	---	---	---
TBW-6														
2/23/99	---	2.09	---	8020		160	600	< 50	60	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0

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7101 Edgewater Drive, Oakland, California
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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
5/27/99	---	3.31	---	---		---	---	---	---	---	---	---	---	---
8/24/99	---	7.29	---	8020	SGC	180	400	<50	130	<0.5	<0.5	<0.5	<0.5	<5.0
11/22/99	---	4.37	---	---		---	---	---	---	---	---	---	---	---
1/18/00	9.49	3.83	5.66	---		---	---	---	---	---	---	---	---	---
1/19/00	9.49	---	---	8020	SGC	55 C	<200	<50	170	0.6	<0.5	<0.5	<0.5	<5.0
5/11/00	9.49	2.51	6.98	---		---	---	---	---	---	---	---	---	---
8/24/00	9.49	4.34	5.15	---		---	---	---	---	---	---	---	---	---
8/25/00	9.49	---	---	8020	SGC	320	<250	200	<50	<0.5	<0.5	<0.5	<0.5	<5.0
11/28/00	9.49	4.74	4.75	---		---	---	---	---	---	---	---	---	---
2/27/01	9.49	2.30	7.19	8020	Filtered+SGC	<57	<230	<57	<50	<0.5	<0.5	<0.5	<0.5	<5.0
5/17/01	9.49	3.35	6.14	---		---	---	---	---	---	---	---	---	---
8/16/01	9.49	3.85	5.64		Filtered+SGC	<50	<200	<100	<50	<0.5	<0.5	<0.5	<0.5	<5
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	---	---	---	---	---	---	---	---	---	---	---
10/2/07	9.49	4.98	4.51	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	9.49	3.16	6.33	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	9.49	5.32	4.17	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-A1														
4/22/03	---	1.81	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.09	2.52	7.57	---		---	---	---	---	---	---	---	---	---
10/27/04	10.09	3.03	7.06	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	10.09	3.31	6.78	---	SPH: None	---	---	---	---	---	---	---	---	---
3/27/06	10.09	0.62	9.47	---	SPH: None	---	---	---	---	---	---	---	---	---
9/6/06	10.09	3.52	6.57	---	SPH: None	---	---	---	---	---	---	---	---	---
4/3/07	10.09	2.93	7.16	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.09	NM[7]	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	10.09	3.16	6.93	---	SPH: None	---	---	---	---	---	---	---	---	---
11/20/08 [10]	10.09	4.49	5.60	8260B	SGC	56 Y	<300	<50	<50	8.8	<0.50	<0.50	<0.50	4.5
RW-A2														
4/22/03	---	1.22	---	---	Sheen	---	---	---	---	---	---	---	---	---

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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/28/04	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
10/2/07	9.67	3.81	5.86	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	9.67	1.71	7.96	---	SPH: None	---	---	---	---	---	---	---	---	---
11/20/08 [(10)]	9.67	3.96	5.71	8260B	SGC	590 Y	<300	160 Y	<50	<0.50	<0.50	<0.50	<0.50	<0.50
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	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	---	5.34	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	---	2.73	---	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	---	5.31	---	---	---	---	---	---	---	---	---	---	---	---
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
10/2/07	11.22	7.70	3.52	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	11.22	7.06	4.16	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	11.22	7.90	3.32	---	SPH: None	---	---	---	---	---	---	---	---	---
RW-B2														
4/22/03	---	7.29	---	---	Sheen, Odor	---	---	---	---	---	---	---	---	---
4/28/04	11.23	7.20	4.03	---		---	---	---	---	---	---	---	---	---
10/27/04	11.23	7.81	3.42	---	SPH: None	---	---	---	---	---	---	---	---	---
8/31/05	11.23	7.14	4.09	---	SPH: None	---	---	---	---	---	---	---	---	---

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Concentrations expressed in micrograms per liter (µg/l)

Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
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	3400	2700	190	1100	<10
10/2/07	11.23	7.71	3.52	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	11.23	7.07	4.16	---	SPH: None (strong odor)	---	---	---	---	---	---	---	---	---
11/20/08 [10]	11.23	7.92	3.31	8260B	SGC	190 Y	<300	150 Y	7,900 Y	3,200	2,100	140	720	<25
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	7900	4300	130	520	357	<31
10/2/07	11.14	9.56	1.58	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	---	NM [7]	---	---	NM	---	---	---	---	---	---	---	---	---
11/18/08	11.14	9.57	1.57	---	---	---	---	---	---	---	---	---	---	---
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	16000	3200	150	460	1430	<8.3
10/2/07	11.29	9.72	1.57	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	11.29	9.87	1.42	---	SPH: None (odor)	---	---	---	---	---	---	---	---	---
11/20/08 [10]	11.29	9.75	1.54	8260B	SGC	3,100 Y	2,900	930	6,000 Y	3,100	100	270	679	<25
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	1300	63 H Y	<50	<0.50	<0.50	<0.50	<0.50	<0.50
10/2/07	10.44	8.48	1.96	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---

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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
3/19/08	10.44	8.56	1.88	---	SPH: None	---	---	---	---	---	---	---	---	---
11/20/08 (10)	10.44	8.29	2.15	8260B	SGC	290 Y	1,200	76 Y	<50	6.4	<0.50	<0.50	0.51	<0.50
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	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.58	9.75	0.83	---	SPH: 0.015 ft.	---	---	---	---	---	---	---	---	---
10/3/07	10.58	9.39	1.19	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	10.58	9.38	1.20	---	---	---	---	---	---	---	---	---	---	---
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
10/2/07	10.71	8.59	2.12	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
3/19/08	10.71	8.38	2.33	---	SPH: None	---	---	---	---	---	---	---	---	---
11/20/08 (10)	10.71	8.61	2.10	8260B	SGC	720 Y (11)	1600 (11)	170 Y (11)	<50	1.1	<0.50	0.67	<0.50	<0.50
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	---	---	---	---	---	---	---	---	---	---	---
10/2/07	11.32	8.62	2.70	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	11.32	9.13	2.19	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	11.32	8.99	2.33	---	---	---	---	---	---	---	---	---	---	---
RW-C5														

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)
4/22/03	---	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	12000	3400	170	520	1300	<25
10/2/07	10.79	8.95	1.84	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	10.79	8.82	1.97	---	SPH: 0.01 ft.	---	---	---	---	---	---	---	---	---
11/20/08 [10]	10.79	8.92	1.87	8260B	SPH: None/ SGC	3,700 Y	430	3,300	5,800 Y	2,900	91	120	437	<20
11/20/08 dup	---	---	---	8260B	SGC: Oder	3,400 Y	<300	3,100	3,900 Y	2,700	78	91	358	<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]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.31	8.45	1.86	---	SPH: residual	---	---	---	---	---	---	---	---	---
3/19/08	10.31	8.32	1.99	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	10.31	8.42	1.89	---	SPH: Oder	---	---	---	---	---	---	---	---	---
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]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.12	9.01	1.11	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	10.12	8.85	1.27	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	10.12	8.97	1.15	---	---	---	---	---	---	---	---	---	---	---
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.	---	---	---	---	---	---	---	---	---

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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 (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
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	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.39	8.67	1.72	---	SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---
3/19/08	10.39	8.49	1.90	---	SPH: 0.29 ft.	---	---	---	---	---	---	---	---	---
11/18/08	10.39	8.57	1.82	---	SPH: 0.03 ft.	---	---	---	---	---	---	---	---	---
RW-D1														
4/22/03	---	6.97	---	---		---	---	---	---	---	---	---	---	---
4/28/04	10.18	5.62	4.56	---		---	---	---	---	---	---	---	---	---
10/27/04	10.18	6.67	3.51	---	SPH: Present	---	---	---	---	---	---	---	---	---
8/31/05	10.18	5.75	---	---	SPH: 0.02 ft.	---	---	---	---	---	---	---	---	---
3/27/06	10.18	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
9/6/06	10.18	NM[2]	---	---	No Access	---	---	---	---	---	---	---	---	---
4/4/07	10.18	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.18	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	---	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
11/19/08	10.18	11.29	-1.11	6260B	SGC	11,000 Y	4,900	9,400	5,100 Y	270	85	150	710	<2.0
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]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.33	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	---	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
11/18/08	10.33	10.95	-0.62	---	---	---	---	---	---	---	---	---	---	---
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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Municipal Service Center
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Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (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)
10/2/07	10.07	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	---	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
11/18/08	10.07	10.10	-0.03	---	---	---	---	---	---	---	---	---	---	---
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]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	10.22	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	---	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
11/19/08 [10]	10.22	9.10	1.12	8260B	SGC	55,000	9,700	46,000	7,600 Y	210	17	270	280	<1.7
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]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	9.99	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	---	NM[2]	---	---	---	---	---	---	---	---	---	---	---	---
11/18/08	9.99	9.45	0.54	---	---	---	---	---	---	---	---	---	---	---
RW-D6														
11/18/08	---	11.10	---	---	---	---	---	---	---	---	---	---	---	---
RW-D7														
11/19/08 [10]	---	9.62	---	8260B	SGC	54,000 Y	59,000	43,000	3,400	100	54	13	830	<3.1
RW-D8														
11/18/08	---	8.48	---	---	---	---	---	---	---	---	---	---	---	---
RW-D9														
11/18/08	---	9.70	---	---	---	---	---	---	---	---	---	---	---	---

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RW-D10														
11/18/08	---	8.84	---	8260B	SGC	1,000 Y	650	760	640 Y	2.7	0.69	5.6	17.71	<0.50
RW-D11														
11/18/08	---	8.66	---	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---
10/2/07	9.46	8.66	0.80	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	9.46	8.90	0.56	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	9.46	8.41	1.05	---	---	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---
10/2/07	9.95	9.07	0.88	---	SPH: None	---	---	---	---	---	---	---	---	---
3/19/08	9.95	8.64	1.31	---	SPH: None	---	---	---	---	---	---	---	---	---
11/18/08	9.95	8.94	1.01	---	---	---	---	---	---	---	---	---	---	---
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)]	---	---	---	---	---	---	---	---	---	---	---	---
10/2/07	---	NM[(2)]	---	---	---	---	---	---	---	---	---	---	---	---
3/19/08	---	NM[(2)]	---	---	---	---	---	---	---	---	---	---	---	---

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11/18/08	---	8.81	---	---	---	---	---	---	---	---	---	---	---	---
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
10/2/07	---	---	---	8260B		<50	<300	<50	<50	<0.5	0.5	<0.5	<0.5	<0.5
3/20/08	---	---	---	8260B	SGC	<50	<300	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5
11/19/08	---	---	---	8260B	SGC	<50	<300	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
11/20/08	---	---	---	8260B	SGC	<50	<300	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
11/21/08	---	---	---	8260B	SGC	<50	<300	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
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
10/2/07	---	---	---	8260B	Trip Blank 1	---	---	---	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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.

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)

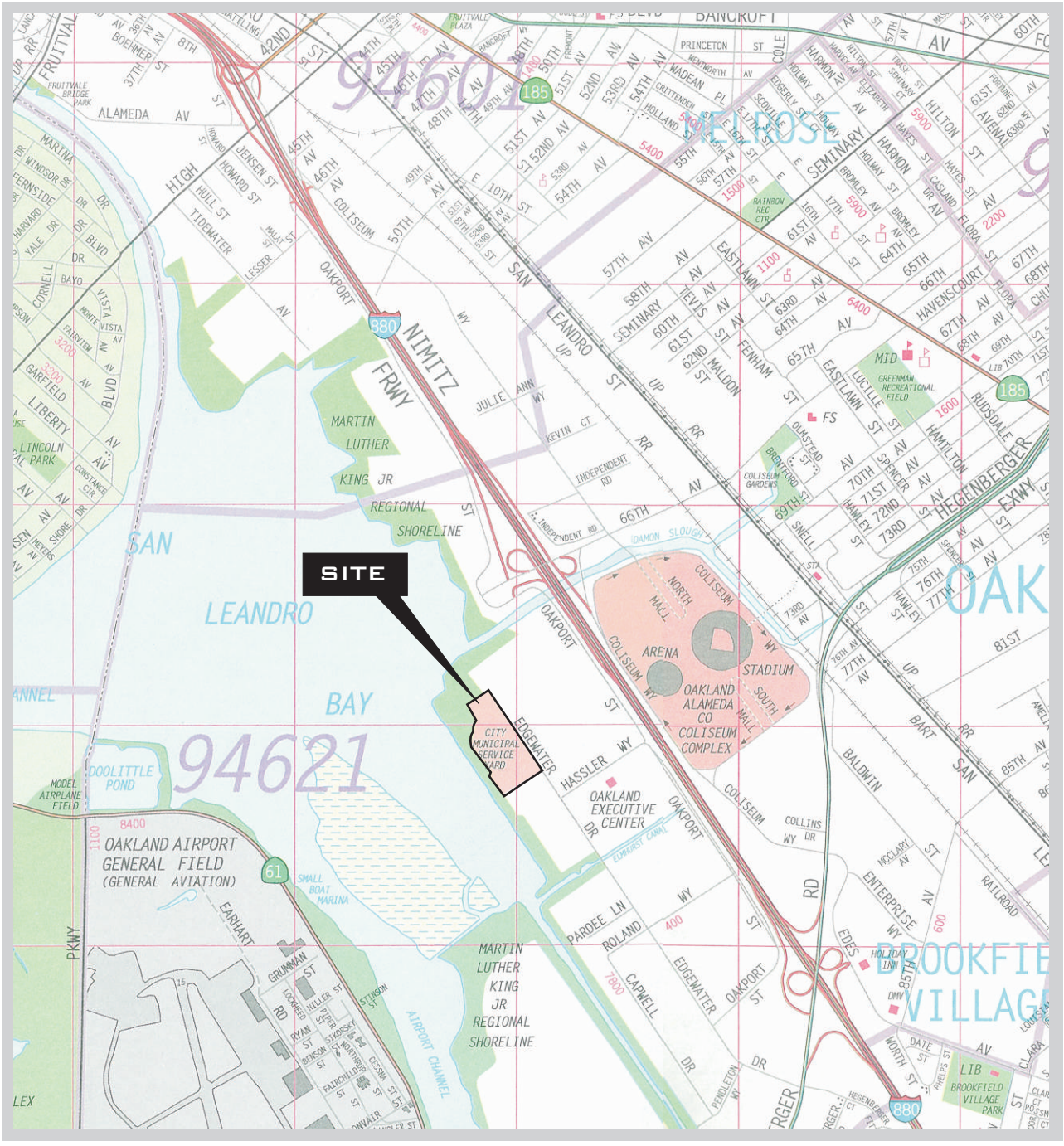
Well ID/ Date	TOC Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	BTEX Method	Notes	TPH-d (µg/l)	TPH-mo (µg/l)	TPH-k (µg/l)	TPH-g (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (µg/l)

(5) = Well dewatered, field staff unable to collect all samples.
(6) = Well has active remediation unit/recovery.
(7) = Well was covered by car or heavy equipment.
(8) = Depth to groundwater measured on March 19, 2008.
(9) = Well dewatered, field staff unable to collect samples.
(10) = Depth to groundwater measured on 11/18/2008.
(11) = Low surrogate recovery was observed for hexacosane. The sample was re-extracted, but was outside the EPA-recommended hold time.

--- = 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



0 2400 4800

APPROXIMATE SCALE IN FEET

SOURCE: 2002 THOMAS GUIDE FOR ALAMEDA AND CONTRA COSTA COUNTIES

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

Site Vicinity Map

Municipal Service Center, 7101 Edgewater Drive, Oakland, California

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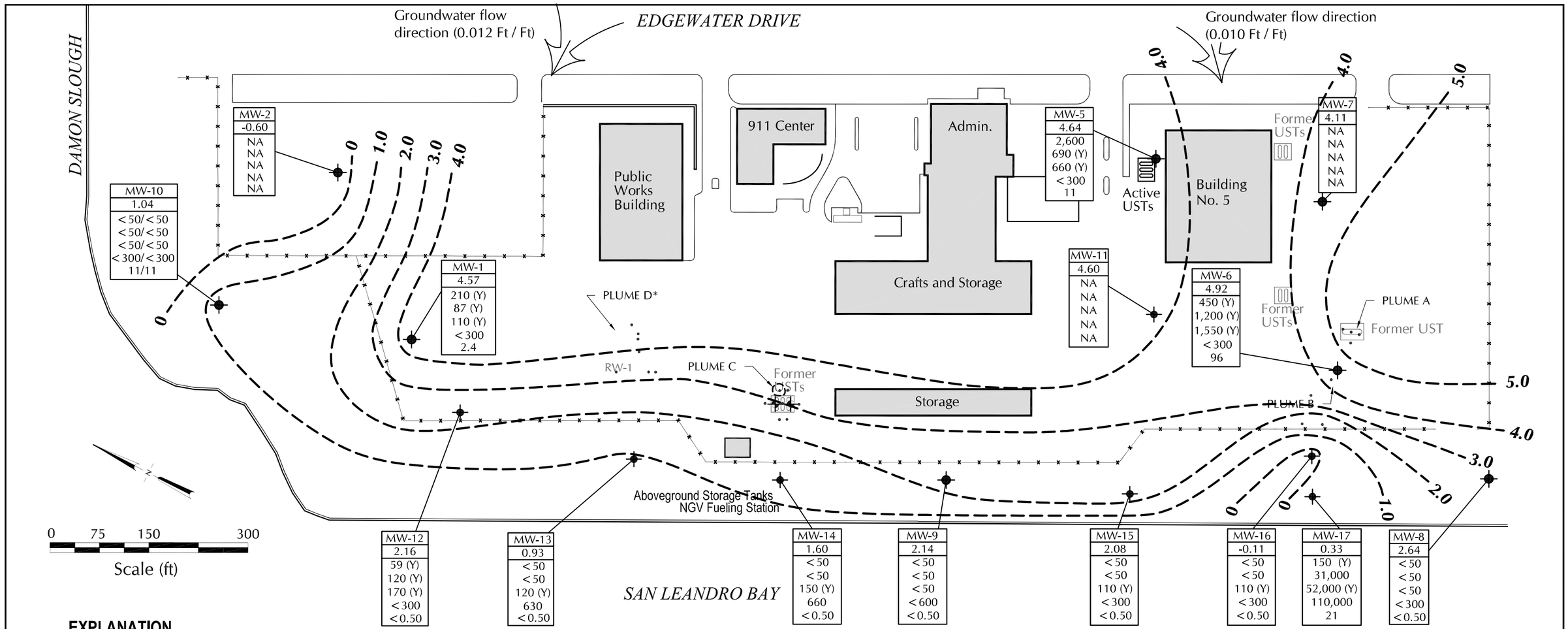
Figure 1



EXPLANATION

- MW-1 — Monitoring well location
- RW-1 — Remediation well location
- TBW-1 — Tank Backfill Well
- MW-3 — Abandoned Well
- Y — Sample exhibits chromatographic pattern that does not resemble standard
- NA — Not sampled in this event
- 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, 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

SPH = Separate Phase Hydrocarbons
UST = Underground Storage Tank

* Plume D Wells not used in contouring due to continued extraction.

Source: CAMBRIA

Groundwater Elevation Contour Map and Hydrocarbon Concentrations in Shallow Groundwater, November 2008

Municipal Service Center, Oakland, California

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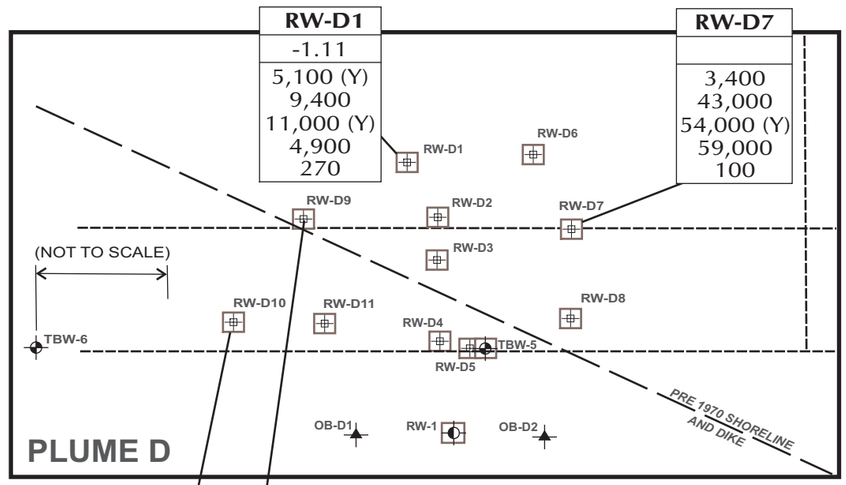
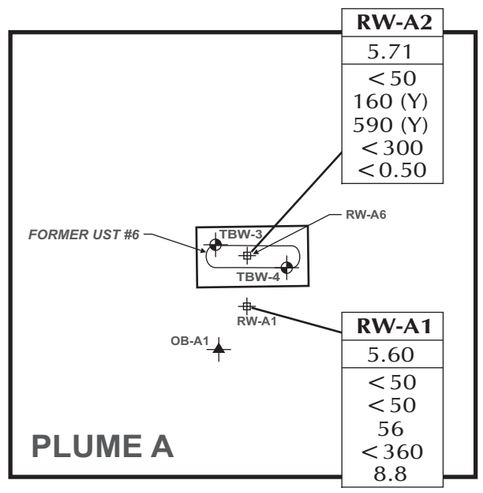
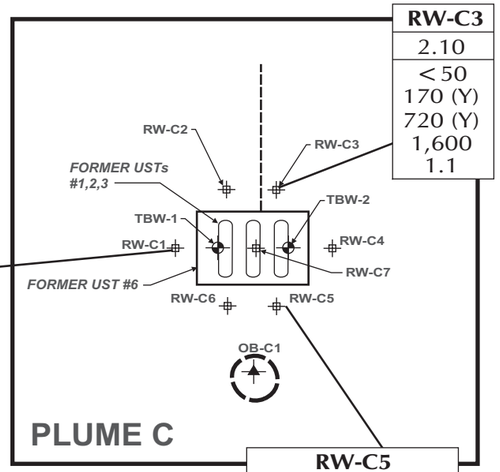
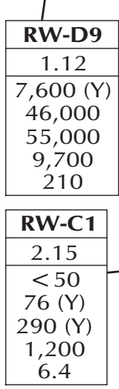
Figure 2

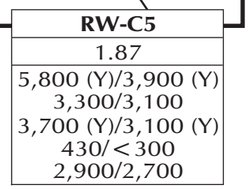
I:\Design\001\09225\11\000\dwg\GW Elev November 2008.dwg Feb 04,2009-2:28pm

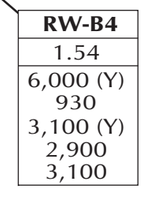


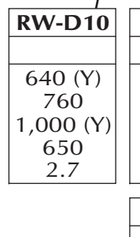












EXPLANATION

- RW-D1 — EXTRACTION WELL LOCATION
- RW-A1 — TEST/OBSERVATION WELL LOCATION
- OB-A1 — OBSERVATION WELL LOCATION
- MW-A6 — MONITORING WELL LOCATION
- RW-1 — REMEDIATION WELL LOCATION
- TBW-1 — TANK BACKFILL WELL
- FENCE
- FORMER UNDERGROUND PIPING
- AREA OF SPH ON GROUNDWATER (DASHED WHERE INFERRED)

* 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

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 (µg/L)

TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
TPHk	TOTAL PETROLEUM HYDROCARBONS AS KEROSENE
TPHd	TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPHmo	TOTAL PETROLEUM HYDROCARBONS AS MOTOR OIL
B	BENZENE
Y	SAMPLE EXHIBITS CHROMATOGRAPHIC PATTERN THAT DOES NOT RESEMBLE STANDARD

0 50 100

APPROXIMATE SCALE IN FEET

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

DESIGN\001\09225\11\000\09225 Plume Detail rev4.CDR

Detail Plume Map with Hydrocarbon Concentrations November 2008

Municipal Service Center, 7101 Edgewater Drive, Oakland, California

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Figure 3

APPENDIX A

City of Oakland MSC Schedule and Protocol

Table A: Revised Well Sampling Schedule and Protocol

City of Oakland Municipal Service Center

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

Notes:

gauge only = measure groundwater elevation and floating product thickness only

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

APPENDIX B

Groundwater Sampling Field Data Sheets

LFR LEVINE • FRICKE

WATER-LEVEL MEASUREMENTS LOG

Project No. 028-10060-00-*** Date 11/18/08 Page 1 of ___

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

Field Personnel Michael Sullivan and Sharon Terwilliger

General Observations

Time Measured

WELL NO.	~~WELL~~ ELEVATION	DEPTH TO WATER 1	DEPTH TO WATER 2	~~Open WATER~~ ELEVATION	WELL SECURE? Y	WELL SECURE? N	Depth to Product ~~Time Measured~~ REMARKS (UNITS = FEET)
RW-D4	911	9.10	9.10	—	X		—
RW-D5	915	9.45	9.45	—	X		—
TWB-5	1426	9.32	9.32	920	X		~~TSB~~
OBD 1	1429	8.41	8.41	915	X		
OBD 2	1432	8.94	8.94	910	X		
RW-D8	928	8.48	8.48		X		
RW-D1	1486	8.81	8.81	925	X		~~925~~
RW-D7	940	9.62	9.62	—	X		—
RW-D3	1410	10.10	10.10	1000			
RW-D11	1010	8.66	8.66	—	X		
RW-D10	1012	8.84	8.84	—	X		
RW-D9	955	9.70	9.70	—	X		
RW-D2	1414	10.95	10.95	950	X		
RW-D1				945			
RW-D6	1417	~~11.10~~	~~11.10~~	—	—	—	~~Pipe Connected~~ ~1000 Pipe Rem/Left Open
OB-C1	1400	0.57	8.57	1015	X		Bi.54 Product 0.05 in Bailer
RW-C4	1530	8.99	8.99	1020	X		
RW-C1	1535	8.29	8.29	1025	X		
~~PBW-2~~				~~1040~~			
RW-C7	1532	8.97	8.97	1040	X		~~Dry~~
RW-C5 ~~RW-C11~~	1543	8.92	8.92	1032			~~Dry~~ oder, No in Bailer
RW-C8	1520	9.38	9.38	1045	X		—
RW-C3	1522	8.61	8.61	1050	X		
RW-C6	1538	8.42	8.42	1030	X		oder but no product, smells Anoxic
RW-B4	1344	9.75	9.75	1100	X		
RW-B3	1346	9.57	9.57	1050	X		
RW-B2	1349	7.92	7.92	1055	X		
RW-B1	1351	7.90	7.90	1058	X		
MW-6	1355	6.16	6.16	1102	X		
OB-A1	1357	5.31	5.31	1103	X		
RW-A1	1359	4.49	4.49	1104	X		
RW-A2	1401	3.96	3.96	1105	X		

LFR LEVINE•FRICKE — WATER-LEVEL MEASUREMENTS LOG

Project No. 028-10060-00-*** Date 11/18/08 Page 2 of 2

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

Field Personnel Michael Sullivan and Sharon Terwilliger

General Observations

Measured

WELL NO.	~~WELL ELEVATION~~	DEPTH TO WATER 1	DEPTH TO WATER 2	~~WATER ELEVATION~~ Depth to product	WELL SECURE? Y	WELL SECURE? N	opened	REMARKS (UNITS = FEET)
MW-8	1132	9.58	9.58	—	X		800	
MW-17	1137	9.53	9.53	—	X		805	
MW-16	1140	12.33	12.33	—	X		810	TD=1301 0/3 bolts 4/16
MW-15	1142	10.28	10.28	—	X		815	2/3 bolts 11
MW-9	1145	8.63	8.63	—	X		820	
MW-14	1152	8.45	8.45	—	X		825	2/3 bolts
MW-13	1156	10.41	10.41	—	X		830	9/3 bolts
MW-10	1201	9.55	9.55	—	X		835	
MW-2	1210	11.07	11.07	—	X		845	
MW-1	1304	5.48	5.48	—	X		855	
MW-12	8.27 1304	1309	8.27	—	X		900	DK material on probe - no im fp No Prod in casing
MW-11	1337	7.00	7.00		X		1112	
MW-5	1334	6.51	6.51	—	X		1106	
MW-7	1329 1342	7.40	7.40	—	X		1109	~~opened well bolts~~
TBW-6	~~1325~~	5.33	~~5.33~~ 5.32	~~1325~~	X		1325	No pad in probe (removed) +TBW #4

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WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/21/08 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: ____ Sample No.: MW-1 ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ___

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

Well No. MW-1 Depth of Water 5.60

Well Diameter: 2" Well Depth 15.69

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

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.6144

80% DTW 7.62

10.09 × .2 = 2.018 + 5.60 = 7.618

10.09 × .16 = 6054 + 10090 = 1.6144

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1050			2	0.81	20.73	6.68	13233	-153.1	~~1 gal~~
1055		15.33	3		~ dewatered				
1111		9.99							
~~1215~~									
1220		8.09		Sample					

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/21/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: MW-5 ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP ___

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-5 Depth of Water 6.51

Well Diameter: 2" Well Depth 14.28

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 7.77

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.24

80% DTW 8.06

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1040					Start				
1044			1.5	2.87	19.94	7.15	2302	25.5	
1046			3	3.06	20.57	6.91	2604	29.7	
1049			4.5	3.95	20.0	6.77	3687	33.2	
1050			5.75	~~2.81~~	20.92	6.84	2952	26.3	DO 2.75
1052			7	3.40	20.69	6.75	3416	29.1	
1055		6.57			Sample				

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/21/08 Page 1 of 1

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: S Terwilliger Sample No.: MW-6 ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ☒ Hand

Well No. MW-6 Depth of Water 6.06

Well Diameter: 2 Well Depth 14.12

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.06

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.29

8.06
x .2
1.612
6.06
7.67

80% DTW 7.67

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
808			1.5	2.07	18.43	6.81	3968	-80.6	
812			2.75	1.70	19.08	6.78	4097	-59.3	
815			4	1.92	19.08	6.86	4153	-31.3	
818			5.25						
821		12.12	6.5	5.95	18.43	6.78	4191	5.5	Silty - Starting to clear out
828			7.25	7.51	19.01	6.81	4271	19.0	
858		8.2							
918		7.65		2 Samples		2			

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of 1

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☑ Hand _____

Well No. MW-8 Depth of Water 9.60

Well Diameter: 2" Well Depth ~~9~~ 15.17

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 5.57

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.892

5.57 × .20 = 1.114

9.60 + 1.11

80% DTW 10.71

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1025		9.60	Start						
1034			1	2.48	18.95	7.38	50406	18.2	
1039			2	2.14	19.47	7.19	50757	30.6	
1042			3	2.66	19.20	7.16	50495	30.8	
1046			4	4.28	18.85	7.19	50050	31.0	
1050		13.95	4.5			Low Flow			
1450		9.80				Sample			

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/21/08 Page 1 of 1

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: EMW Sample No.: ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ☒ Hand

Well No. MW-9 Depth of Water 9.172

Well Diameter: 2 Well Depth 14.43

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 5.71

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.91

MW-9-FB 1130

1142 9.72

80% DTW 9.86

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
									conduct
DUP 1250			1	0.66	20.3	6.71	36629	-170.2	36629
1251			2	0.68	19.91	6.86	36872	-188.0	
1253			3	0.73	19.79	6.90	35416	-207.4	plad
1255			4	0.62	19.97	6.89	34333	-250.4	
1257			5	0.69	19.94	6.93	33666	-244.7	
1300		[redacted]	6	0.71	19.80	6.92	32271	-244.3	grey, odor
1302		9.79		~Sample					

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: MW-10 ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-10 Depth of Water 9.52

Well Diameter: 2" Well Depth 15.16

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 5.64

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.90

80% DTW 10.65

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1515				Start					
1517			1	1.45	19.64	7.36	12590	-37.1	
1522			2	0.43	19.80	7.18	11556	-37.7	
1524			3.25	0.35	19.72	7.19	11025	-43.4	
1531		4	2.65	~~2.62~~	19.62	7.13	10106	-14.6	
1534		±	5	1.85	20.00	7.03	9978	-14.5	
1539			6	1.50	19.96	6.96	11568	-20.7	
1543		11.70	7	2.15	19.36	6.96	10300	-31.2	
1550		10.32			Sample				
1555	Dup								
					Reading Could be influenced by tide				

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/21/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP ___

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-12 Depth of Water 6.26

Well Diameter: 2 Well Depth 14.45

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.19

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.98

80% DTW 9.51

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
0954			1	0.45	18.31	7.18	7760	-110.1	
1001			2	0.54	18.61	7.40	8082	-131.0	
1004			3	0.54	18.48	7.46	7935	-134.4	
1006		~~6.51~~ 4		0.50	19.24	7.43	~~7886~~		-135.1
1010		8.51			Sample				
								-7886	

Continue remarks on reverse, if needed.

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/21/08 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: ____ Sample No.: MW-13 ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ____

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

Well No. MW-13 Depth of Water 10.70

Well Diameter: 2 Well Depth 19.58

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.88

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

80% DTW 12.48

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1355				Start					
1358			1.5	0.88	19.20	7.40	14194	-154.9	brown,
1401			3 0.37 ~~0.43~~		19.49	7.19	15926	-201.9	grey/brown
1404			4.5	0.47	19.87	7.05	16264	-198.5	
1407			6 0.22 ~~0.39~~		18287	7.06	16000	-166.6	
1411			7.5	0.54	19.28	6.99	16476	-167.5	
1414		14.15	9	0.66	19.04	6.99	16406	-152.6	
1420		12.31		Sample					

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/21/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP ___

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-14 Depth of Water 8.44

Well Diameter: 2 Well Depth 14.62

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 6.18

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.98

80% DTW 9.68

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1320		start							
1323			1	0.66	19.91	7.47	24996	-275.0	black/grey
1326			2.25	0.74	19.84	7.57	23940	-264.1	black/grey
1329			3.25	0.34	19.91	7.63	20271	-346.6	" "
1331			4.25	0.44	19.82	7.70	19364	-354.1	" "
1333			5.25	0.54	19.85	7.71	18588	-369.2	grey
1335		9.76	6.25	0.54	19.70	7.76	17768	-354.7	grey
1340		9.49			Sample				

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of 1

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: ST-Shannon Trundlyer Sample No.: ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ☒ Hand

Well No. MW-1S Depth of Water 10.31

Well Diameter: 2" Well Depth 20.32

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 10.01

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

80% DTW 12.30

10.01 × 0.16 = 1.6016

10.01 × 2 = 20.02

6 0 0 6

1 0 0 1 0

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1125			2	1.05	19.30	7.65	15767	-88.2	
1130			3.5	0.42	18.63	7.46	15387	-117.5	
1135			5	0.41	18.88	7.38	15182	-121.3	
1140			6.5	0.49	18.74	7.37	15316	-123.4	
1144		10.44							
1148	~Sample~								
									2 3/60ml's preserved none
									Screw in

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP ___

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-16 Depth of Water 12.24

Well Diameter: 2" Well Depth 13.05

☒ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 0.81

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 0.13

80% DTW 12.40

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1038		12.24							
1040	~0.13			0.13	19.32	8.70	16835	-211.9	
	@ 1040		well	dewatered,	collected	~	1	reading	
1445		12.36		Sample					

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. MW-17 Depth of Water 9.14

Well Diameter: 2 Well Depth 17.42

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.28

☐ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.32

FB - MW-17-FB
1050
8.28 9.14
.20 1.65
16 56 10.79
80% DTW 10.79

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1109									
1114			1.5	0.15	19.29	8.69	41859	-243.5	
1119			3	0.13	18.68	8.88	42870	-259.0	
1122				0.10	19.03	8.41	42652	-220	
1124					~~19.51~~	~~8.37~~	~~42469~~	~~-201.4~~	
1127				1.47	18.33	8.04	42967	-144.1	
1133				1.65	18.30	8.16	43143	-246.4	
1140				0.89	18.89	8.64	42844	-255.9	
1142				0.44	18.87	8.89	44197	-281.2	
1146		9.38		1.56	19.01	8.61	42982	-247.8	
1150		Sample							

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/20/08 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: ____ Sample No.: ____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ____

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

Well No. RW-A1 Depth of Water 4.60

Well Diameter: 4" Well Depth 14.50

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 9.90

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 6.435

1.98

80% DTW 6.58

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1540						Start			
1547		10.49	6.5	0.85	19.06	6.88	1771	-30.9	
1615		13.20 ~~Recovered~~							
1650		Dewatered @ ~11 gal							
		5.79 11/21/08 @ 90%							
910		Sample							

Continue remarks on reverse, if needed.

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/20/08 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: ____ Sample No.: ____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

Well No. RW-A2 Depth of Water 3.97

Well Diameter: 4" Well Depth 13.30

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 9.33

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 6.0645

1.846

80% DTW 5.836

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	cond / ORP Remarks
755		4.00			Pump				
		Pump	R1996	because	clogged,	going	to	bail	
830			6	1.68	16.53	6.73			1027 / 119.2
845			12	1.65	17.45	6.70	969	114	969 / 114.4
950			18	1.29	18.72	6.70			956 / 103.5
856			24	1.26	19.31	6.70			955 / 97.8
900			30	1.46	19.33	6.72			954 / 92.0
905		4.00							Sample

Continue remarks on reverse, if needed.

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/20/08 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: Erica W Sample No.: ____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ____

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By: ☐ Courier ☒ Hand

Well No. RW-B2 Depth of Water 7.98

Well Diameter: 4 Well Depth 14.15

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 6.17

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 4.01

80% DTW 9.21

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1304		7.91	Start						
1335		10.21	4	21.95	23.21	6.76	2750	95.8	
1350		10.44	8	16.02	~~19.94~~	6.94	3618	23.3	Temp 23.38
1404		12.00	12	17.44	23.14	6.90	4227	27.0	
1405		Generator Empty -							
1436		Start again							
1440			16	9.36	23.36	7.27	3947	11.4	
			18.5	~~Start~~	~~Stop~~	~~Overhead~~			
1449			20	14.19	22.86	6.99	4394	14.5	
1506			24	13.81	22.96	7.00	4536	14.6	
1516		11.22	28	10.07	22.88	7.51	4632	10.9	
1524		9.13							
1527		~ Sample ~							

Continue remarks on reverse, if needed

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/20/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: S Terrillegar Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. RW-B4D Depth of Water 9.44

Well Diameter: _____ Well Depth 13.90

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 4.06

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.63

80% DTW _____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C).	ORP (mV)	Remarks
1314			3	1.15	20.68	6.82	12672	-74.8	
1318			5.5	1.08	20.58	6.63	12625	-63.3	
1322			8	0.93	20.52	6.79	12591	-71.2	
1331			10.5	1.14	20.39	6.79	12452	-65.6	
1335			13	0.81	20.36	6.76	12421	-64.7	
1346			15.5	0.90	20.25	6.76	12360	-63.9	
1352			18	1.19	20.20	6.76	12335	-62.2	
1355		9.93	~Sample	~					

Continue remarks on reverse, if needed.

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/2010 8 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: ____ Sample No.: ____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ____

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

Well No. RW-C1 Depth of Water 6.33

Well Diameter: 4" Well Depth 14.34

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 8.01

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 5.206

FB 1605

8.01 .20 .8020 — 6.33 .80 5.13

80% DTW ____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
~~836~~			Start						
0945			2	0.67	19.09	5.78	22219	-33.1	
956		11.3	4.5	1.27	20.3	5.89	24657	~~-206~~	-46.1
923		13.55	6	0.42	20.52	5.67	23159	-16.5	
925			well	dry >	1ft	water,	wait to	see if	
			well will	recharge	fast.				
931		well recharging slowly Pulling pump & will							
~~936~~		bail rest							
936		well dewatered							
1139		13.08							
~~1147~~	13.00								
~~1200~~	1620	Sample							

Continue remarks on reverse, if nee

LFR LEVINE • FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/20108 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: Erica W Sample No.: ____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ____

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

14.34 − 8.63 = 5.71; 5.71 × .17 = 0.97

Well No. RW-C3 Depth of Water 8.63

Well Diameter: ~~2~~ 4 Well Depth 14.34

~~☒~~ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 5.71

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 3 × 5.71 = 17.13 (15 ~~bailed~~)

80% DTW 9.77

8.63 + 3.46 = 12.09

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1036		8.46	pump in						
1048		well is	drawing down						
1108		9.88	~1.5	1.485	23.62	6.66	10632	73.2	
1117		11.14	3.75	7.65	22.48	~~7.01~~ 6.63	12305	76.0	
1124		13.39		pump not able to bring up more water Lift					
		will	bail dest						
1134		well dry, wait for recharge							
1634	11.93								
1640		sample							

MSC_frm-

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/20/08 Page 1 of 1

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: S Terrillion Sample No.: ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ☒ Hand

Well No. RW-65 0900 Depth of Water 8.93

Well Diameter: 4" Well Depth 13.90

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 4.97

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 3.23

4.97 × .2 = 994 → 8.93 → 9.92

80% DTW = 9.92

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Spec Cond (uS/cm C)	ORP (mV)	Remarks
920			3.25	10.93	21.51	6.76	10.[illegible]	-167.4	10.66
927			6.5	2.15	21.34	6.66	10.05	-124.1	
934			9.75	0.40	21.89	6.76	10.27	-131.9	
945			13	1.72	20.88	6.85	10.18	-91.8	Spec Cond ms/cm 11050
955			16.25	0.86	21.09	6.82	10.25	-101.2	11089
1003			19.5	0.35	21.61	6.85	10.50	-117.4	11234
1008				1.84	21.49	6.85	10.62	-93.4	11393
1015		8.94		~ Sample					
1020				~ Dup					

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: ____ Sample No.: ____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ____

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

Well No. RW-D1 Depth of Water 11.29

Well Diameter: 4" Well Depth 14.29

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 3

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 1.95

80% DTW 11.89

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
~~917~~	11/17/08	Well	Pump			removed			
11/19/08 917		11.29			Start	Purge			
920		11.29	2	0.12	23.26	7.76	2698	-88.9	
925		Sample							

Continue remarks on reverse, if needed.

LFR LEVINE-FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. RW-D4 Depth of Water 9.03

Well Diameter: 4" Well Depth 12.90

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 3.87

☒ 4" (0.65 gal/feet) ☐ 6" (1.47 gal/feet) Well Volume 2.51

80% DTW 9.40

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
850		9.03	11/17/08		well Pump removed				Start well
902		12.25	>2.5	0.18	21.99	6.97	32335	-153.3	
					Wait for recharge				
1305		11.68		Sample			[NP]		

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/19/08 Page 1 of _____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: _____ Sample No.: _____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: _____ ☐ DUP

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: _____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier _____ ☒ Hand _____

Well No. RW-D7 Depth of Water 9.62

Well Diameter: 6" Well Depth 20.11

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 10.49

☐ 4" (0.65 gal/feet) ☒ 6" (1.47 gal/feet) Well Volume 15.42

80% DTW 11.72

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
11/17/08	Well Pump was Removed								
11/19/08		15.65	~15.5	1.21	32.23	6.55	28776	-73.9	
↓ 1405		15.16					Sample		

Continue remarks on reverse, if needed.

LFR LEVINE•FRICKE

WATER-QUALITY SAMPLING LOG

Project No. 028-10060-00-*** Date: 11/18/08 Page 1 of ____

Project Name: MSC Oakland Edgewater Sampling Location: 7101 Edgewater Drive, Oakland, Ca

Sampler's Name: Mikis Sample No.: ____ ☐ FB

Sampling Plan By: DCR Dated: 11/12/08 C.O.C. No.: ____ ☐ DUP ____

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

Purge Water Storage Container Type: 55 gallon drum Storage Location: On-site

Date Purge Water Disposed: ____ Where Disposed: On-site

Analyses Requested	No. and Type of Bottles Used
TPHg / BTEX / MTBE by 8260	3 VOAs with HCl preservative
TPHd / TPHmo / TPHk by 8010 with silica gel clean-up	1 Liter Amber

Lab Name: Curtis and Tompkins

Delivery By ☐ Courier ____ ☒ Hand ____

Well No. RW-D10 Depth of Water 8.84

Well Diameter: 6" Well Depth 19.40

☐ 2" (0.16 gal/feet) ☐ 5" (1.02 gal/feet) Water Column Height 10.56

☐ 4" (0.65 gal/feet) ☒ 6" (1.47 gal/feet) Well Volume 15.52

80% DTW ____

Time	Inlet Depth	Depth to Water	Volume Purged (gal)	DO (mg/L)	Temperature (C°)	PH (SU)	Cond (uS/cm C)	ORP (mV)	Remarks
1539			4	0.82	22.89	7.05	18337	-59.3	
1553			8	1.03	22.87	6.98	18217	-61.9	
1608			12	1.60	23.14	7.08	18829	-59.3	
1620			16	1.17	23.03	7.01	1860	-64.6	Sample
1630									

*Pump Removal 11/17/08

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 207988
ANALYTICAL REPORT

LFR Levine Fricke	Project : 028-10060-00
1900 Powell Street	Location : Oakland MSC
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
TB-111808	207988-001
RW-D10	207988-002
MW-8	207988-003
MW-17-FB	207988-004
MW-17	207988-005
MW-16	207988-006
RW-D1	207988-007
RW-D4	207988-008
RW-D7	207988-009
MW-15	207988-010
MW-10	207988-011
MW-10D	207988-012

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. This report may be reproduced only in its entirety.

Signature: _____ Date: 12/15/2008
Project Manager

Signature: _____ Date: 12/15/2008
Senior Program Manager

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**207988**
Client:	**LFR Levine Fricke**
Project:	**028-10060-00**
Location:	**Oakland MSC**
Request Date:	**11/19/08**
Samples Received:	**11/19/08**

This data package contains sample and QC results for eleven water samples, requested for the above referenced project on 11/19/08. The samples were received cold and intact. All data were e-mailed to Daren Roth on 12/09/08.

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

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recoveries were observed for bromofluorobenzene in the method blank for batch 145309, the method blank for batch 145369, and the method blanks for batch 145422; no target analytes were detected in these samples. RW-D4 (lab # 207988-008) had pH greater than 2. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Received:	11/19/08
Units:	ug/L	Prepared:	12/01/08
Batch#:	145494		

Field ID:	RW-D10	Sampled:	11/18/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	207988-002	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

Analyte	Result	RL
Kerosene C10-C16	760	50
Diesel C10-C24	1,000 Y	50
Motor Oil C24-C36	650	300

Surrogate	%REC	Limits
Hexacosane	105	58-127

Field ID:	MW-8	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	207988-003	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Hexacosane	86	58-127

Field ID:	MW-17-FB	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	207988-004	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Hexacosane	98	58-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Received:	11/19/08
Units:	ug/L	Prepared:	12/01/08
Batch#:	145494		

Field ID:	MW-17	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/06/08
Lab ID:	207988-005	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Hexacosane	115	58-127

Field ID:	MW-16	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	207988-006	Cleanup Method:	EPA 3630C
Diln Fac:	25.00		

Analyte	Result	RL
Kerosene C10-C16	31,000	1,300
Diesel C10-C24	52,000 Y	1,300
Motor Oil C24-C36	110,000	7,500

Surrogate	%REC	Limits
Hexacosane	DO	58-127

Field ID:	RW-D1	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	207988-007	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

Analyte	Result	RL
Kerosene C10-C16	9,400	50
Diesel C10-C24	11,000 Y	50
Motor Oil C24-C36	4,900	300

Surrogate	%REC	Limits
Hexacosane	99	58-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Received:	11/19/08
Units:	ug/L	Prepared:	12/01/08
Batch#:	145494		

Field ID:	RW-D4	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/09/08
Lab ID:	207988-008	Cleanup Method:	EPA 3630C
Diln Fac:	10.00		

Analyte	Result	RL
Kerosene C10-C16	46,000	500
Diesel C10-C24	55,000	500
Motor Oil C24-C36	9,700	3,000

Surrogate	%REC	Limits
Hexacosane	DO	58-127

Field ID:	RW-D7	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/06/08
Lab ID:	207988-009	Cleanup Method:	EPA 3630C
Diln Fac:	25.00		

Analyte	Result	RL
Kerosene C10-C16	43,000	1,300
Diesel C10-C24	54,000 Y	1,300
Motor Oil C24-C36	59,000	7,500

Surrogate	%REC	Limits
Hexacosane	DO	58-127

Field ID:	MW-15	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/06/08
Lab ID:	207988-010	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Hexacosane	104	58-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Received:	11/19/08
Units:	ug/L	Prepared:	12/01/08
Batch#:	145494		

Field ID:	MW-10	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/06/08
Lab ID:	207988-011	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Hexacosane	94	58-127

Field ID:	MW-10D	Sampled:	11/19/08
Type:	SAMPLE	Analyzed:	12/06/08
Lab ID:	207988-012	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Hexacosane	100	58-127

Type:	BLANK	Analyzed:	12/05/08
Lab ID:	QC473083	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Hexacosane	105	58-127

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

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	145494
Units:	ug/L	Prepared:	12/01/08
Diln Fac:	1.000	Analyzed:	12/04/08

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC473084

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,866	75	52-120

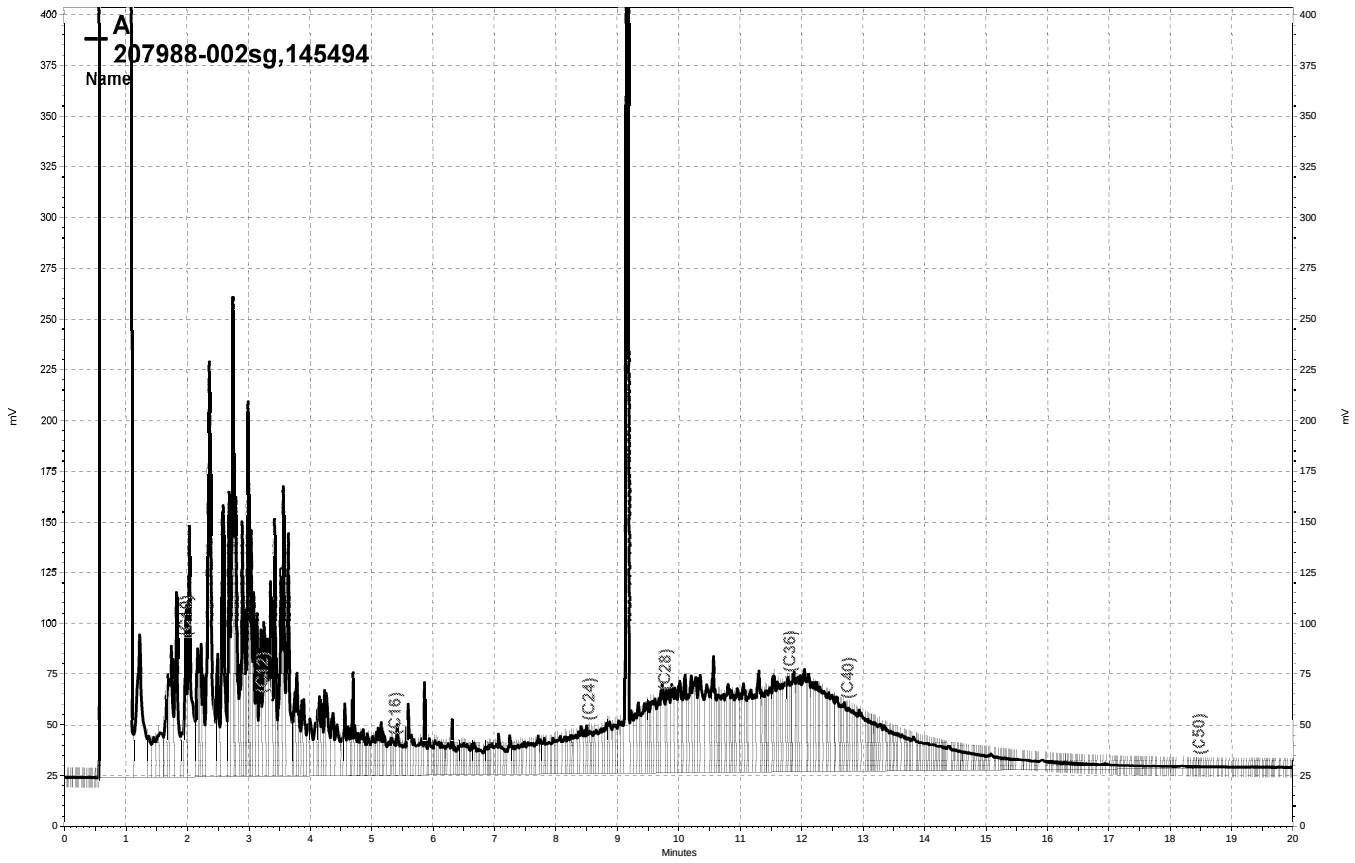
Surrogate	%REC	Limits
Hexacosane	96	58-127

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC473085

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,097	84	52-120	12	30

Surrogate	%REC	Limits
Hexacosane	106	58-127

RPD= Relative Percent Difference



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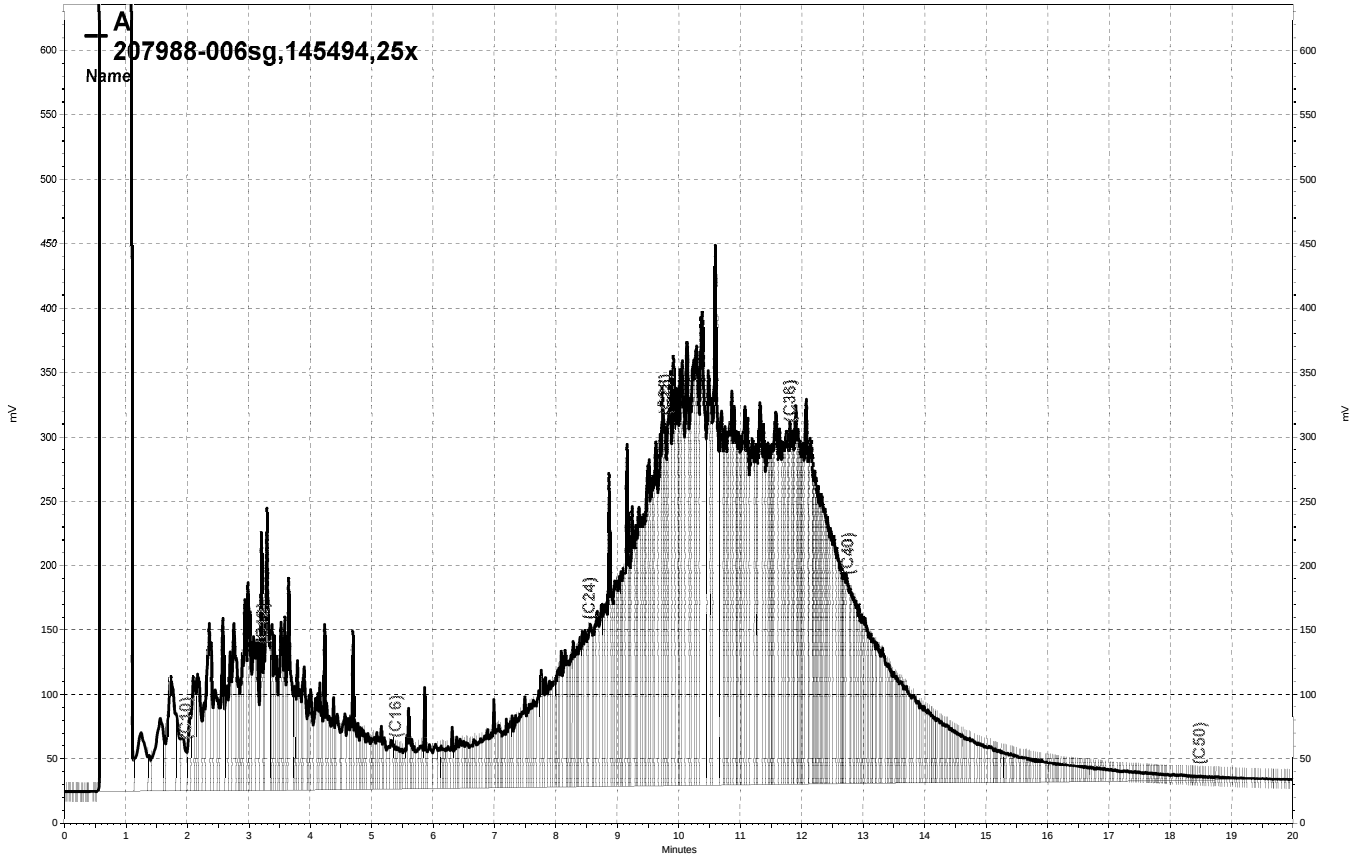

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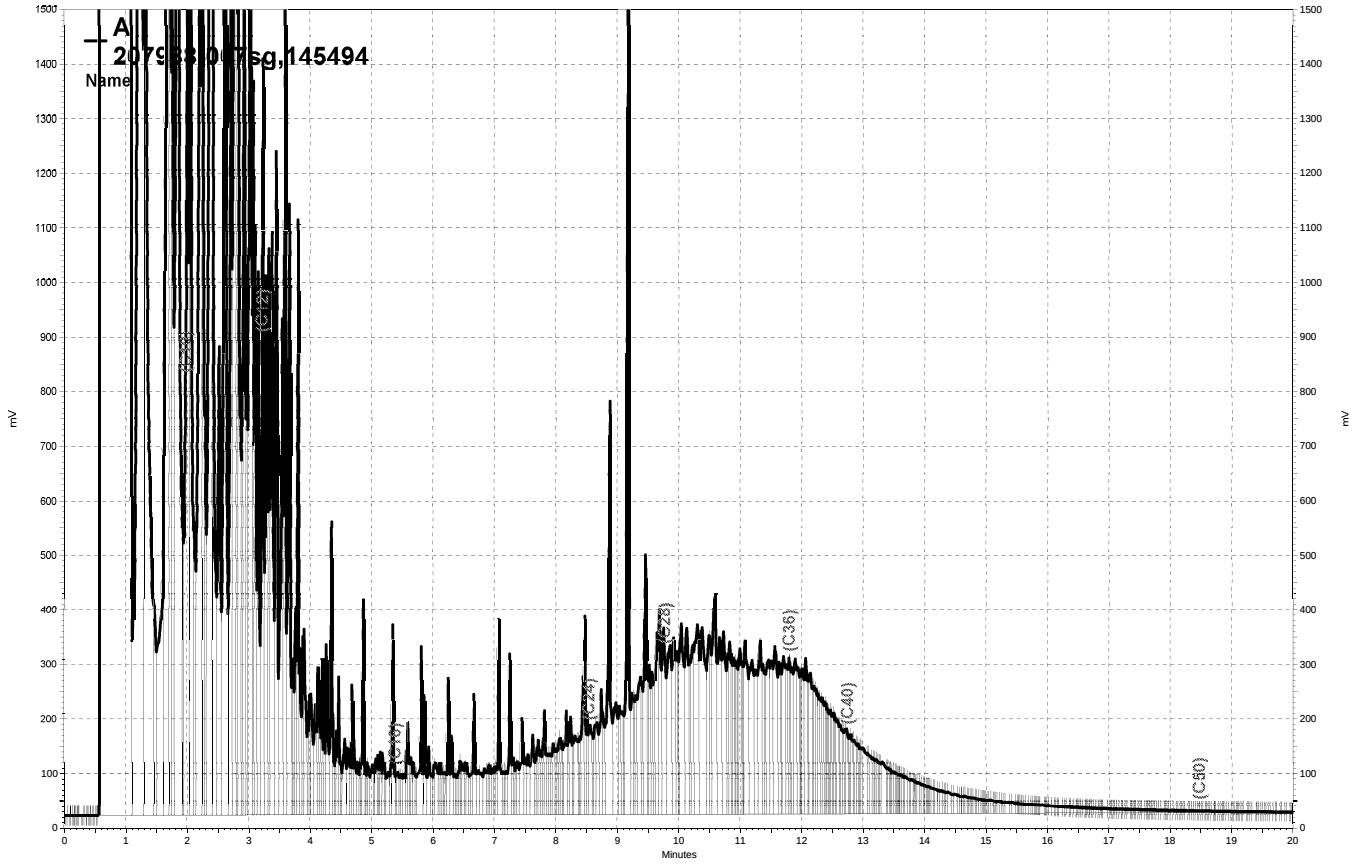

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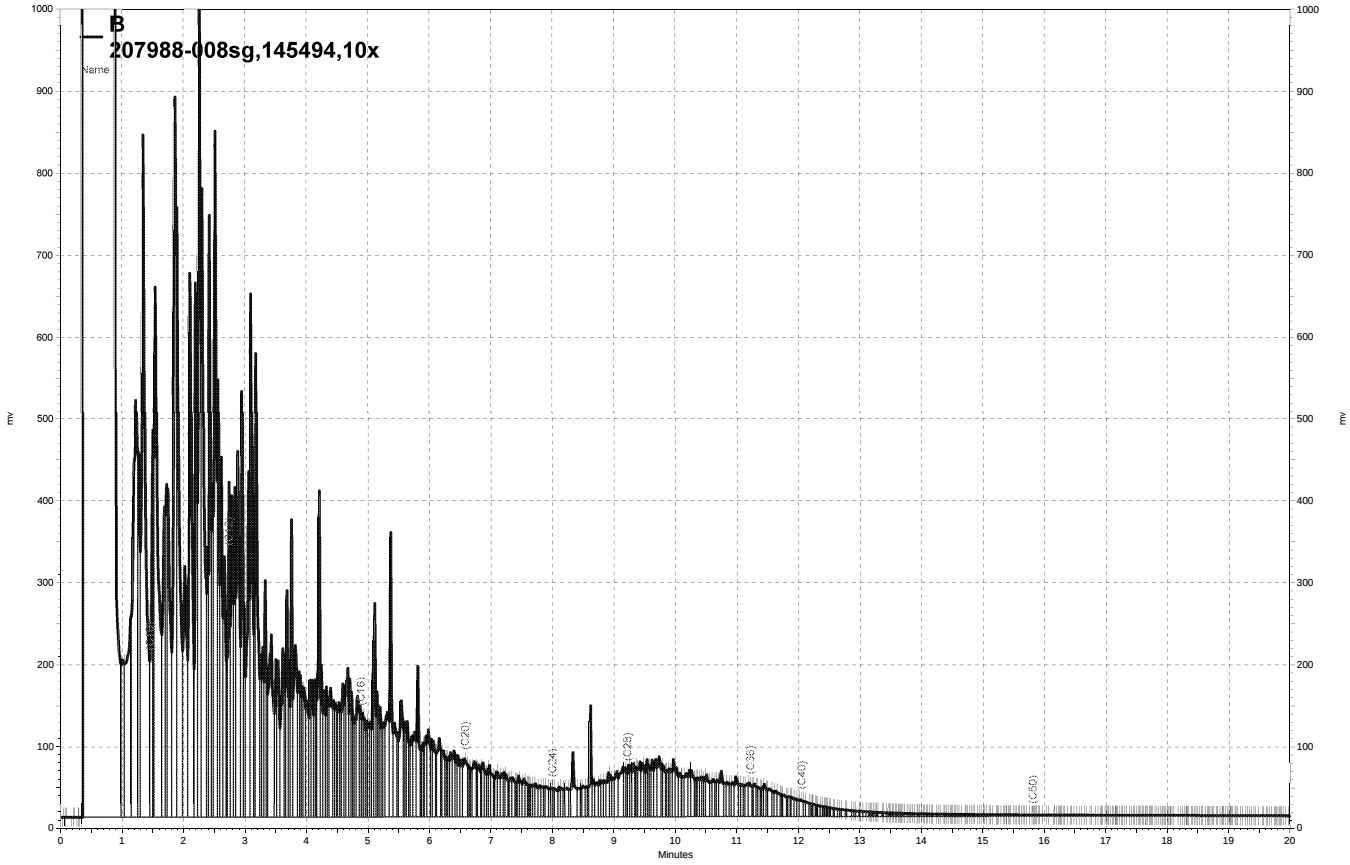

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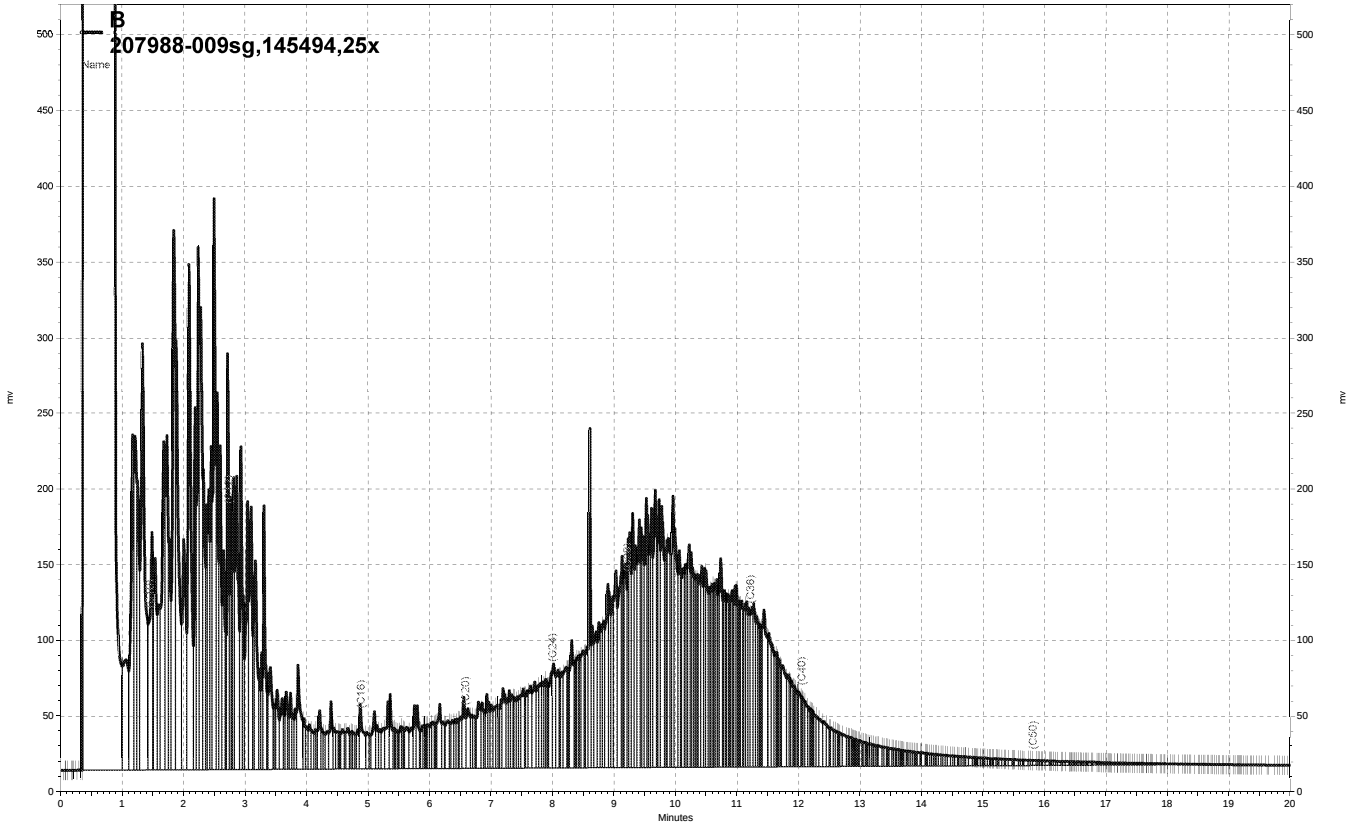

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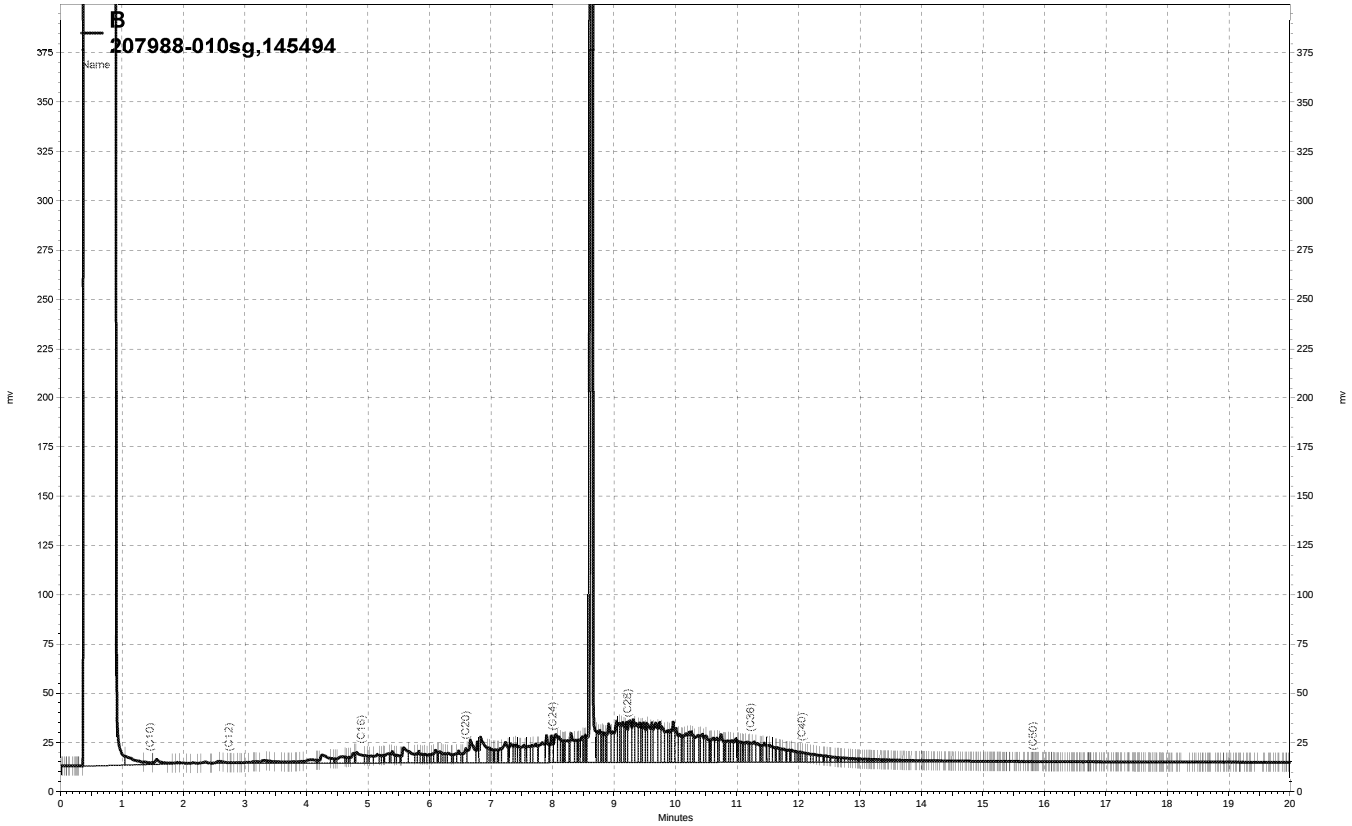

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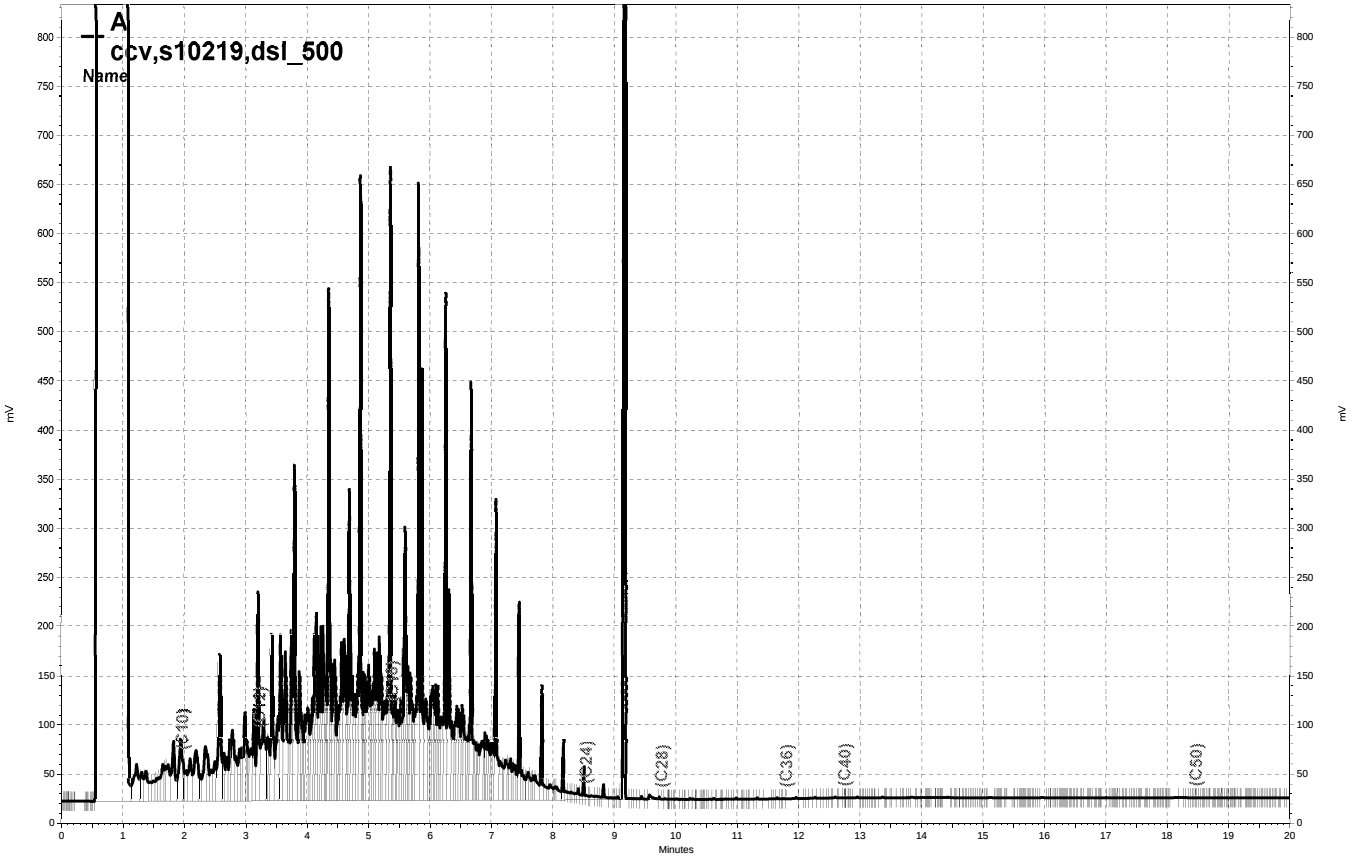

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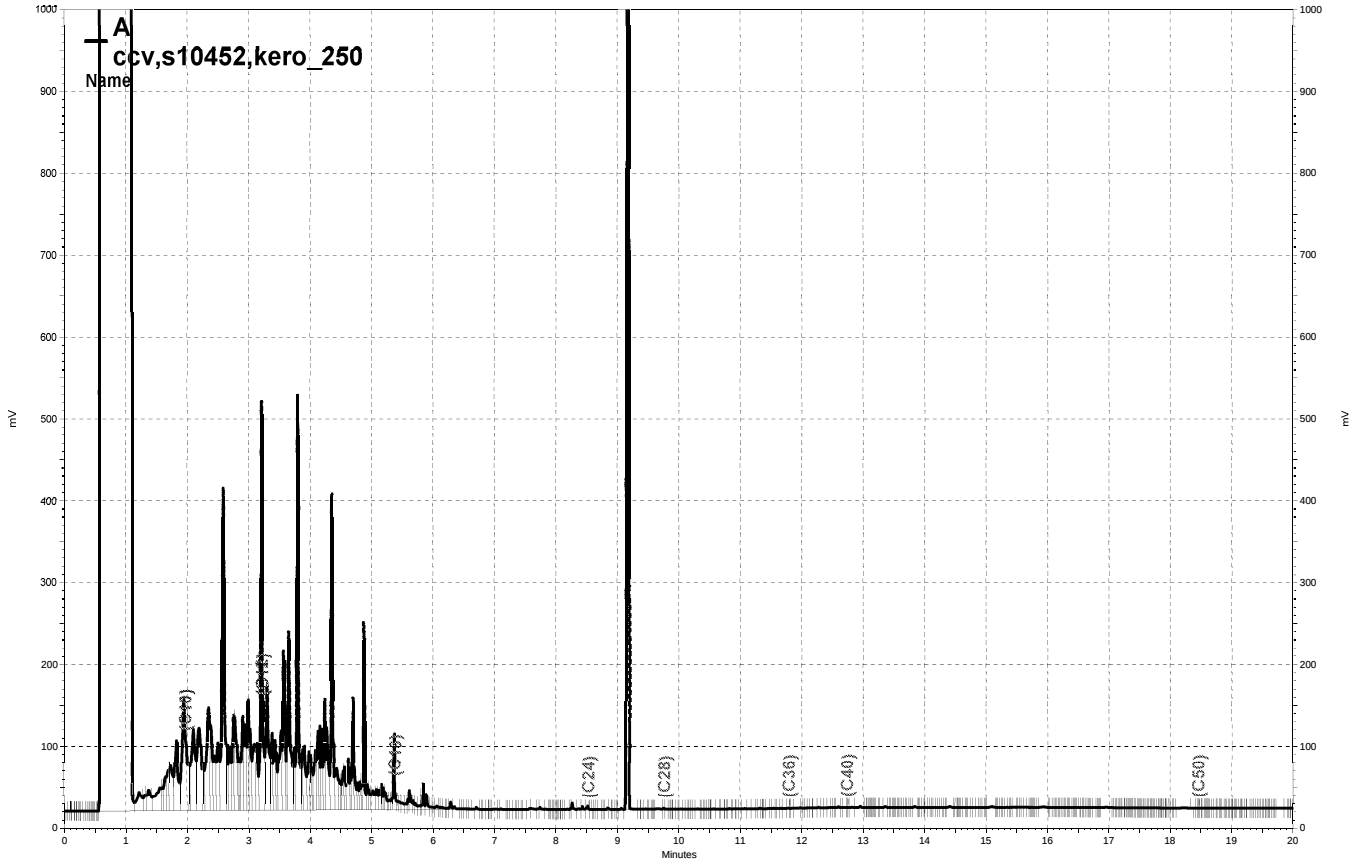

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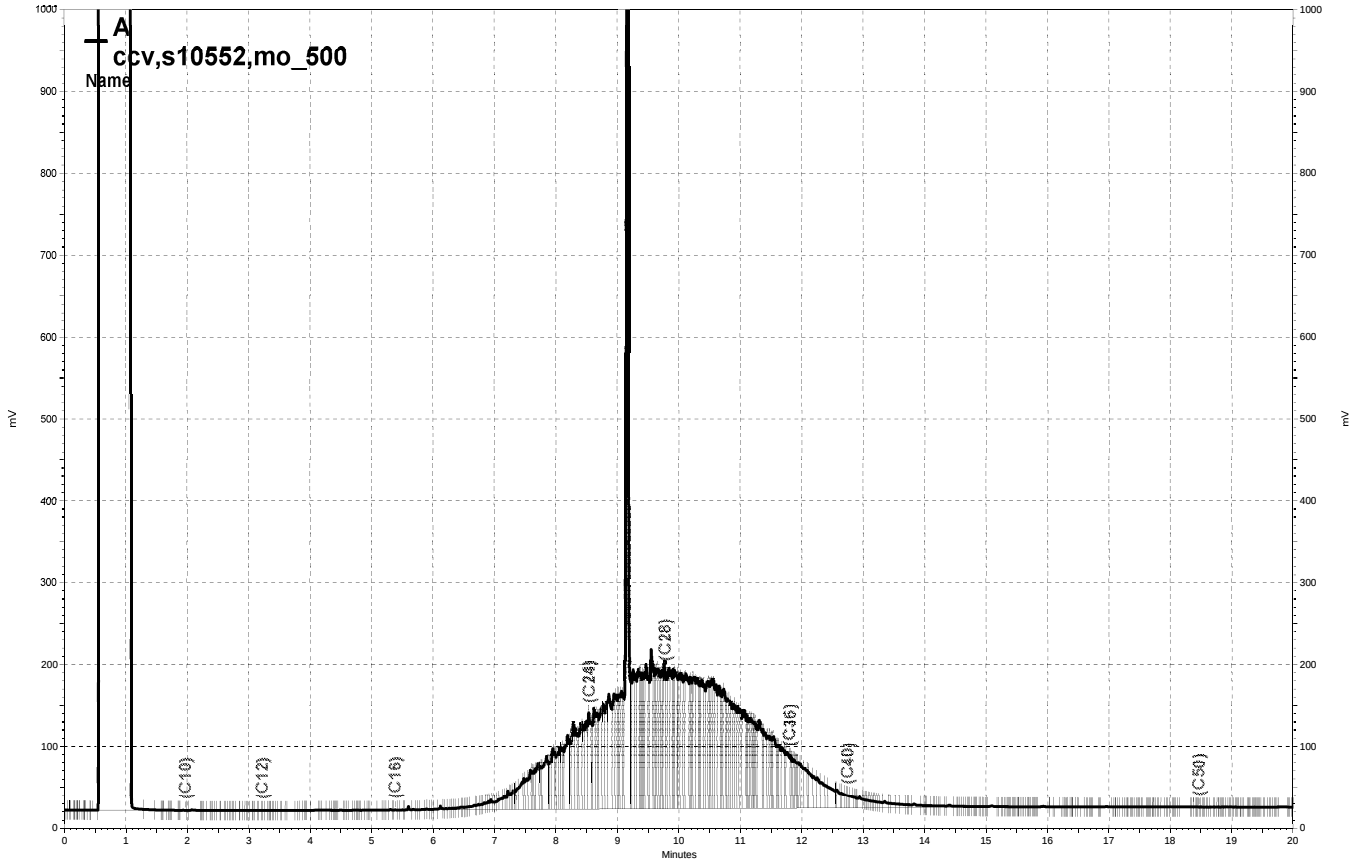

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Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Field ID:	RW-D10	Batch#:	145487
Type:	SAMPLE	Sampled:	11/18/08
Lab ID:	207988-002	Analyzed:	12/01/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	640 Y	50
MTBE	ND	0.50
Benzene	2.7	0.50
Toluene	0.69	0.50
Ethylbenzene	5.6	0.50
m,p-Xylenes	17	0.50
o-Xylene	0.71	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-122

Field ID:	MW-8	Batch#:	145309
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-003	Analyzed:	11/24/08
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	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	121	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Field ID:	MW-17-FB	Batch#:	145309
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-004	Analyzed:	11/24/08
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	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	122	80-122

Field ID:	MW-17	Batch#:	145309
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-005	Analyzed:	11/25/08
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	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	120	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Field ID:	MW-16	Batch#:	145561
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-006	Analyzed:	12/03/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	150 Y	50
MTBE	ND	0.50
Benzene	21	0.50
Toluene	1.7	0.50
Ethylbenzene	2.7	0.50
m,p-Xylenes	1.1	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	113	80-122

Field ID:	RW-D1	Batch#:	145422
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-007	Analyzed:	11/26/08
Diln Fac:	4.000		

Analyte	Result	RL
Gasoline C7-C12	5,100 Y	200
MTBE	ND	2.0
Benzene	270	2.0
Toluene	85	2.0
Ethylbenzene	150	2.0
m,p-Xylenes	470	2.0
o-Xylene	240	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	86	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Field ID:	RW-D4	Batch#:	145422
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-008	Analyzed:	11/26/08
Diln Fac:	3.333		

Analyte	Result	RL
Gasoline C7-C12	7,600 Y	170
MTBE	ND	1.7
Benzene	210	1.7
Toluene	17	1.7
Ethylbenzene	270	1.7
m,p-Xylenes	260	1.7
o-Xylene	20	1.7

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	93	80-122

Field ID:	RW-D7	Batch#:	145369
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-009	Analyzed:	11/25/08
Diln Fac:	6.250		

Analyte	Result	RL
Gasoline C7-C12	3,400	310
MTBE	ND	3.1
Benzene	100	3.1
Toluene	54	3.1
Ethylbenzene	13	3.1
m,p-Xylenes	430	3.1
o-Xylene	400	3.1

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	111	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Field ID:	MW-15	Batch#:	145309
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-010	Analyzed:	11/25/08
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	1.1	0.50
o-Xylene	0.68	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	121	80-122

Field ID:	MW-10	Batch#:	145309
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-011	Analyzed:	11/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	11	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	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	119	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Field ID:	MW-10D	Batch#:	145309
Type:	SAMPLE	Sampled:	11/19/08
Lab ID:	207988-012	Analyzed:	11/25/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	11	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	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	117	80-122

Type:	BLANK	Batch#:	145309
Lab ID:	QC472282	Analyzed:	11/24/08
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	98	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	123 *	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Type: BLANK
Lab ID: QC472283
Diln Fac: 1.000

Batch#: 145309
Analyzed: 11/24/08

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	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	122	80-122

Type: BLANK
Lab ID: QC472551
Diln Fac: 1.000

Batch#: 145369
Analyzed: 11/25/08

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	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	127 *	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Type: BLANK
Lab ID: QC472774
Diln Fac: 1.000

Batch#: 145422
Analyzed: 11/26/08

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	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	129 *	80-122

Type: BLANK
Lab ID: QC472775
Diln Fac: 1.000

Batch#: 145422
Analyzed: 11/26/08

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	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	126 *	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Type: BLANK
Lab ID: QC473035
Diln Fac: 1.000

Batch#: 145487
Analyzed: 12/01/08

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	96	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	118	80-122

Type: BLANK
Lab ID: QC473036
Diln Fac: 1.000

Batch#: 145487
Analyzed: 12/01/08

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	93	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	119	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Received:	11/19/08
Units:	ug/L		

Type: BLANK
Lab ID: QC473427
Diln Fac: 1.000

Batch#: 145561
Analyzed: 12/03/08

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

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	119	80-122

Type: BLANK
Lab ID: QC473428
Diln Fac: 1.000

Batch#: 145561
Analyzed: 12/03/08

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	93	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	114	80-122

*= Value outside of QC limits; see narrative
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 #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145309
Units:	ug/L	Analyzed:	11/24/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472284

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	19.57	98	70-125
Benzene	20.00	21.69	108	80-120
Toluene	20.00	20.05	100	80-120
Ethylbenzene	20.00	19.60	98	80-122
m,p-Xylenes	40.00	39.62	99	80-126
o-Xylene	20.00	20.09	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-122

Type: BSD Lab ID: QC472285

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.43	97	70-125	1	20
Benzene	20.00	21.06	105	80-120	3	20
Toluene	20.00	19.69	98	80-120	2	20
Ethylbenzene	20.00	19.62	98	80-122	0	20
m,p-Xylenes	40.00	38.94	97	80-126	2	20
o-Xylene	20.00	19.88	99	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145309
Units:	ug/L	Analyzed:	11/24/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472286

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	877.6	88	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC472287

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	858.0	86	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	109	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145369
Units:	ug/L	Analyzed:	11/25/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472553

Analyte	Spiked	Result	%REC	Limits
MTBE	22.50	22.05	98	70-125
Benzene	22.50	23.66	105	80-120
Toluene	22.50	22.28	99	80-120
Ethylbenzene	22.50	21.92	97	80-122
m,p-Xylenes	45.00	43.37	96	80-126
o-Xylene	22.50	21.88	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	106	80-122

Type: BSD Lab ID: QC472554

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	22.50	21.87	97	70-125	1	20
Benzene	22.50	22.79	101	80-120	4	20
Toluene	22.50	21.10	94	80-120	5	20
Ethylbenzene	22.50	20.74	92	80-122	6	20
m,p-Xylenes	45.00	41.12	91	80-126	5	20
o-Xylene	22.50	20.81	93	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	106	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145369
Units:	ug/L	Analyzed:	11/25/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472555

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	804.5	80	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	113	80-122

Type: BSD Lab ID: QC472556

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	840.0	84	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	113	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145422
Units:	ug/L	Analyzed:	11/26/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472776

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.58	94	70-125
Benzene	25.00	26.84	107	80-120
Toluene	25.00	25.71	103	80-120
Ethylbenzene	25.00	24.69	99	80-122
m,p-Xylenes	50.00	48.29	97	80-126
o-Xylene	25.00	24.60	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	107	80-122

Type: BSD Lab ID: QC472777

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.50	94	70-125	0	20
Benzene	25.00	25.17	101	80-120	6	20
Toluene	25.00	23.64	95	80-120	8	20
Ethylbenzene	25.00	23.38	94	80-122	5	20
m,p-Xylenes	50.00	45.95	92	80-126	5	20
o-Xylene	25.00	23.39	94	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	106	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145422
Units:	ug/L	Analyzed:	11/26/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472778

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	907.1	91	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-122

Type: BSD Lab ID: QC472779

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	855.1	86	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	111	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145487
Units:	ug/L	Analyzed:	12/01/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473037

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	17.61	88	70-125
Benzene	20.00	21.25	106	80-120
Toluene	20.00	20.04	100	80-120
Ethylbenzene	20.00	19.67	98	80-122
m,p-Xylenes	40.00	38.36	96	80-126
o-Xylene	20.00	19.30	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-122

Type: BSD Lab ID: QC473038

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	17.70	89	70-125	1	20
Benzene	20.00	20.75	104	80-120	2	20
Toluene	20.00	19.52	98	80-120	3	20
Ethylbenzene	20.00	19.05	95	80-122	3	20
m,p-Xylenes	40.00	37.98	95	80-126	1	20
o-Xylene	20.00	19.08	95	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145487
Units:	ug/L	Analyzed:	12/01/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473039

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	825.5	83	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	86	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC473040

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	853.4	85	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145561
Units:	ug/L	Analyzed:	12/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473429

Analyte	Spiked	Result	%REC	Limits
MTBE	22.50	19.34	86	70-125
Benzene	22.50	23.69	105	80-120
Toluene	22.50	22.45	100	80-120
Ethylbenzene	22.50	22.40	100	80-122
m,p-Xylenes	45.00	44.62	99	80-126
o-Xylene	22.50	22.66	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	84	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-122

Type: BSD Lab ID: QC473430

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	22.50	19.24	86	70-125	1	20
Benzene	22.50	23.76	106	80-120	0	20
Toluene	22.50	22.51	100	80-120	0	20
Ethylbenzene	22.50	21.87	97	80-122	2	20
m,p-Xylenes	45.00	43.68	97	80-126	2	20
o-Xylene	22.50	22.09	98	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	207988	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145561
Units:	ug/L	Analyzed:	12/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473431

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	972.7	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC473432

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	997.8	100	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-122

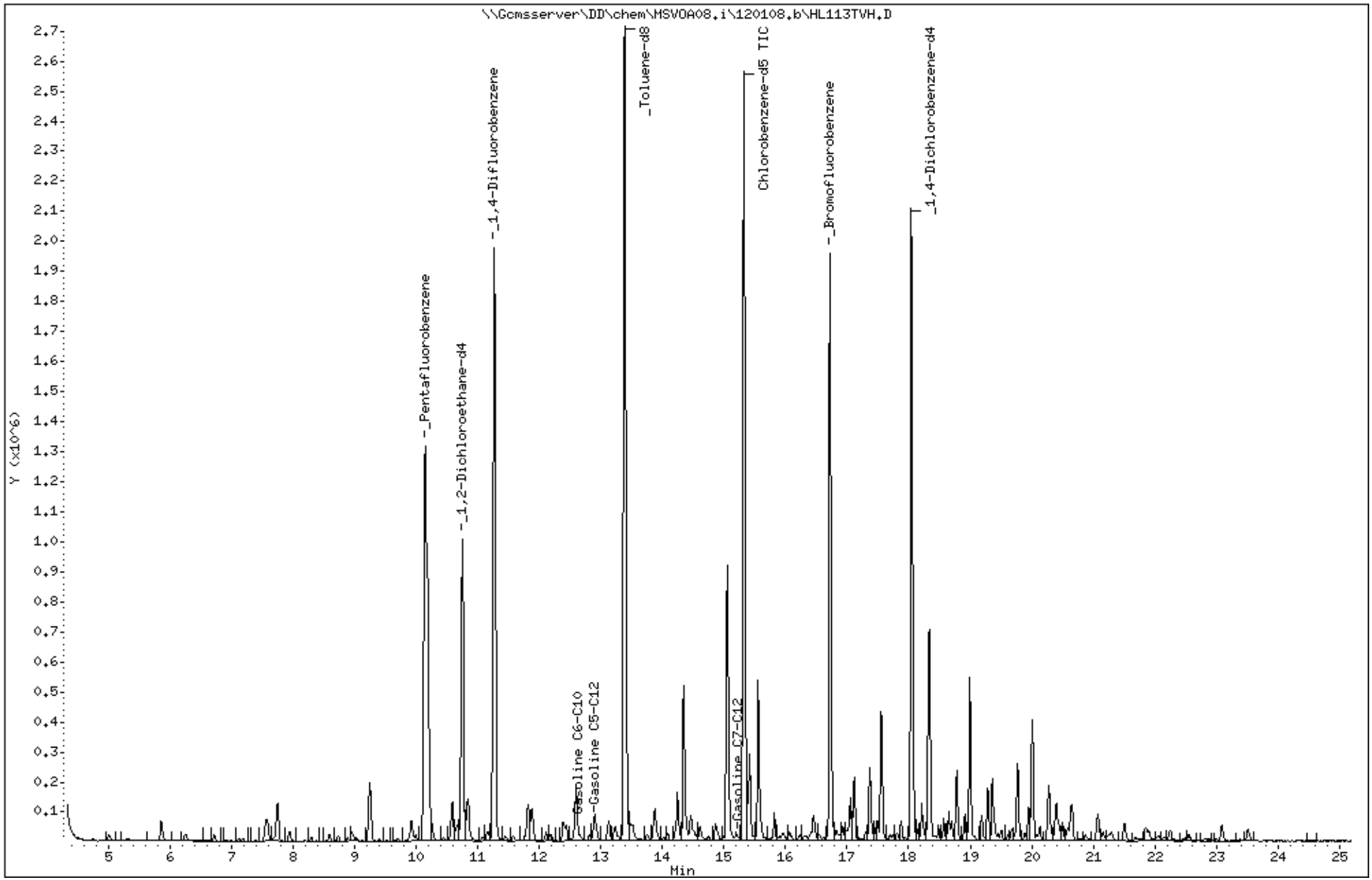
RPD= Relative Percent Difference

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\120108.b\HL113TVH.D
Date : 01-DEC-2008 18:10
Client ID: DYNA P&T
Sample Info: S,207988-002

Instrument: MSVOA08.i

Operator: voc
Column diameter: 2.00

Column phase:

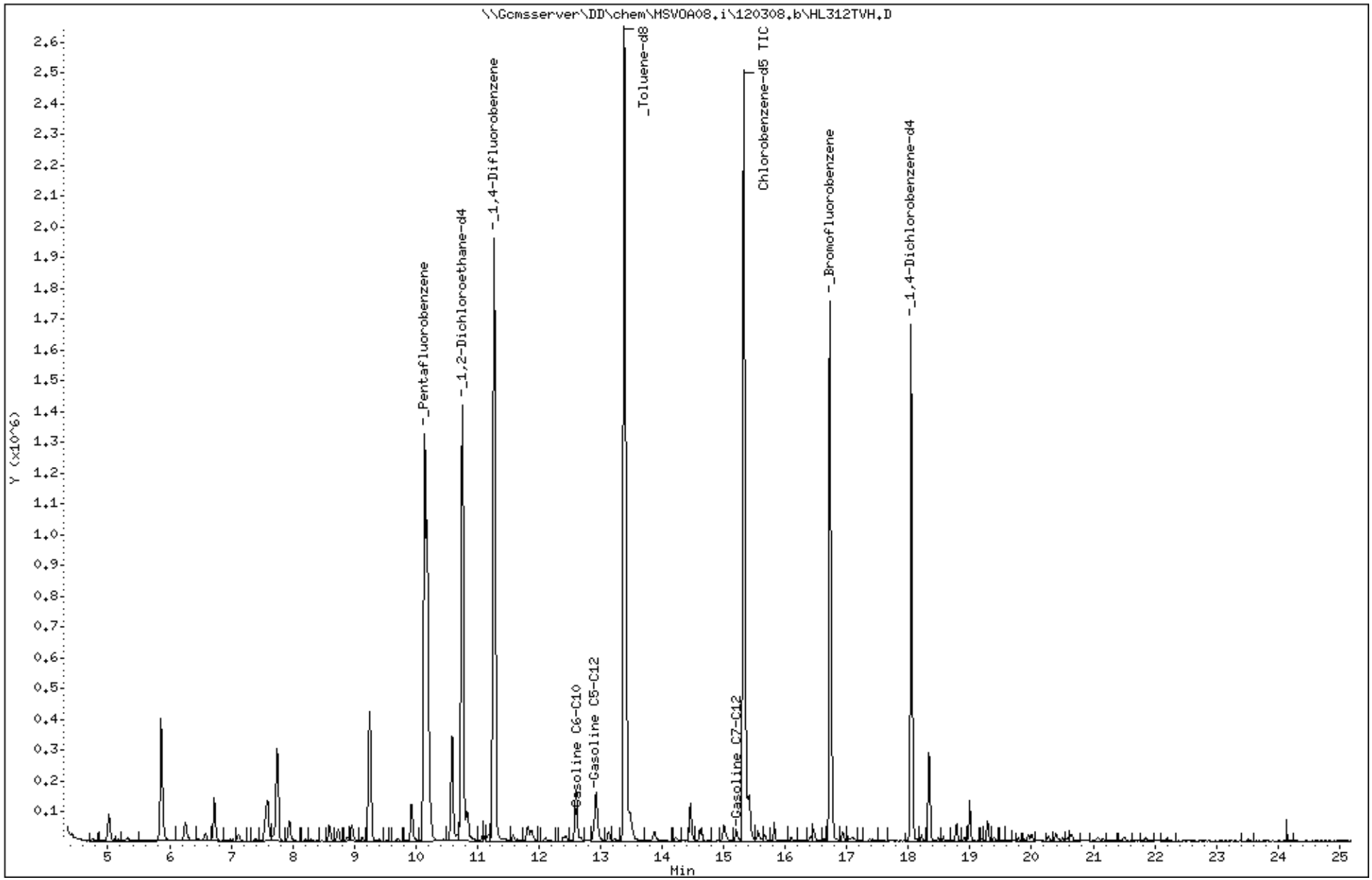


Data File: \\Gcmsserver\DD\chem\MSVOA08.i\120308.b\HL312TVH.D
Date : 03-DEC-2008 17:30
Client ID: DYNA P&T
Sample Info: S,207988-006

Instrument: MSVOA08.i

Operator: voc
Column diameter: 2.00

Column phase:

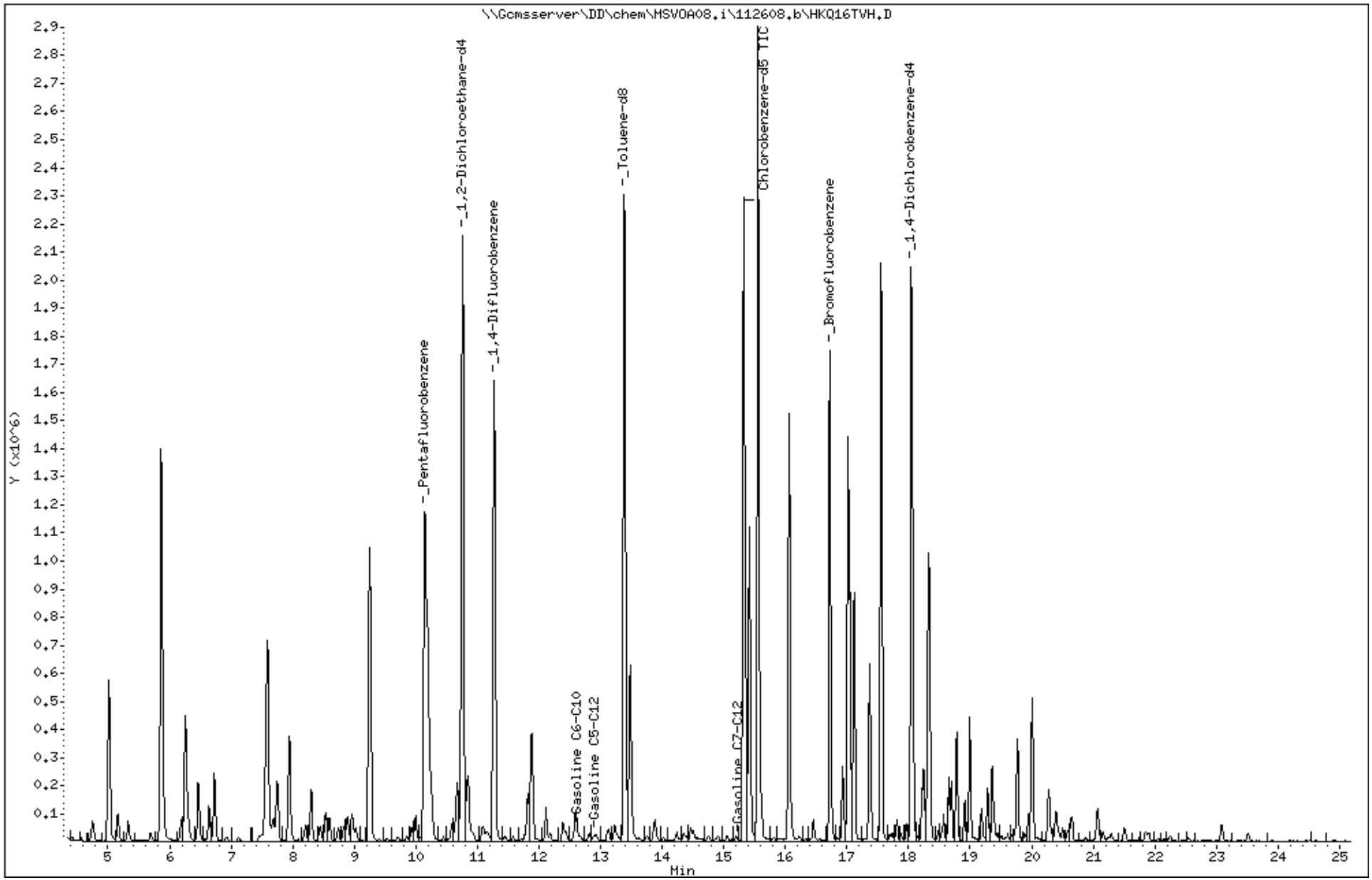


Data File: \\Gcmsserver\DD\chem\MSVOA08.i\112608.b\HKQ16TVH.D
Date : 26-NOV-2008 19:26
Client ID: DYNA P&T
Sample Info: S,207988-007

Instrument: MSVOA08.i

Operator: voc
Column diameter: 2.00

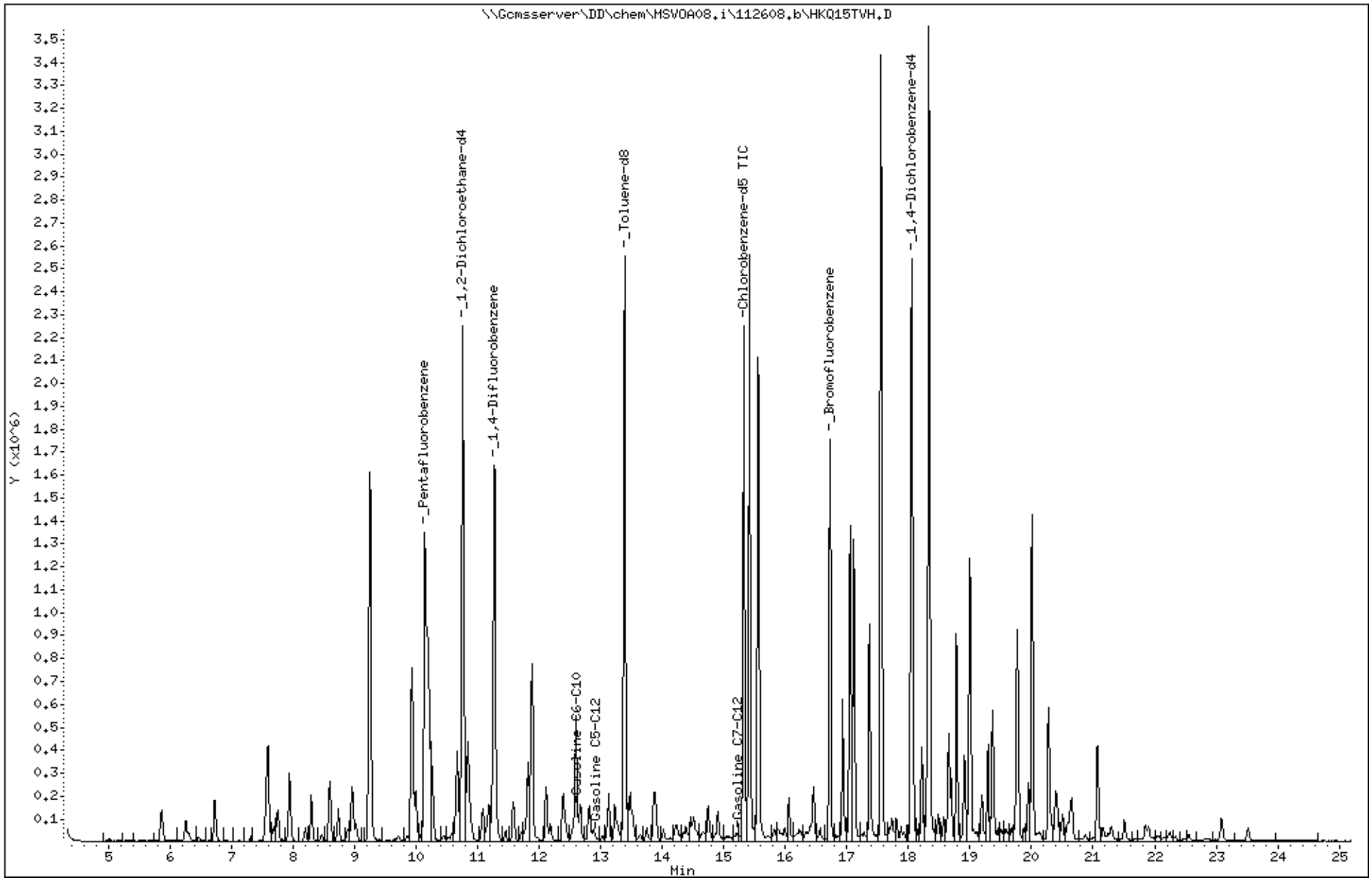
Column phase:



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\112608.b\HKQ15TVH.D
Date : 26-NOV-2008 18:51
Client ID: DYNA P&T
Sample Info: S,207988-008

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:

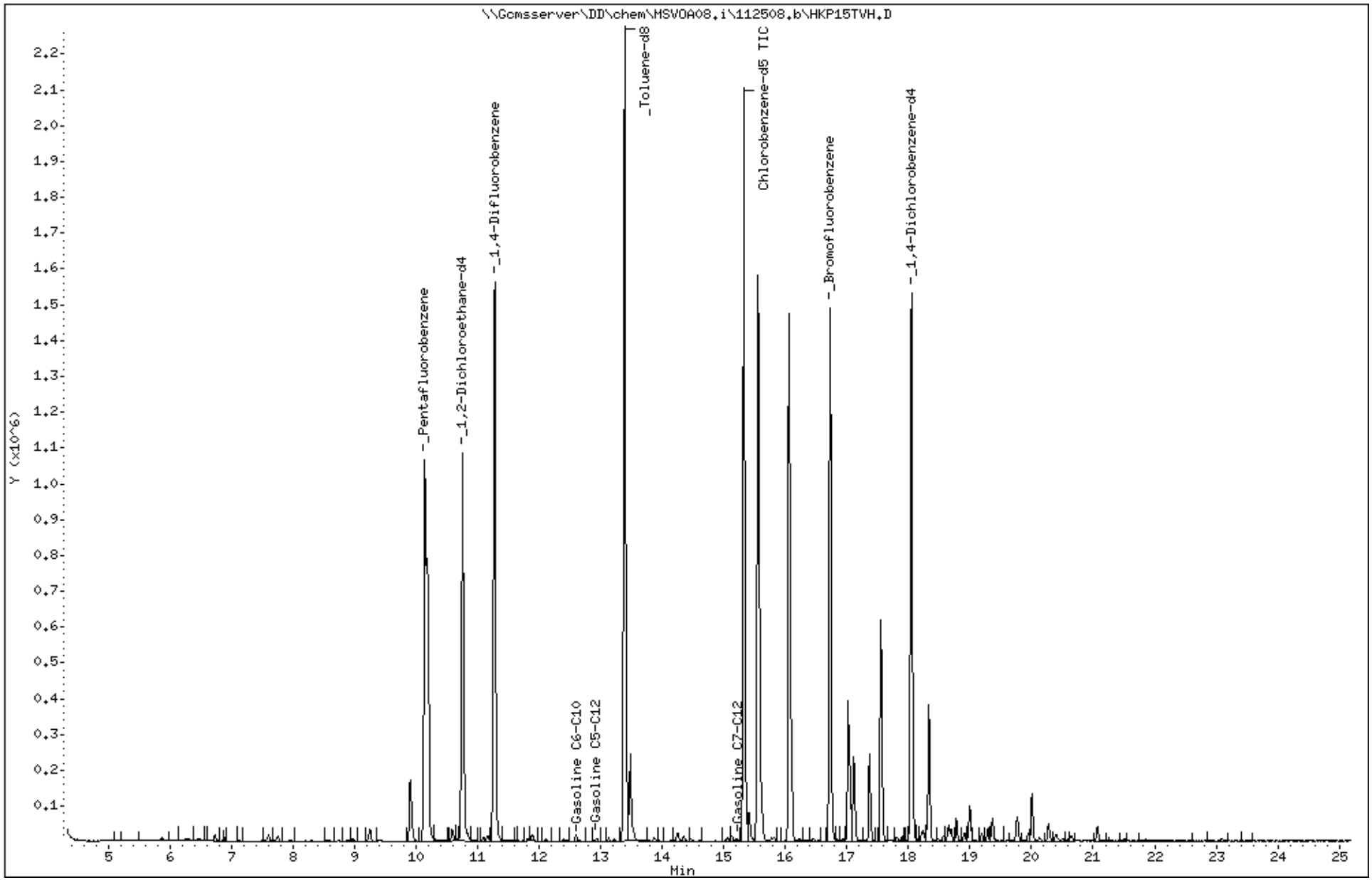


Data File: \\Gcmsserver\DD\chem\MSVOA08.i\112508.b\HKP15TVH.D
Date : 25-NOV-2008 19:25
Client ID: DYNA P&T
Sample Info: S,207988-009

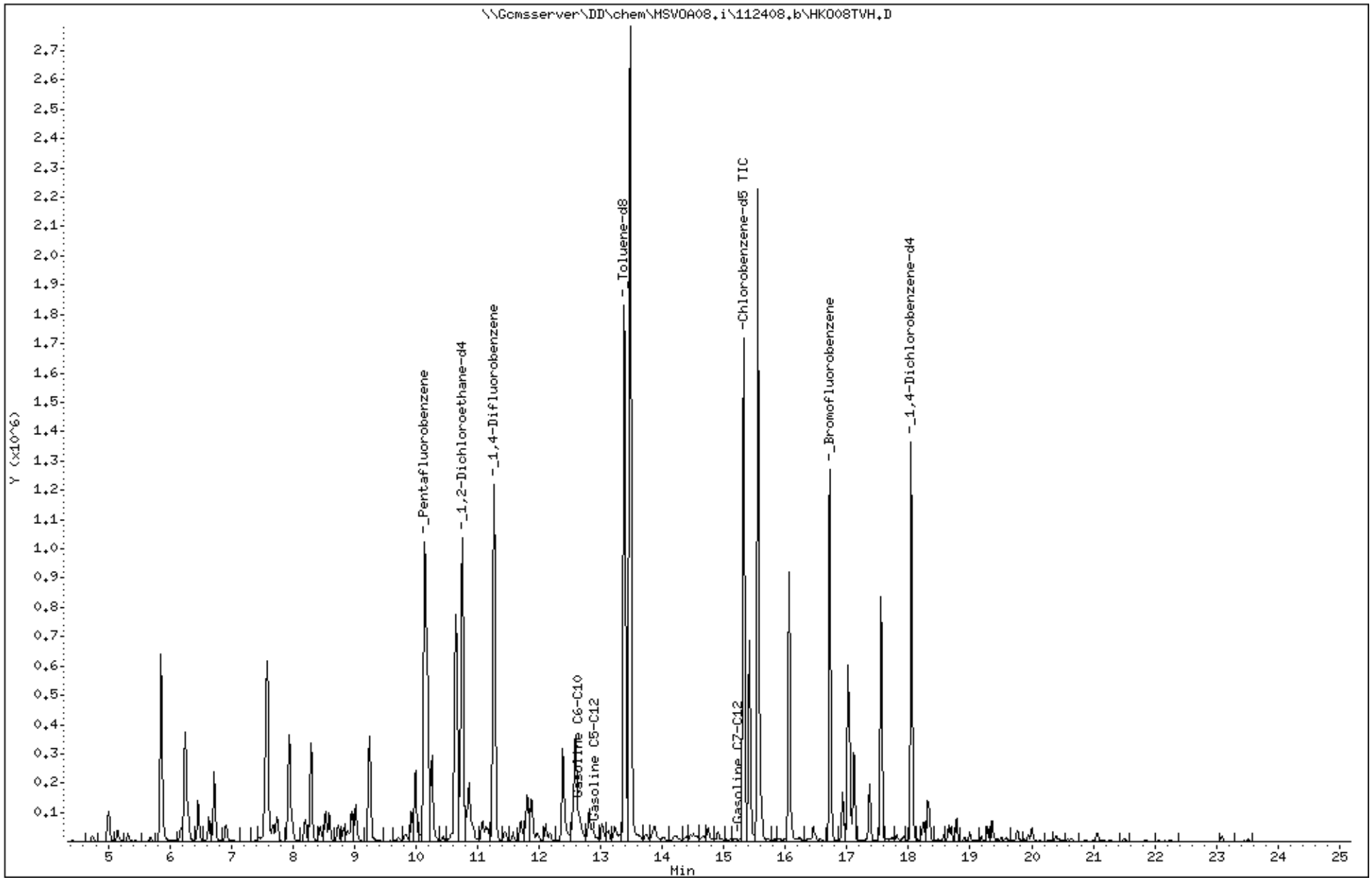
Instrument: MSVOA08.i

Operator: voc
Column diameter: 2.00

Column phase:



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\112408.b\HK008TVH.D
Date : 24-NOV-2008 13:46
Client ID: DYNA P&T
Instrument: MSVOA08.i
Sample Info: CCV,S9459,0.015/100,
Operator: voc
Column phase:
Column diameter: 2.00



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

CHAIN OF CUSTODY

C & T LOGIN #: 207988

Project No.: 028-10060-00
Project Name: Oakland MSC
Project P.O.: 028-10060-00
Turnaround Time: Standard

Sampler: ST/ENW/MWS
Report To: Daren Roth
Company: LPR, Inc
Telephone: 5106524500
Fax: 5106522246

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	&	Analysis: TPH-g/BTEX, MTBE (8260)	TPH-d, TPH MO, TPH-k (8015)	*
1	TB-111808	11/18/08 0700		X		1	X							HOLD
2	RW-D10	11/19/08 1630		X		4	X				X	X	X	
3	MW-8	11/19/08 1430		X		4	X				X	X	X	
4	MW-17-FB	11/19/08 1050		X		4	X				X	X	X	
5	MW-17	11/19/08 1150		X		4	X				X	X	X	
6	MW-16	11/19/08 1445		X		4	X				X	X	X	
7	RW-D1	11/19/08 925		X		4	X				X	X	X	
8	RW-D4	11/19/08 1325		X		4					X	X	X	VOAs NOT PRESERVED
9	RW-D7	11/19/08 1405		X		4	X				X	X	X	
10	MW-15	11/19/08 1148		X		4	X				X	X	X	
11	MW-10	11/19/08 1550		X		4	X				X	X	X	
12	MW-10D	11/19/08 1555		X		4	X				X	X	X	

Notes: * USE SILICA GEL CLEANUP ON TPHd/mo/k samples PRIOR TO analysis

* ~~NEW~~ RW-D4 VOAs NOT PRESERVED

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

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	DATE / TIME
[signature]	11/19/08 1755	Pat Langley	11/19/08 1755
	DATE / TIME		DATE / TIME
	DATE / TIME		DATE / TIME

SIGNATURE

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # 207988 Date Received 11-19-07 Number of coolers 2
Client LFR Inc Project Oakland MSC

Date Opened 11-19-07 By (print) J. Rasmussen (sign)
Date Logged in ↓ By (print) M. Villanueva (sign)

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
Shipping info

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? ..... YES NO N/A
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☒ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.1, 2.3

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES (NO)
If YES, Who was called? By Date:

COMMENTS

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

Laboratory Job Number 208024
ANALYTICAL REPORT

LFR Levine Fricke	Project : 028-10060-00
1900 Powell Street	Location : Oakland MSC
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
TB-112008	208024-001
RW-B4	208024-002
RW-C5	208024-003
RW-C5-D	208024-004
RW-C3	208024-005
RW-C1-FB	208024-006
RW-C1	208024-007
RW-B2	208024-008
RW-C3-RE	208024-009

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. This report may be reproduced only in its entirety.

Signature: _____ Date: 12/22/2008
Project Manager

Signature: _____ Date: 12/22/2008
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**208024**
Client:	**LFR Levine Fricke**
Project:	**028-10060-00**
Location:	**Oakland MSC**
Request Date:	**11/21/08**
Samples Received:	**11/20/08**

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 11/21/08. The samples were received cold and intact. All data were e-mailed to Daren Roth on 12/15/08.

TPH-Extractables by GC (EPA 8015B):

Low surrogate recovery was observed for hexacosane in RW-C3 (lab # 208024-005). The sample was re extracted outside the EPA recommended hold time under (CT# 208024-009); affected data was qualified with "b". Both sets of data have been reported. No other analytical problems were encountered.

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

High surrogate recoveries were observed for bromofluorobenzene in RW-C1-FB (lab # 208024-006) and the method blank for batch 145309; no target analytes were detected in these samples. RW-C1 (lab # 208024-007) had pH greater than 2. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08
Diln Fac:	1.000		

Field ID:	RW-B4	Prepared:	12/02/08
Type:	SAMPLE	Analyzed:	12/04/08
Lab ID:	208024-002	Cleanup Method:	EPA 3630C
Batch#:	145538		

Analyte	Result	RL
Kerosene C10-C16	2,900	50
Diesel C10-C24	3,100 Y	50
Motor Oil C24-C36	930	300

Surrogate	%REC	Limits
Hexacosane	93	58-127

Field ID:	RW-C5	Prepared:	12/02/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	208024-003	Cleanup Method:	EPA 3630C
Batch#:	145538		

Analyte	Result	RL
Kerosene C10-C16	3,300	50
Diesel C10-C24	3,700 Y	50
Motor Oil C24-C36	430	300

Surrogate	%REC	Limits
Hexacosane	91	58-127

Field ID:	RW-C5-D	Prepared:	12/02/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	208024-004	Cleanup Method:	EPA 3630C
Batch#:	145538		

Analyte	Result	RL
Kerosene C10-C16	3,100	50
Diesel C10-C24	3,400 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	58-127

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08
Diln Fac:	1.000		

Field ID:	RW-C3	Prepared:	12/02/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	208024-005	Cleanup Method:	EPA 3630C
Batch#:	145538		

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	190 Y	50
Motor Oil C24-C36	600	300

Surrogate	%REC	Limits
Hexacosane	14 *	58-127

Field ID:	RW-C1-FB	Prepared:	12/02/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	208024-006	Cleanup Method:	EPA 3630C
Batch#:	145538		

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

Surrogate	%REC	Limits
Hexacosane	95	58-127

Field ID:	RW-C1	Prepared:	12/02/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	208024-007	Cleanup Method:	EPA 3630C
Batch#:	145538		

Analyte	Result	RL
Kerosene C10-C16	76 Y	50
Diesel C10-C24	290 Y	50
Motor Oil C24-C36	1,200	300

Surrogate	%REC	Limits
Hexacosane	79	58-127

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08
Diln Fac:	1.000		

Field ID:	RW-B2	Prepared:	12/02/08
Type:	SAMPLE	Analyzed:	12/05/08
Lab ID:	208024-008	Cleanup Method:	EPA 3630C
Batch#:	145538		

Analyte	Result	RL
Kerosene C10-C16	150 Y	50
Diesel C10-C24	190 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	85	58-127

Field ID:	RW-C3-RE	Prepared:	12/05/08
Type:	SAMPLE	Analyzed:	12/11/08
Lab ID:	208024-009	Cleanup Method:	EPA 3630C
Batch#:	145662		

Analyte	Result	RL
Kerosene C10-C16	170 Y b	50
Diesel C10-C24	720 Y b	50
Motor Oil C24-C36	1,600 b	300

Surrogate	%REC	Limits
Hexacosane	74 b	58-127

Type:	BLANK	Prepared:	12/02/08
Lab ID:	QC473291	Analyzed:	12/04/08
Batch#:	145538	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	95	58-127

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08
Diln Fac:	1.000		

Type:	BLANK	Prepared:	12/05/08
Lab ID:	QC473889	Analyzed:	12/10/08
Batch#:	145662	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	124	58-127

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
b= See narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	145538
Units:	ug/L	Prepared:	12/02/08
Diln Fac:	1.000	Analyzed:	12/05/08

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC473292

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,730	69	52-120

Surrogate	%REC	Limits
Hexacosane	88	58-127

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC473293

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,068	83	52-120	18	30

Surrogate	%REC	Limits
Hexacosane	107	58-127

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	145662
Units:	ug/L	Prepared:	12/05/08
Diln Fac:	1.000	Analyzed:	12/13/08

Type: BS
Lab ID: QC473890
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,452	98	52-120

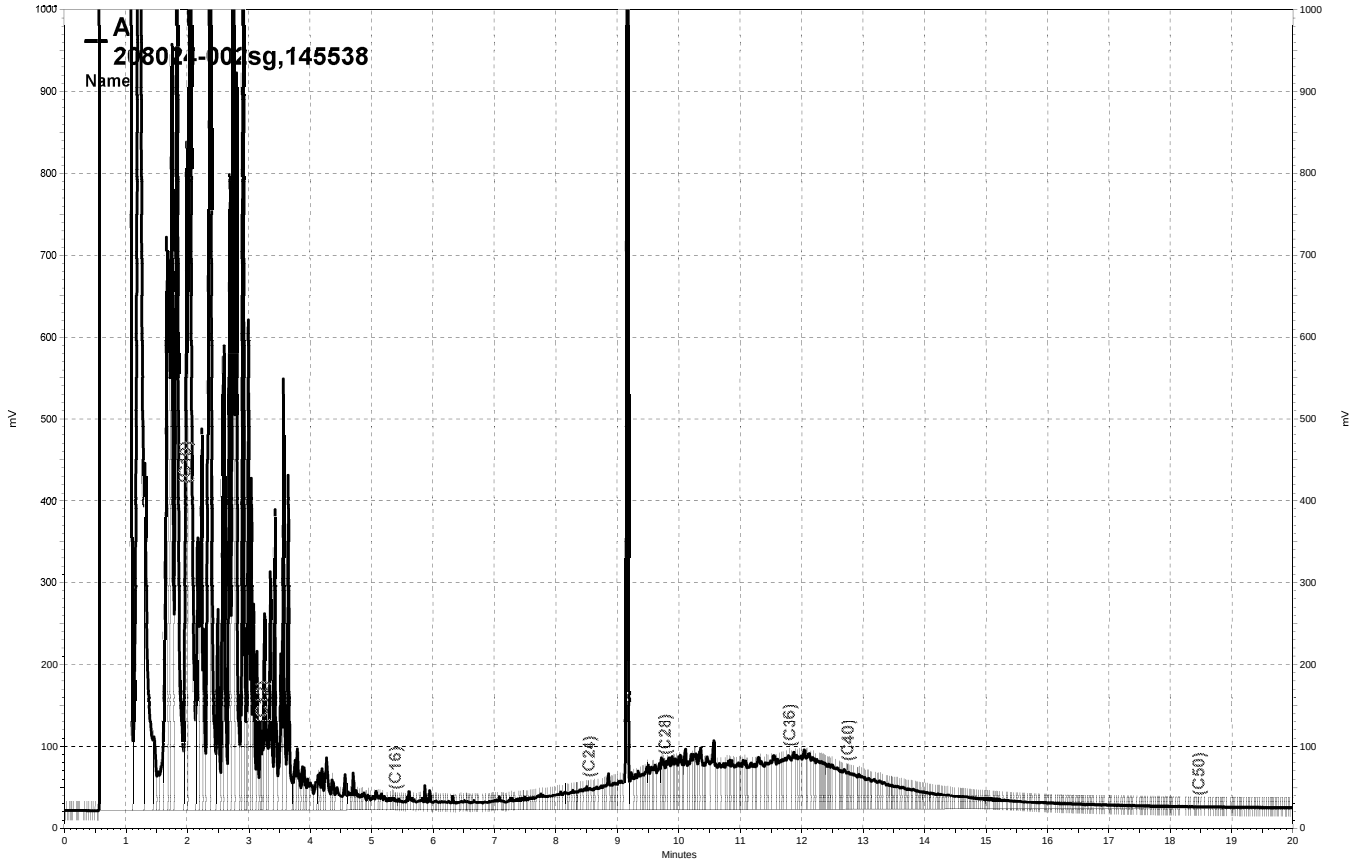
Surrogate	%REC	Limits
Hexacosane	88	58-127

Type: BSD
Lab ID: QC473891
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,407	96	52-120	2	30

Surrogate	%REC	Limits
Hexacosane	85	58-127

RPD= Relative Percent Difference



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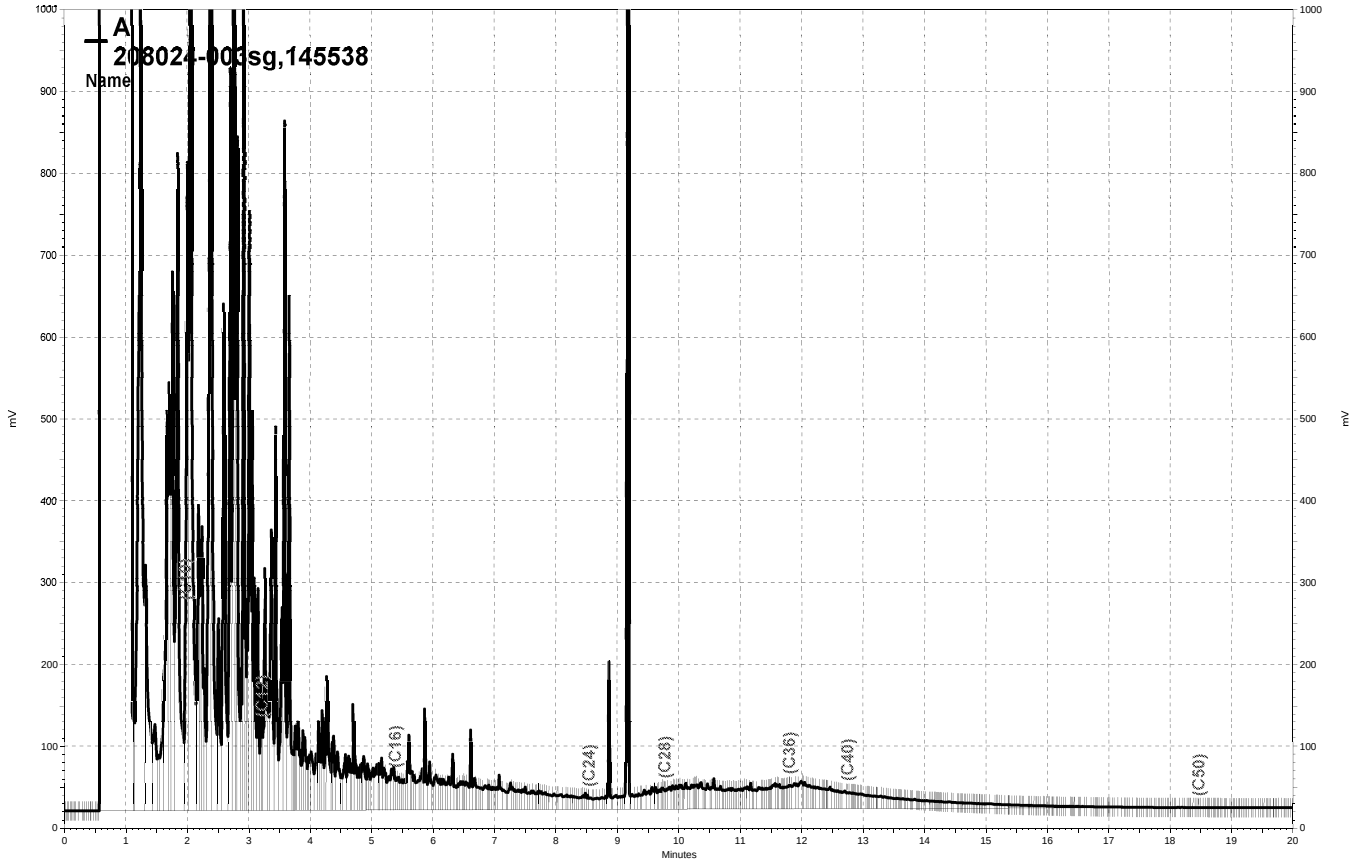

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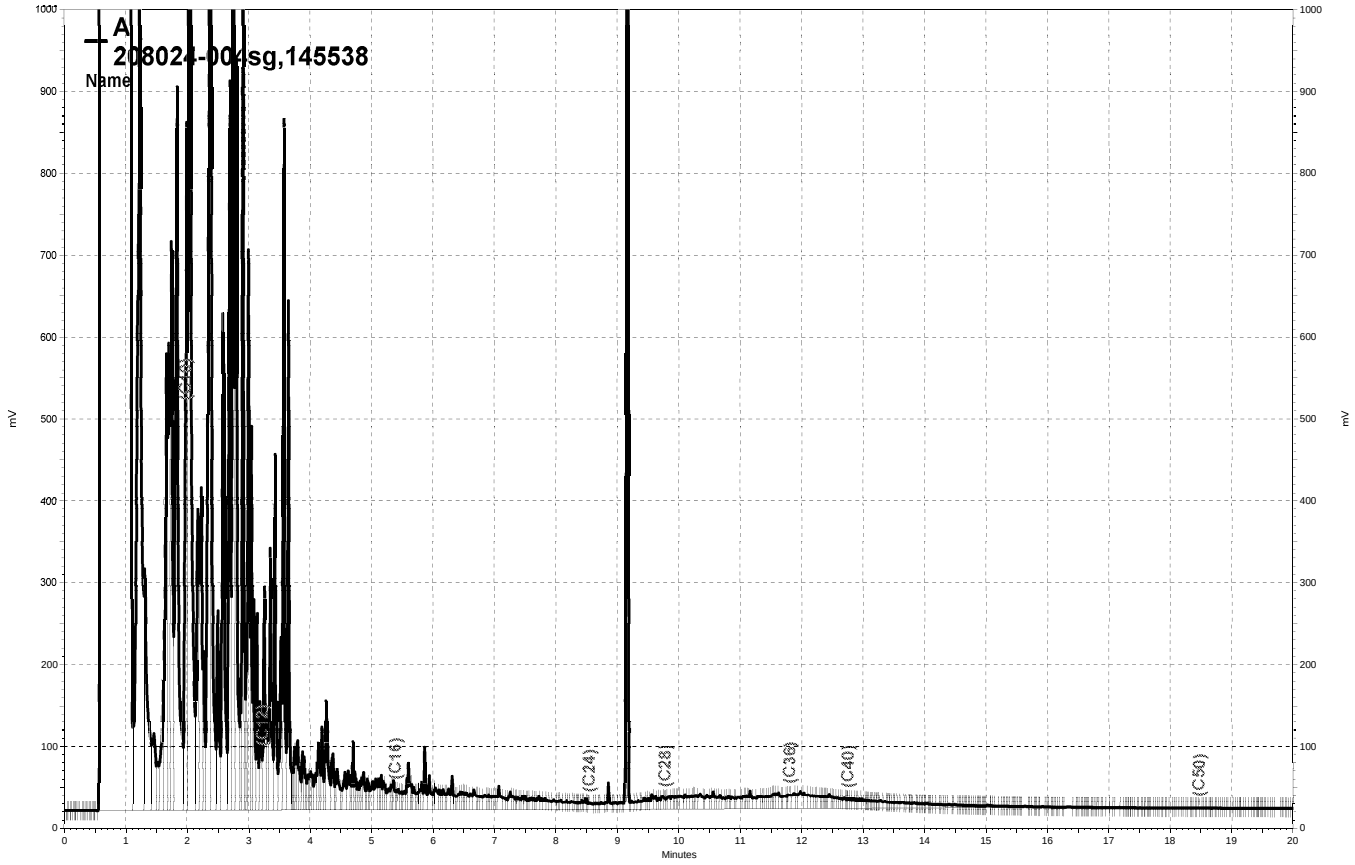

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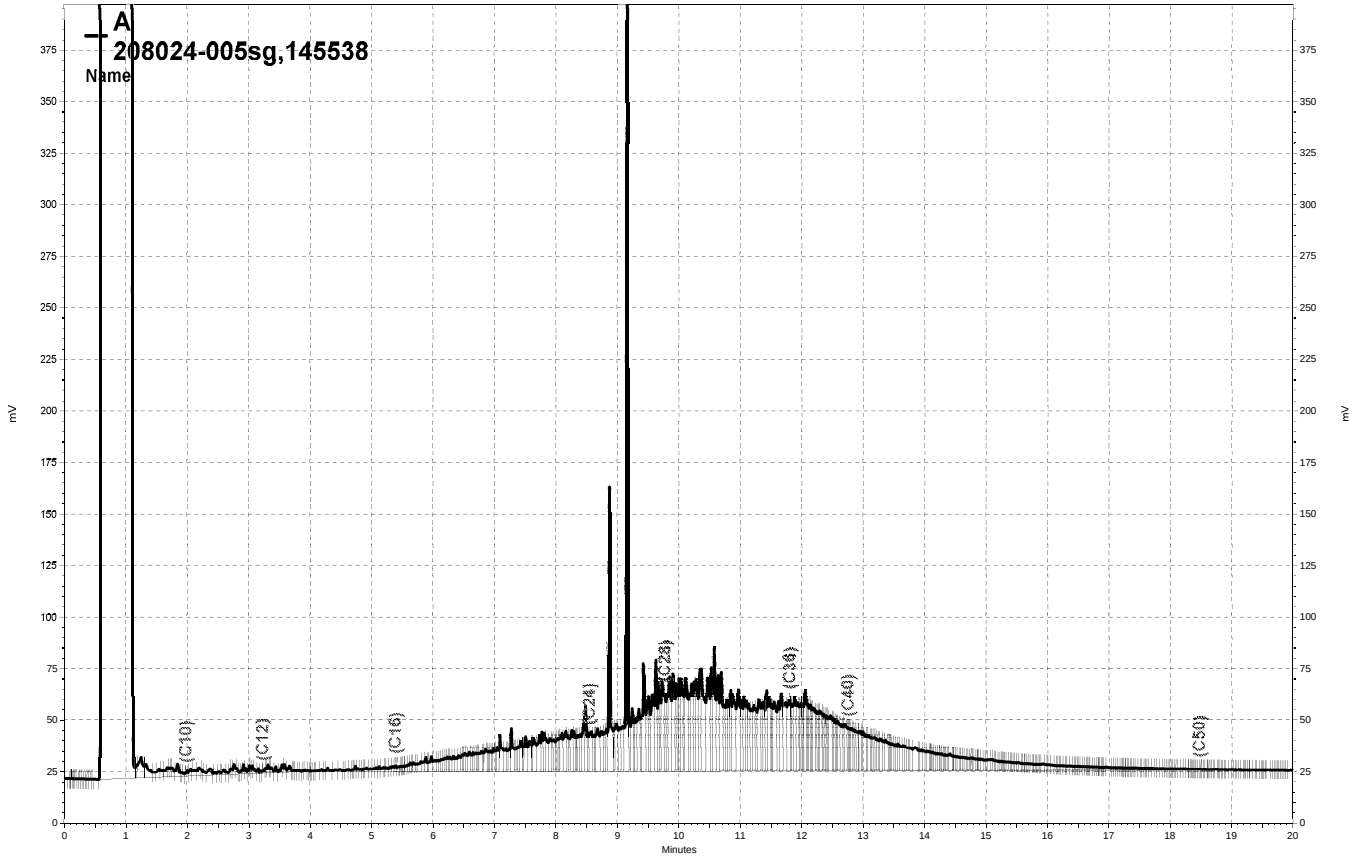

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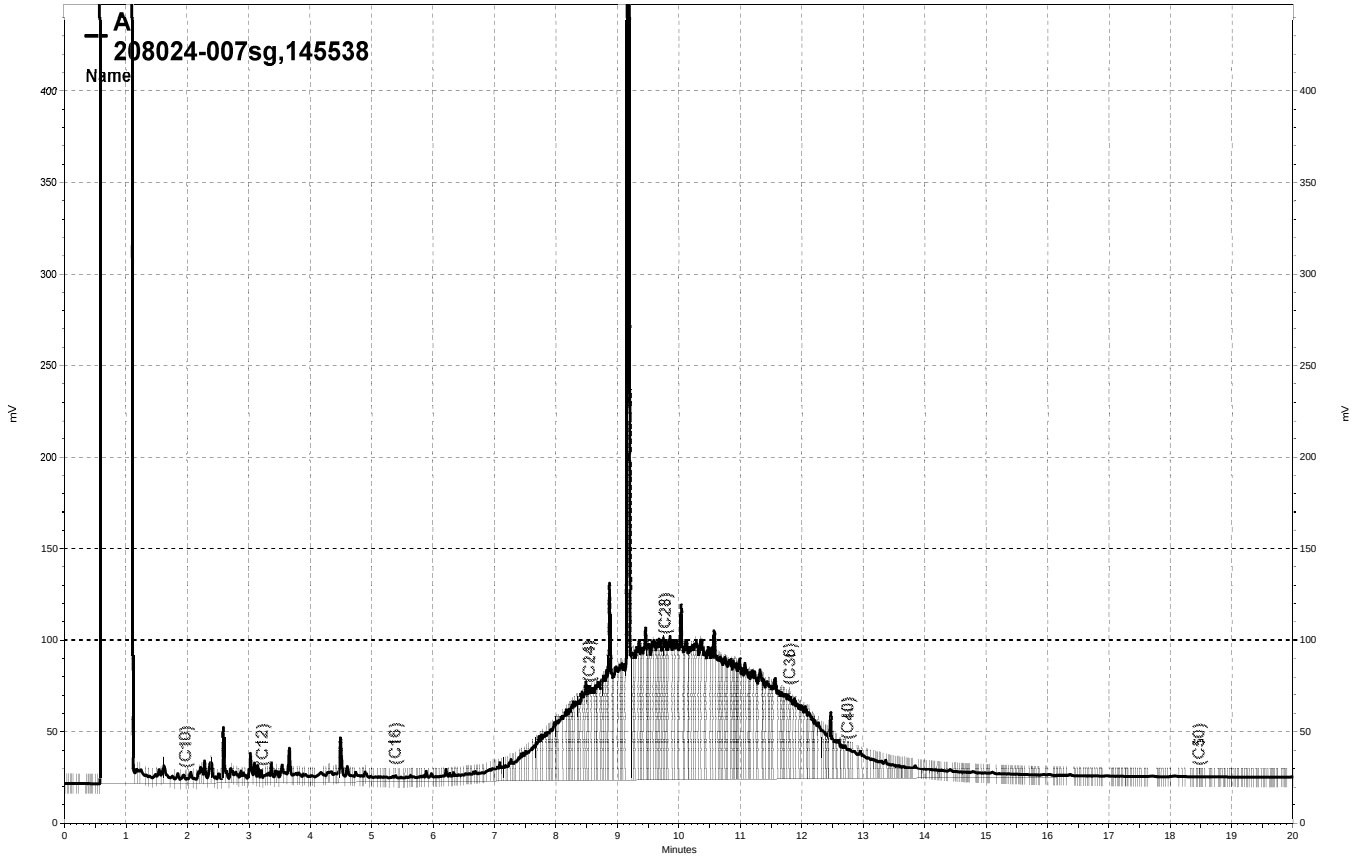

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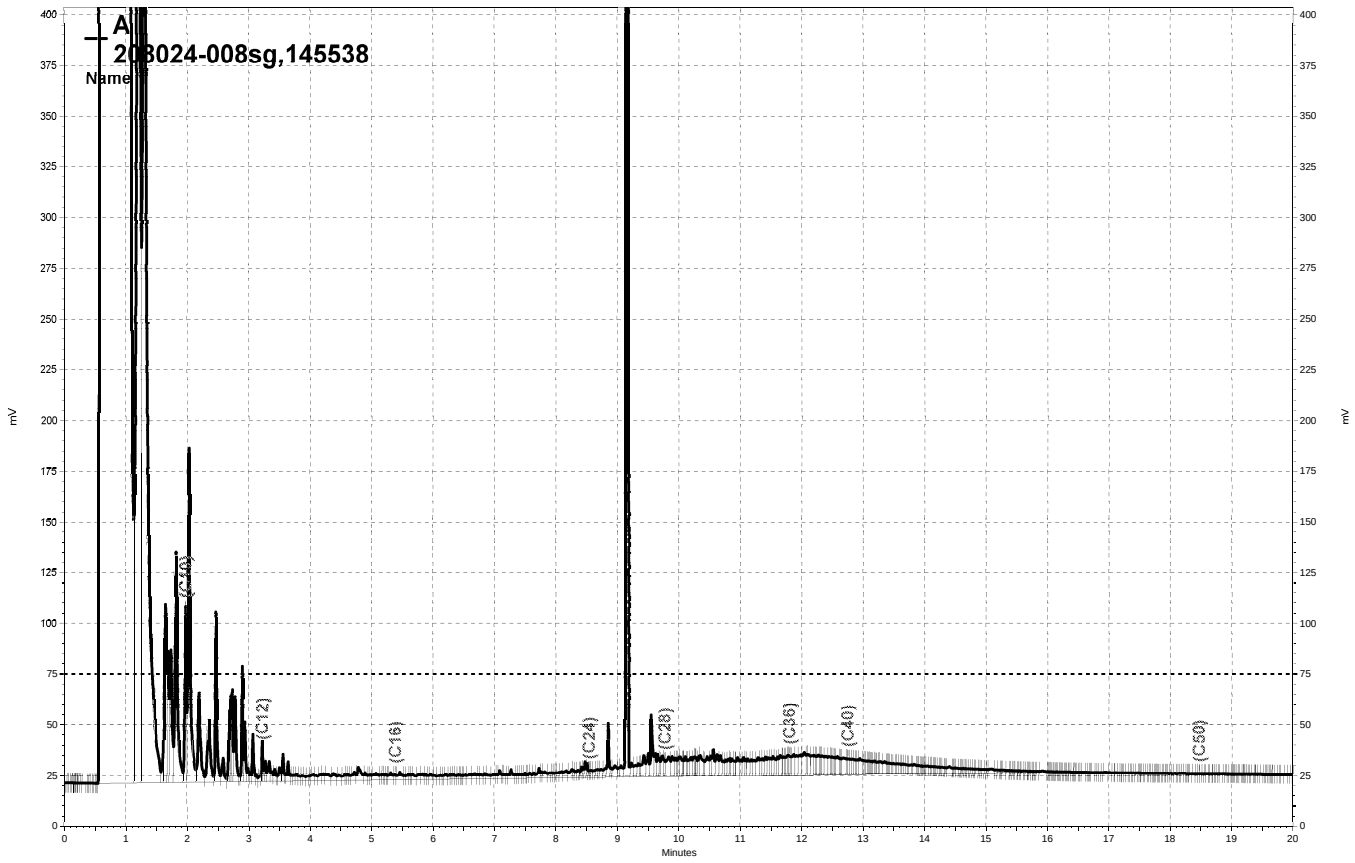

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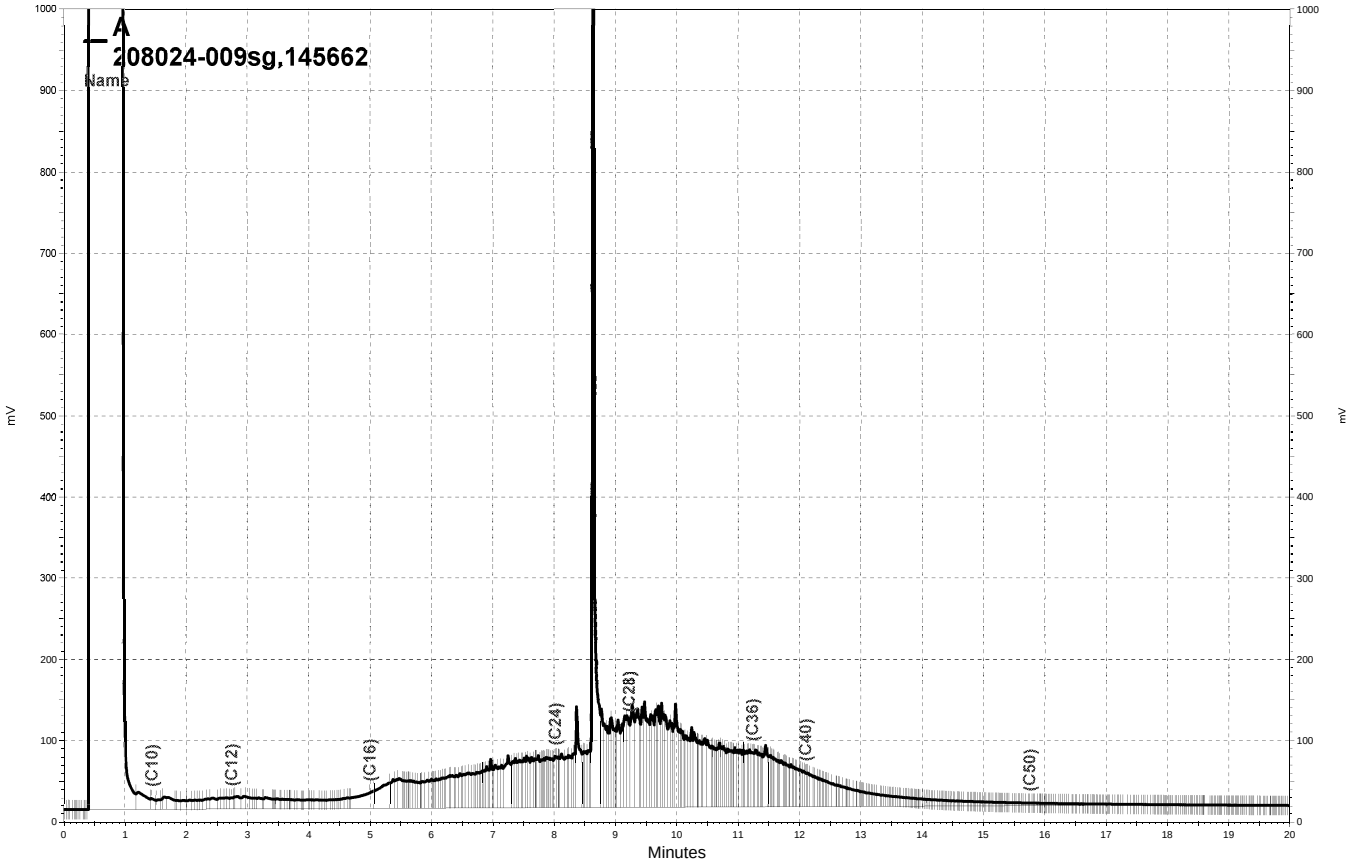

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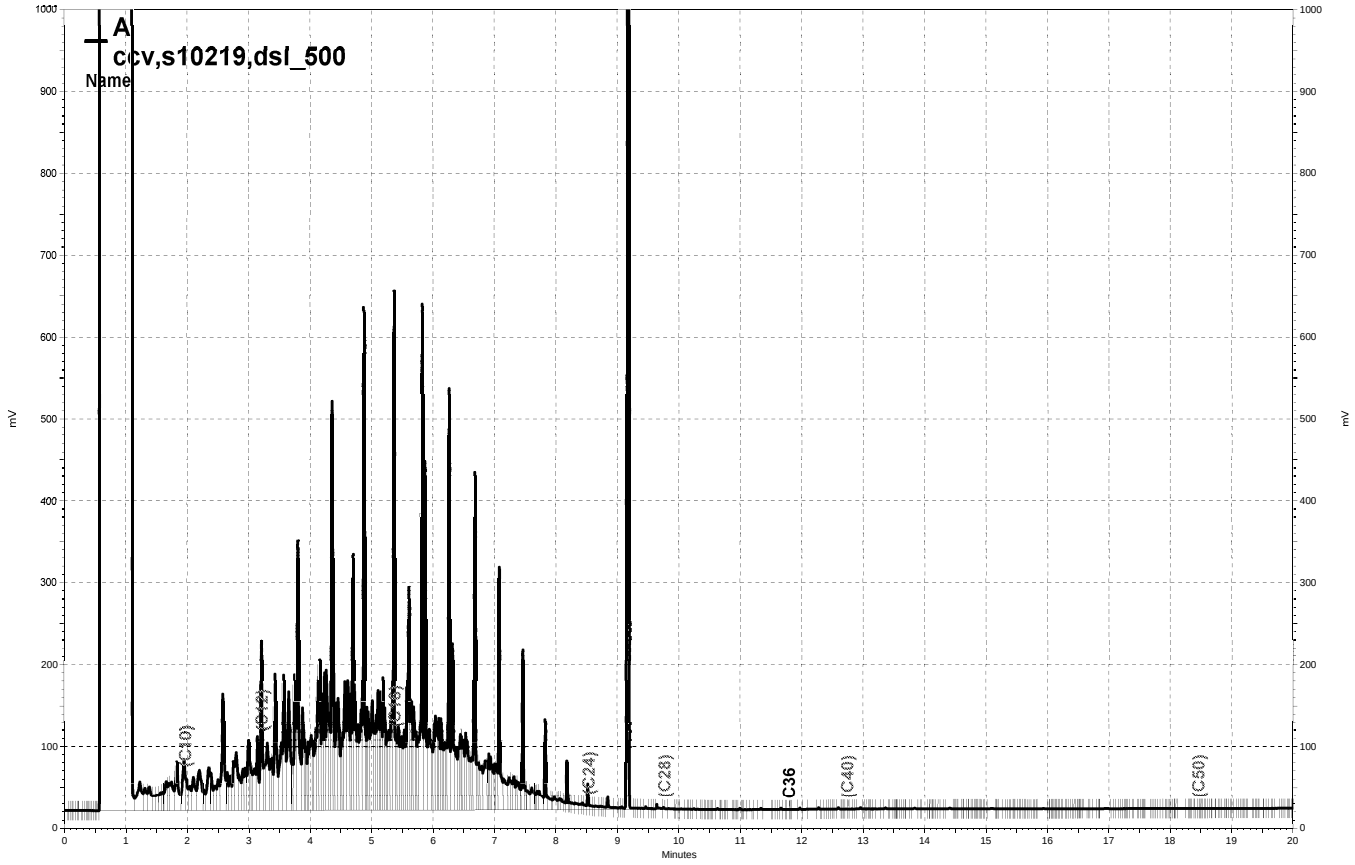

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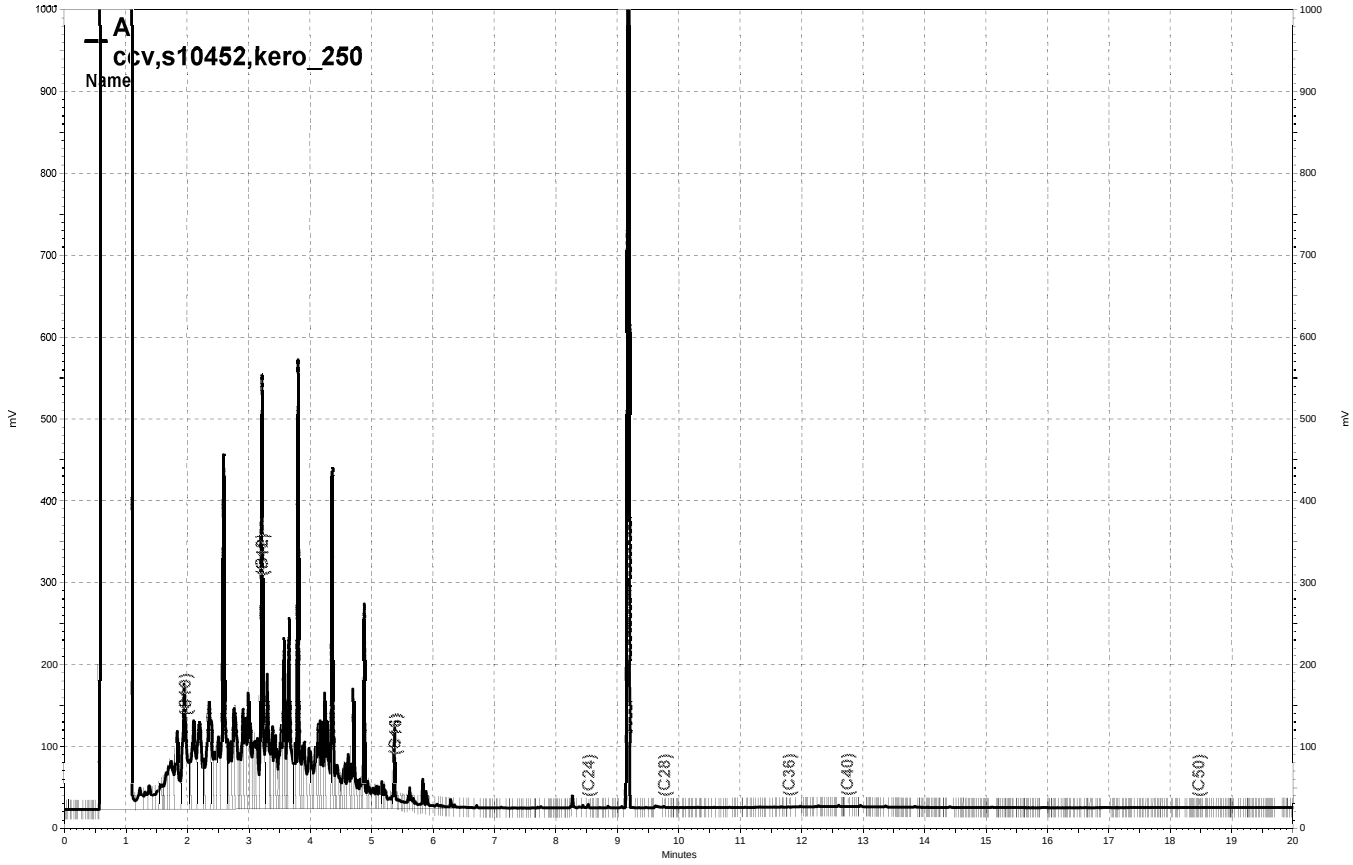

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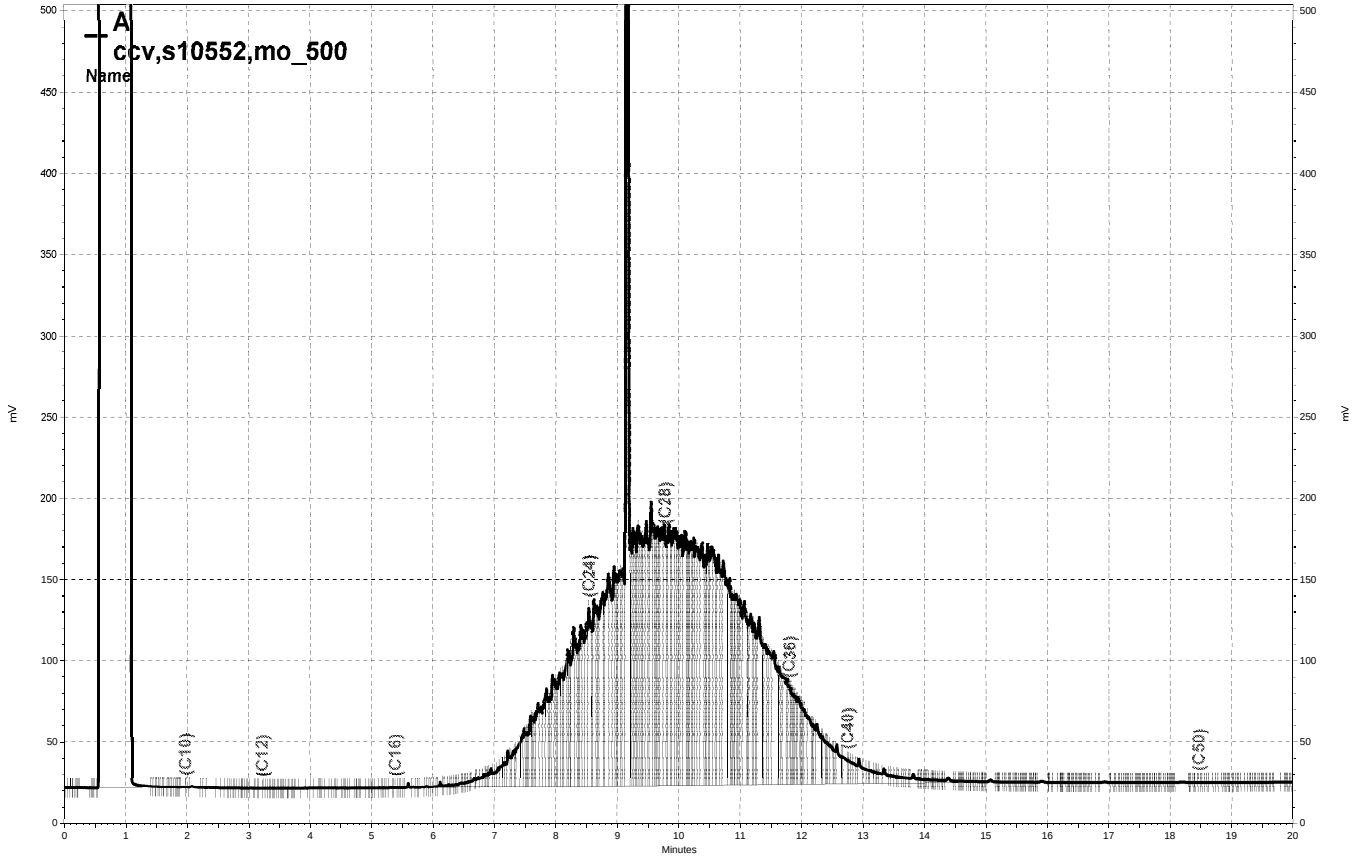

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Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08

Field ID:	RW-B4	Diln Fac:	50.00
Type:	SAMPLE	Batch#:	145487
Lab ID:	208024-002	Analyzed:	12/02/08

Analyte	Result	RL
Gasoline C7-C12	6,000 Y	2,500
MTBE	ND	25
Benzene	3,100	25
Toluene	100	25
Ethylbenzene	270	25
m,p-Xylenes	610	25
o-Xylene	69	25

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	86	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	117	80-122

Field ID:	RW-C5	Diln Fac:	40.00
Type:	SAMPLE	Batch#:	145561
Lab ID:	208024-003	Analyzed:	12/04/08

Analyte	Result	RL
Gasoline C7-C12	5,800 Y	2,000
MTBE	ND	20
Benzene	2,900	20
Toluene	91	20
Ethylbenzene	120	20
m,p-Xylenes	380	20
o-Xylene	57	20

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	83	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	117	80-122

*= Value outside of QC limits; see narrative
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 #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08

Field ID:	RW-C5-D	Diln Fac:	50.00
Type:	SAMPLE	Batch#:	145462
Lab ID:	208024-004	Analyzed:	12/01/08

Analyte	Result	RL
Gasoline C7-C12	3,900 Y	2,500
MTBE	ND	25
Benzene	2,700	25
Toluene	78	25
Ethylbenzene	91	25
m,p-Xylenes	310	25
o-Xylene	48	25

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	119	80-122

Field ID:	RW-C3	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145462
Lab ID:	208024-005	Analyzed:	11/30/08

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	1.1	0.50
Toluene	ND	0.50
Ethylbenzene	0.67	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	119	80-122

*= Value outside of QC limits; see narrative
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 #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08

Field ID:	RW-C1-FB	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145462
Lab ID:	208024-006	Analyzed:	11/30/08

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	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	123 *	80-122

Field ID:	RW-C1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145309
Lab ID:	208024-007	Analyzed:	11/25/08

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	ND	0.50
Benzene	6.4	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	0.51	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	118	80-122

*= Value outside of QC limits; see narrative
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 #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08

Field ID:	RW-B2	Diln Fac:	50.00
Type:	SAMPLE	Batch#:	145462
Lab ID:	208024-008	Analyzed:	12/01/08

Analyte	Result	RL
Gasoline C7-C12	7,900 Y	2,500
MTBE	ND	25
Benzene	3,200	25
Toluene	2,100	25
Ethylbenzene	140	25
m,p-Xylenes	390	25
o-Xylene	330	25

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	116	80-122

Type:	BLANK	Batch#:	145309
Lab ID:	QC472282	Analyzed:	11/24/08
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	98	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	123 *	80-122

*= Value outside of QC limits; see narrative
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 #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08

Type: BLANK
Lab ID: QC472283
Diln Fac: 1.000

Batch#: 145309
Analyzed: 11/24/08

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	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	122	80-122

Type: BLANK
Lab ID: QC472943
Diln Fac: 1.000

Batch#: 145462
Analyzed: 11/30/08

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

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	122	80-122

*= Value outside of QC limits; see narrative
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 #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08

Type: BLANK
Lab ID: QC473035
Diln Fac: 1.000

Batch#: 145487
Analyzed: 12/01/08

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	96	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	105	80-120
Bromofluorobenzene	118	80-122

Type: BLANK
Lab ID: QC473036
Diln Fac: 1.000

Batch#: 145487
Analyzed: 12/01/08

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	93	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	119	80-122

*= Value outside of QC limits; see narrative
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 #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/20/08
Units:	ug/L	Received:	11/20/08

Type: BLANK
Lab ID: QC473427
Diln Fac: 1.000

Batch#: 145561
Analyzed: 12/03/08

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

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	119	80-122

Type: BLANK
Lab ID: QC473428
Diln Fac: 1.000

Batch#: 145561
Analyzed: 12/03/08

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	93	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	114	80-122

*= Value outside of QC limits; see narrative
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 #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145309
Units:	ug/L	Analyzed:	11/24/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472284

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	19.57	98	70-125
Benzene	20.00	21.69	108	80-120
Toluene	20.00	20.05	100	80-120
Ethylbenzene	20.00	19.60	98	80-122
m,p-Xylenes	40.00	39.62	99	80-126
o-Xylene	20.00	20.09	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-122

Type: BSD Lab ID: QC472285

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	19.43	97	70-125	1	20
Benzene	20.00	21.06	105	80-120	3	20
Toluene	20.00	19.69	98	80-120	2	20
Ethylbenzene	20.00	19.62	98	80-122	0	20
m,p-Xylenes	40.00	38.94	97	80-126	2	20
o-Xylene	20.00	19.88	99	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145309
Units:	ug/L	Analyzed:	11/24/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472286

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	877.6	88	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC472287

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	858.0	86	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	109	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145462
Units:	ug/L	Analyzed:	11/30/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472944

Analyte	Spiked	Result	%REC	Limits
MTBE	22.50	20.68	92	70-125
Benzene	22.50	22.81	101	80-120
Toluene	22.50	21.61	96	80-120
Ethylbenzene	22.50	21.21	94	80-122
m,p-Xylenes	45.00	41.07	91	80-126
o-Xylene	22.50	21.27	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

Type: BSD Lab ID: QC472945

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	22.50	20.82	93	70-125	1	20
Benzene	22.50	23.68	105	80-120	4	20
Toluene	22.50	22.55	100	80-120	4	20
Ethylbenzene	22.50	22.22	99	80-122	5	20
m,p-Xylenes	45.00	43.54	97	80-126	6	20
o-Xylene	22.50	22.20	99	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145462
Units:	ug/L	Analyzed:	11/30/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472946

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	825.0	82	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC472947

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	804.5	80	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	110	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145487
Units:	ug/L	Analyzed:	12/01/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473037

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	17.61	88	70-125
Benzene	20.00	21.25	106	80-120
Toluene	20.00	20.04	100	80-120
Ethylbenzene	20.00	19.67	98	80-122
m,p-Xylenes	40.00	38.36	96	80-126
o-Xylene	20.00	19.30	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-122

Type: BSD Lab ID: QC473038

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	17.70	89	70-125	1	20
Benzene	20.00	20.75	104	80-120	2	20
Toluene	20.00	19.52	98	80-120	3	20
Ethylbenzene	20.00	19.05	95	80-122	3	20
m,p-Xylenes	40.00	37.98	95	80-126	1	20
o-Xylene	20.00	19.08	95	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145487
Units:	ug/L	Analyzed:	12/01/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473039

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	825.5	83	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	86	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC473040

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	853.4	85	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145561
Units:	ug/L	Analyzed:	12/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473429

Analyte	Spiked	Result	%REC	Limits
MTBE	22.50	19.34	86	70-125
Benzene	22.50	23.69	105	80-120
Toluene	22.50	22.45	100	80-120
Ethylbenzene	22.50	22.40	100	80-122
m,p-Xylenes	45.00	44.62	99	80-126
o-Xylene	22.50	22.66	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	84	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-122

Type: BSD Lab ID: QC473430

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	22.50	19.24	86	70-125	1	20
Benzene	22.50	23.76	106	80-120	0	20
Toluene	22.50	22.51	100	80-120	0	20
Ethylbenzene	22.50	21.87	97	80-122	2	20
m,p-Xylenes	45.00	43.68	97	80-126	2	20
o-Xylene	22.50	22.09	98	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208024	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145561
Units:	ug/L	Analyzed:	12/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473431

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	972.7	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC473432

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	997.8	100	80-120	3	20

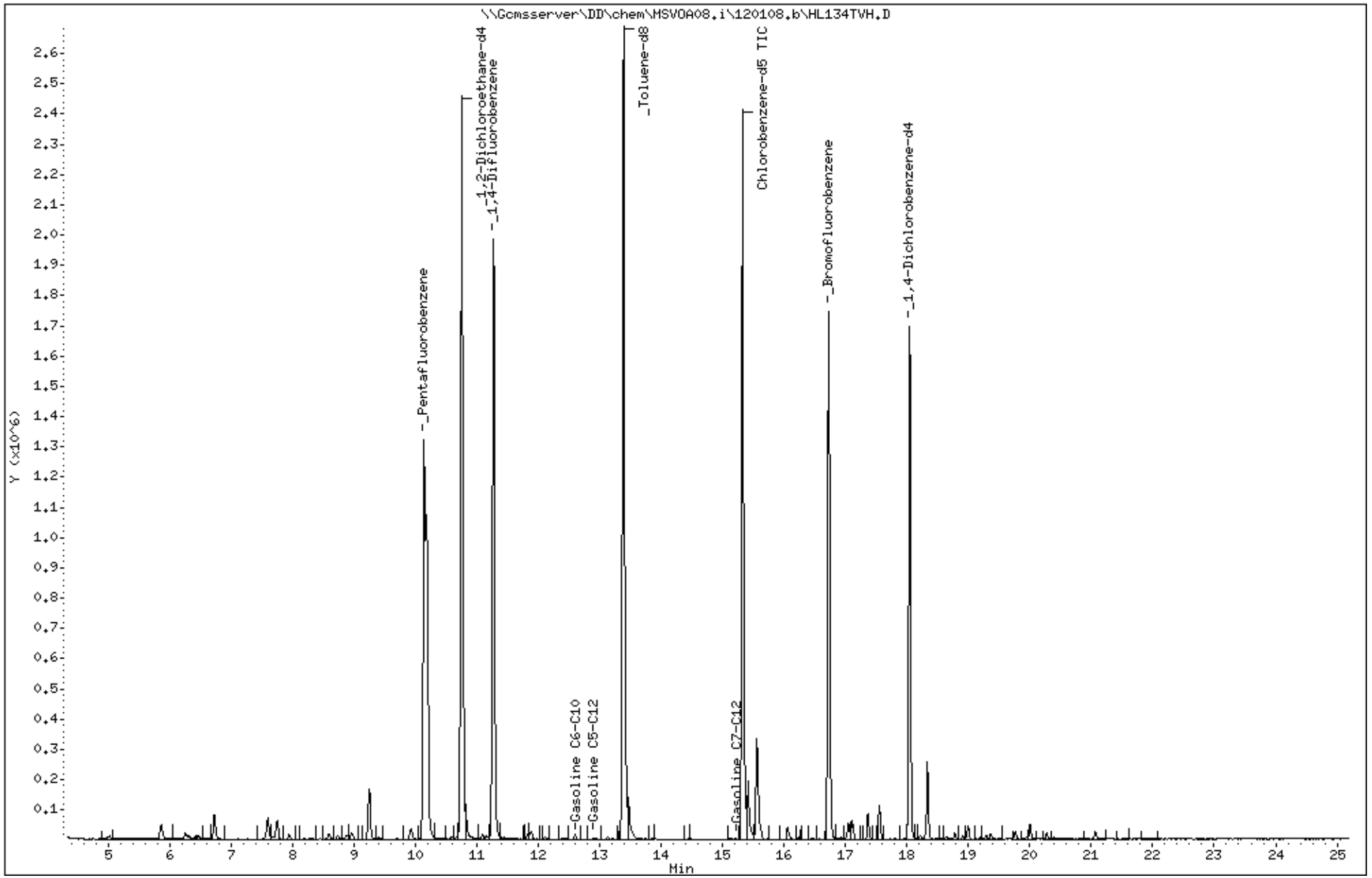
Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-122

RPD= Relative Percent Difference

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\120108.b\HL134TVH.D
Date : 02-DEC-2008 06:36
Client ID: DYNA P&T
Sample Info: S,208024-002

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:

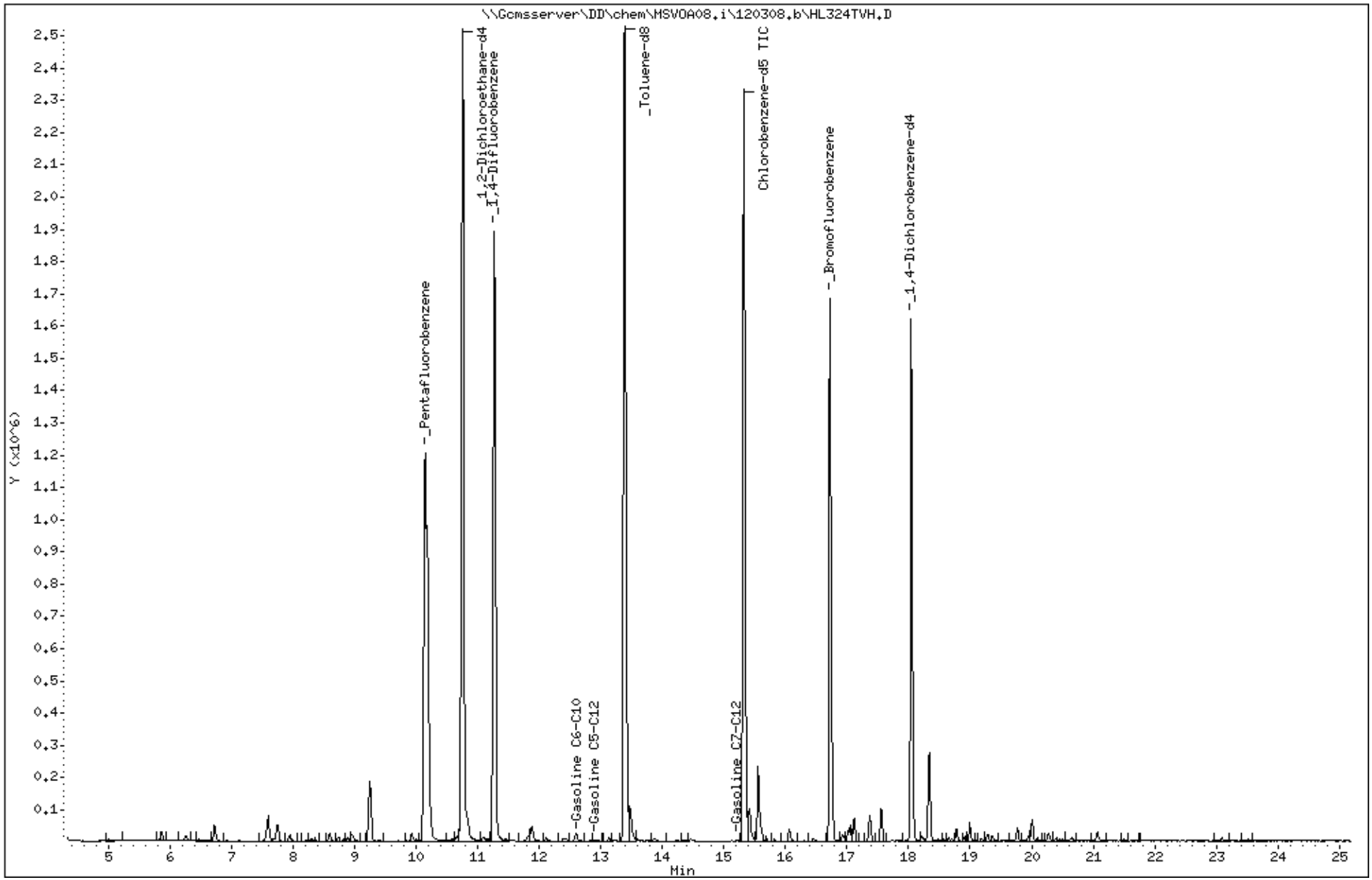


Data File: \\Gcmsserver\DD\chem\MSVOA08.i\120308.b\HL324TVH.D
Date : 04-DEC-2008 00:27
Client ID: DYNA P&T
Sample Info: S,208024-003

Instrument: MSVOA08.i

Operator: voc
Column diameter: 2.00

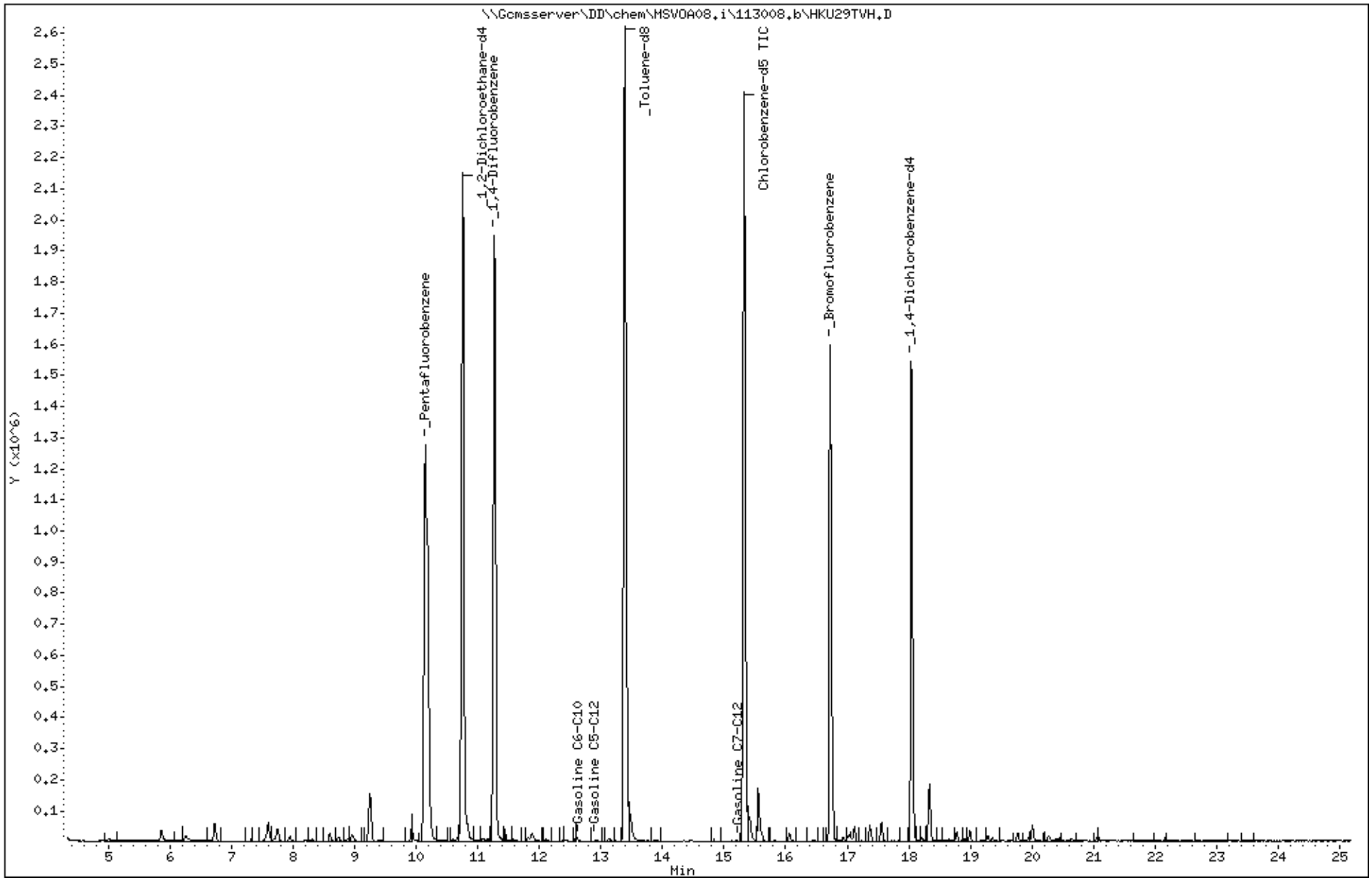
Column phase:



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\113008.b\HKU29TVH.D
Date : 01-DEC-2008 04:28
Client ID: DYNA P&T
Sample Info: S,208024-004

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

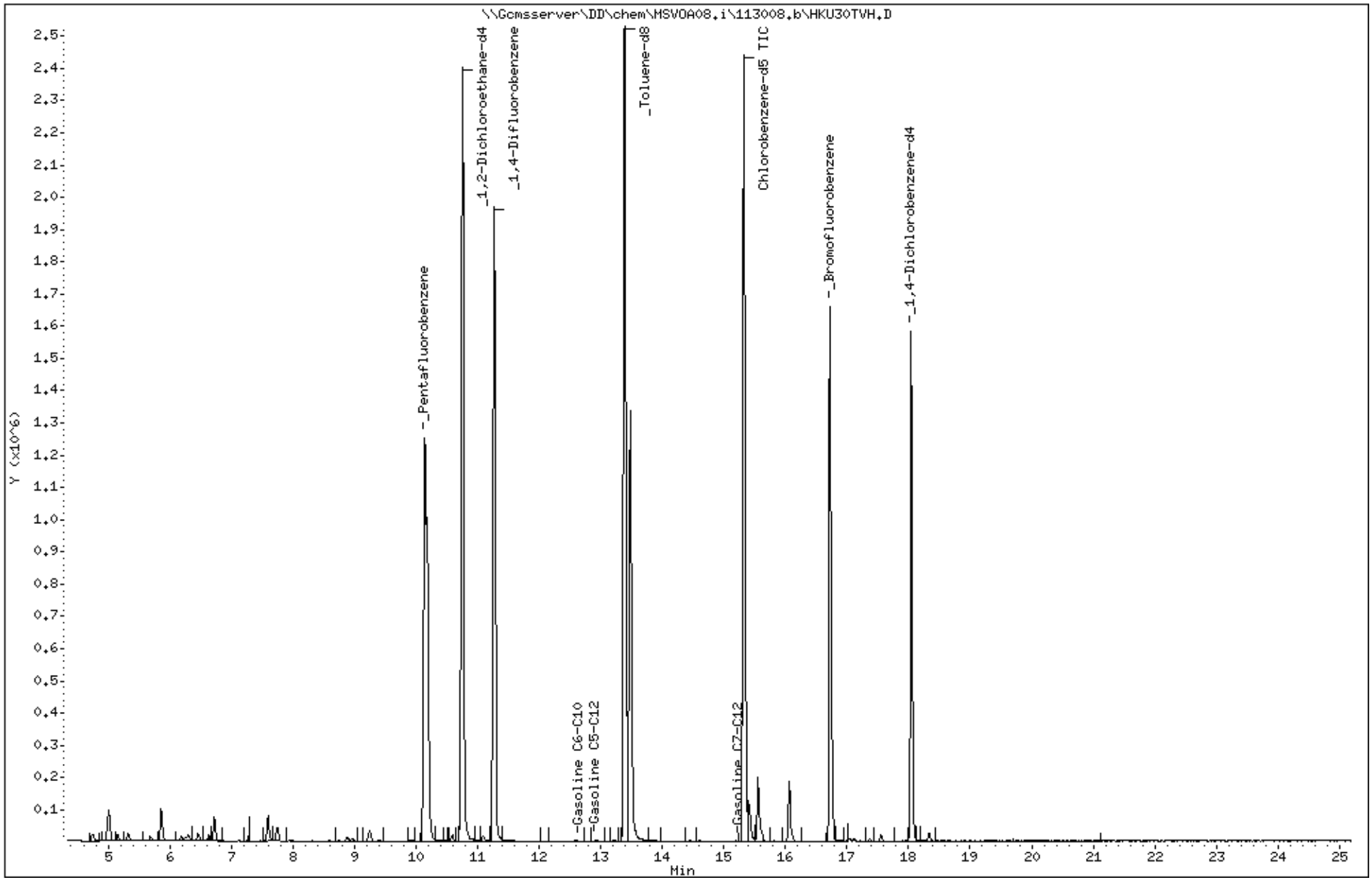
Column phase:



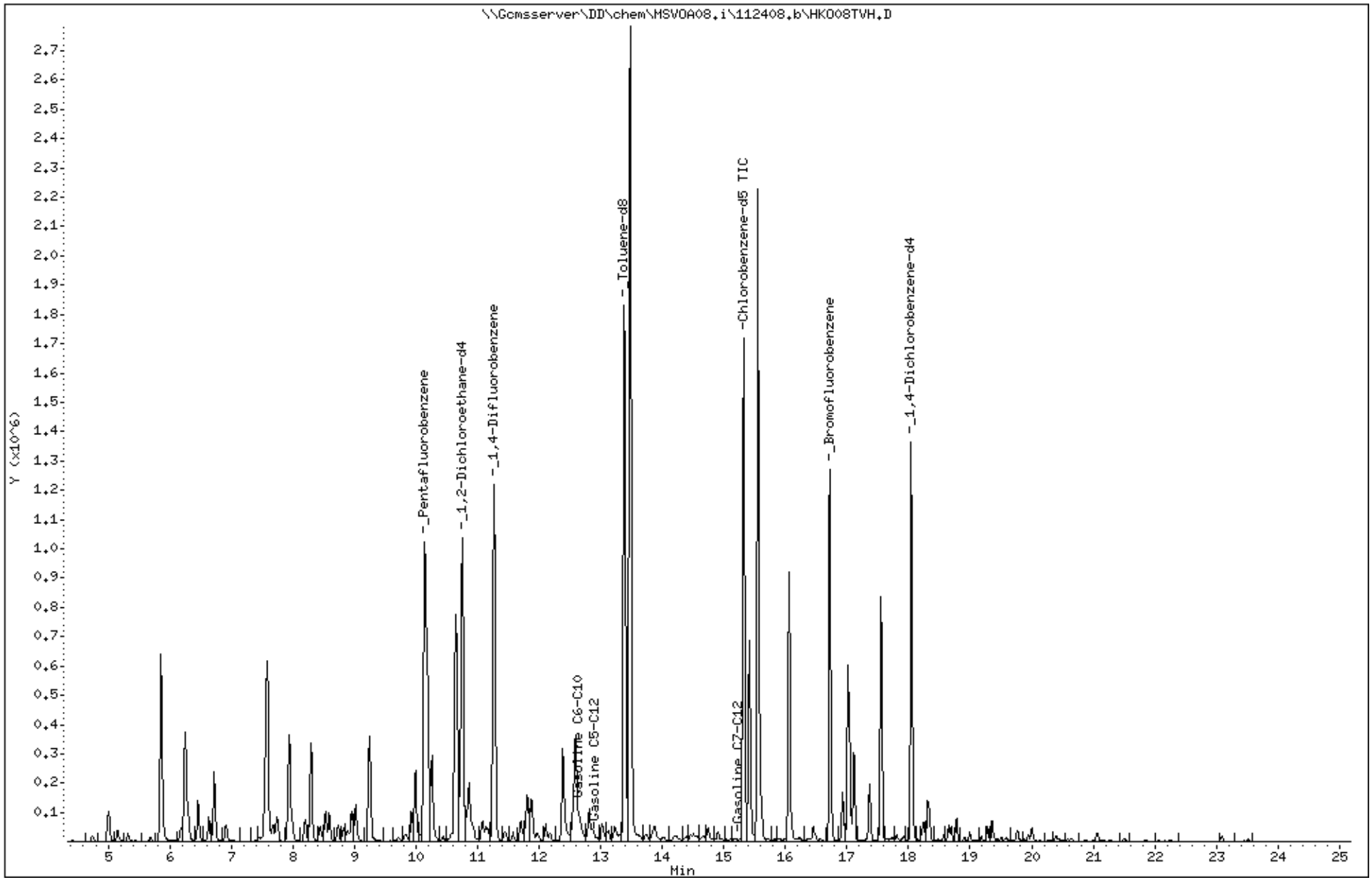
Data File: \\Gcmsserver\DD\chem\MSVOA08.i\113008.b\HKU30TVH.D
Date : 01-DEC-2008 05:04
Client ID: DYNA P&T
Sample Info: S,208024-008

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\112408.b\HK008TVH.D
Date : 24-NOV-2008 13:46
Client ID: DYNA P&T
Instrument: MSVOA08.i
Sample Info: CCV,S9459,0.015/100,
Operator: voc
Column phase:
Column diameter: 2.00



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

CHAIN OF CUSTODY

Page 1 of 1

C & T LOGIN #: 208024

Project No.: 028-10060-00
Project Name: Oakland MSC
Project P.O.: 028-10060-00
Turnaround Time: Std

Sampler: STEVE W
Report To: Dawn Roth
Company: LFR, Inc
Telephone: 5106524520
Fax: 5106522246

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	6	Analysis: TPHd/BTEX MTBE (8260) TPHd, TPHk (8015) TPHg (8015)
1	TB-112008	11/20/08 0700		X		4	X					X HOLD
2	RW-B4	11/20/08 1335		X			X				X	X
3	RW-C5	11/20/08 1015		X		4	X				X	X
4	RW-C5-D	11/20/08 1020		X		4	X				X	X
5	RW-C3	11/20/08 1640		X		4	X				X	X
6	RW-C1-FB	11/20/08 1605		X		4	X				X	X
7	RW-C1	11/20/08 1620		X		4					X	X VOAs NOT PRES
8	RW-B2	11/20/08 1527		X		4	X				X	X

Notes:
* USE SILICA GEL PREP UPON TPHd/mo/lc Samples Prior to Analysis + RW-C1 VOAs NOT Pres

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

RELINQUISHED BY:	RECEIVED BY:
SIGNATURE	SIGNATURE
11/20/08 1843 DATE / TIME	11/20/08 1843 DATE / TIME
DATE / TIME	DATE / TIME
DATE / TIME	DATE / TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # 208074 Date Received 11-20-08 Number of coolers 2
Client LFR Inc Project Oakland MSC

Date Opened 11-20-08 By (print) J. Ramussen (sign)
Date Logged in ↓ By (print) M. VILLAMOR (sign)

1. Did cooler come with a shipping slip (airbill, etc)? ..... YES (NO)
   Shipping info

2A. Were custody seals present? ☐ YES (circle) on cooler on samples ☒ NO
   How many Name Date
2B. Were custody seals intact upon arrival? ..... YES NO (N/A)
3. Were custody papers dry and intact when received? ..... (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ..... (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ..... (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 6.6

☒ Samples Received on ice & cold without a temperature blank

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES (NO)
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? ..... (YES) NO
10. Are samples in the appropriate containers for indicated tests? ..... (YES) NO
11. Are sample labels present, in good condition and complete? ..... (YES) NO
12. Do the sample labels agree with custody papers? ..... (YES) NO
13. Was sufficient amount of sample sent for tests requested? ..... (YES) NO
14. Are the samples appropriately preserved? ..... (YES) NO
15. Are bubbles > 6mm absent in VOA samples? ..... (YES) NO N/A
16. Was the client contacted concerning this sample delivery? ..... YES (NO)
   If YES, Who was called? By Date:

COMMENTS

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

Laboratory Job Number 208064
ANALYTICAL REPORT

LFR Levine Fricke	Project : 028-10060-00
1900 Powell Street	Location : Oakland MSC
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
MW-13	208064-001
MW-6	208064-002
MW-1	208064-003
MW-14	208064-004
MW-9-FB	208064-005
MW-9	208064-006
MW-5	208064-007
MW-12	208064-008
RW-A2	208064-009
RW-A1	208064-010
TB-112108	208064-011

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. This report may be reproduced only in its entirety.

Signature: _____ Date: 12/09/2008
Project Manager

Signature: _____ Date: 12/09/2008
Senior Program Manager

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**208064**
Client:	**LFR Levine Fricke**
Project:	**028-10060-00**
Location:	**Oakland MSC**
Request Date:	**11/21/08**
Samples Received:	**11/21/08**

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 11/21/08. The samples were received cold and intact. All data were e-mailed to Daren Roth on 12/09/08.

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

Volatile Organics by GC/MS (EPA 8260B):
High surrogate recoveries were observed for bromofluorobenzene in MW-13 (lab # 208064-001) and the method blanks for batch 145422; no target analytes were detected in these samples. No other analytical problems were encountered.

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08
Diln Fac:	1.000	Prepared:	12/02/08
Batch#:	145538		

Field ID: MW-13 Analyzed: 12/06/08
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208064-001

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	120 Y	50
Motor Oil C24-C36	630	300

Surrogate	%REC	Limits
Hexacosane	103	58-127

Field ID: MW-6 Analyzed: 12/06/08
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208064-002

Analyte	Result	RL
Kerosene C10-C16	1,200 Y	50
Diesel C10-C24	1,500 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	58-127

Field ID: MW-1 Analyzed: 12/06/08
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208064-003

Analyte	Result	RL
Kerosene C10-C16	87 Y	50
Diesel C10-C24	110 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	103	58-127

Field ID: MW-14 Analyzed: 12/06/08
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 208064-004

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	150 Y	50
Motor Oil C24-C36	660	300

Surrogate	%REC	Limits
Hexacosane	115	58-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08
Diln Fac:	1.000	Prepared:	12/02/08
Batch#:	145538		

Field ID: MW-9-FB
Type: SAMPLE
Lab ID: 208064-005
Analyzed: 12/06/08
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	58-127

Field ID: MW-9
Type: SAMPLE
Lab ID: 208064-006
Analyzed: 12/06/08
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	97	58-127

Field ID: MW-5
Type: SAMPLE
Lab ID: 208064-007
Analyzed: 12/06/08
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	690 Y	50
Diesel C10-C24	660 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	96	58-127

Field ID: MW-12
Type: SAMPLE
Lab ID: 208064-008
Analyzed: 12/06/08
Cleanup Method: EPA 3630C

Analyte	Result	RL
Kerosene C10-C16	120 Y	50
Diesel C10-C24	170 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	58-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08
Diln Fac:	1.000	Prepared:	12/02/08
Batch#:	145538		

Field ID:	RW-A2	Analyzed:	12/06/08
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	208064-009		

Analyte	Result	RL
Kerosene C10-C16	160 Y	50
Diesel C10-C24	590 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	105	58-127

Field ID:	RW-A1	Analyzed:	12/06/08
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	208064-010		

Analyte	Result	RL
Kerosene C10-C16	ND	50
Diesel C10-C24	56 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	113	58-127

Type:	BLANK	Analyzed:	12/04/08
Lab ID:	QC473291	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	95	58-127

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 #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	028-10060-00	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	145538
Units:	ug/L	Prepared:	12/02/08
Diln Fac:	1.000	Analyzed:	12/05/08

Type: BS
Lab ID: QC473292
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,730	69	52-120

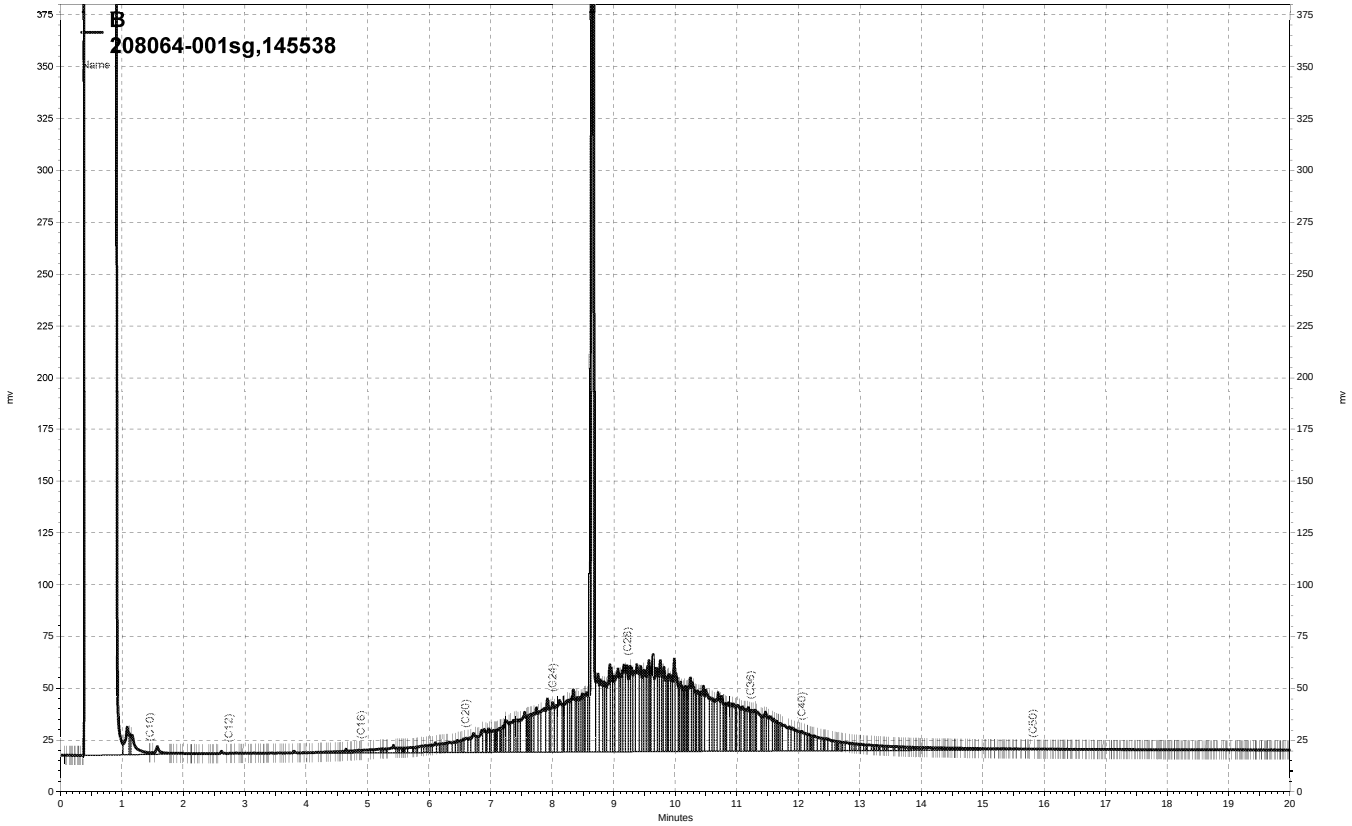
Surrogate	%REC	Limits
Hexacosane	88	58-127

Type: BSD
Lab ID: QC473293
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,068	83	52-120	18	30

Surrogate	%REC	Limits
Hexacosane	107	58-127

RPD= Relative Percent Difference



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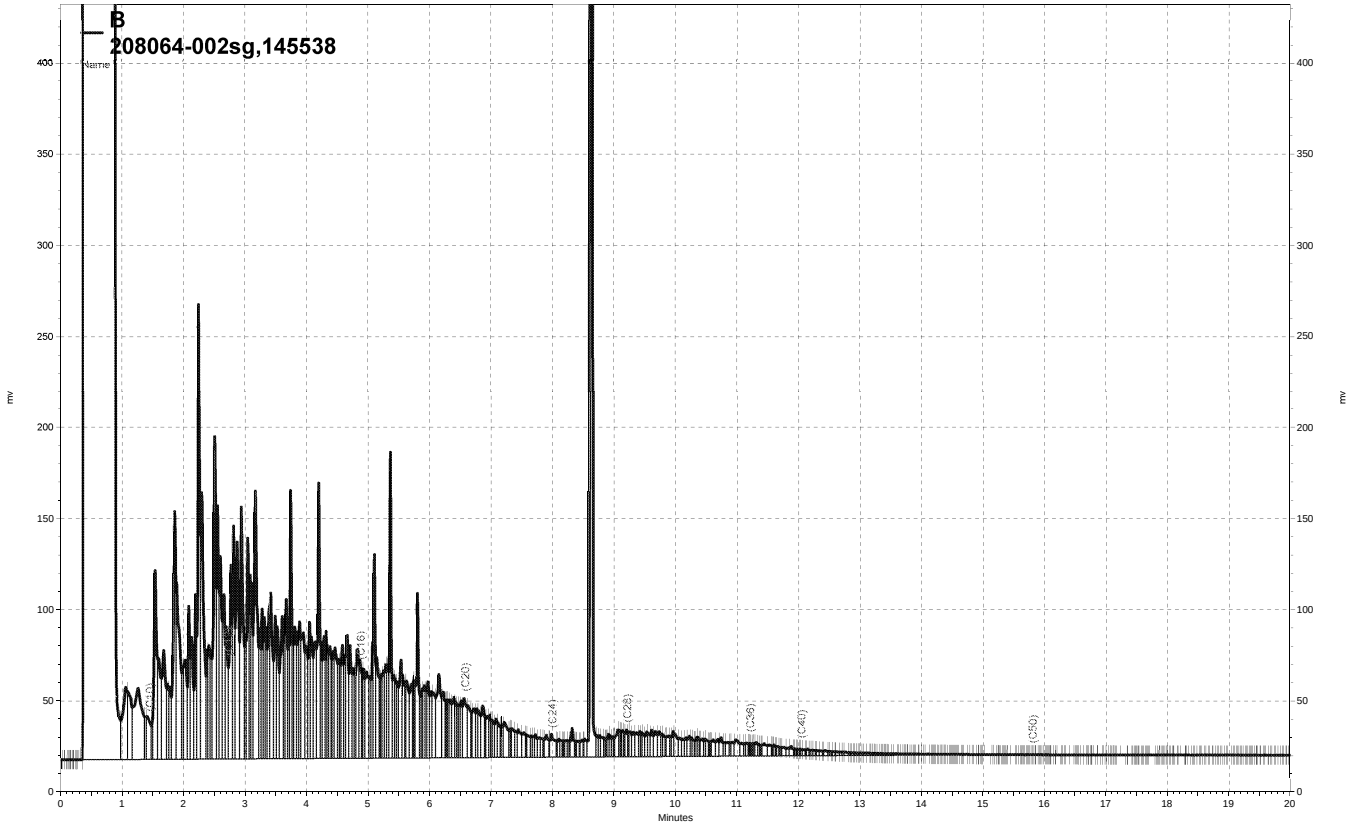

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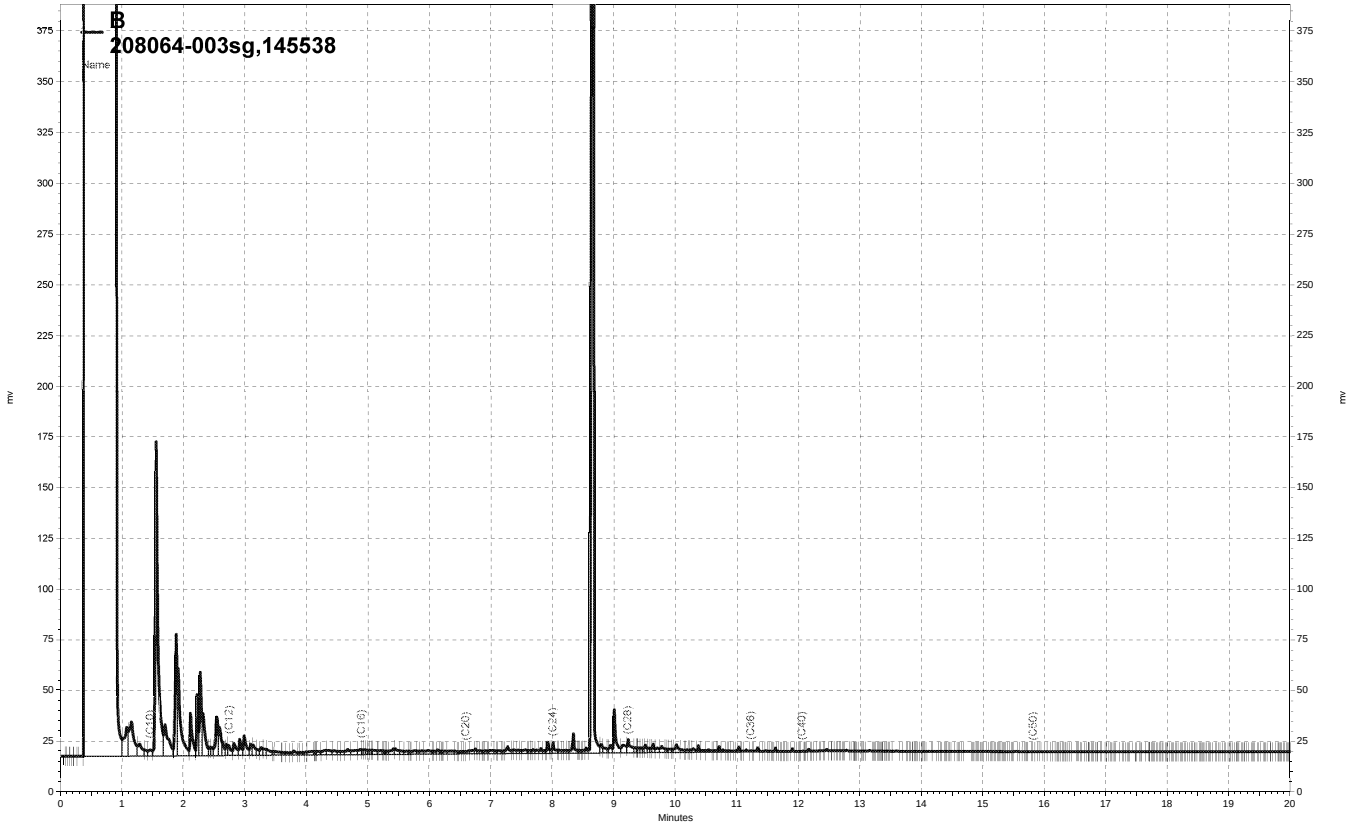

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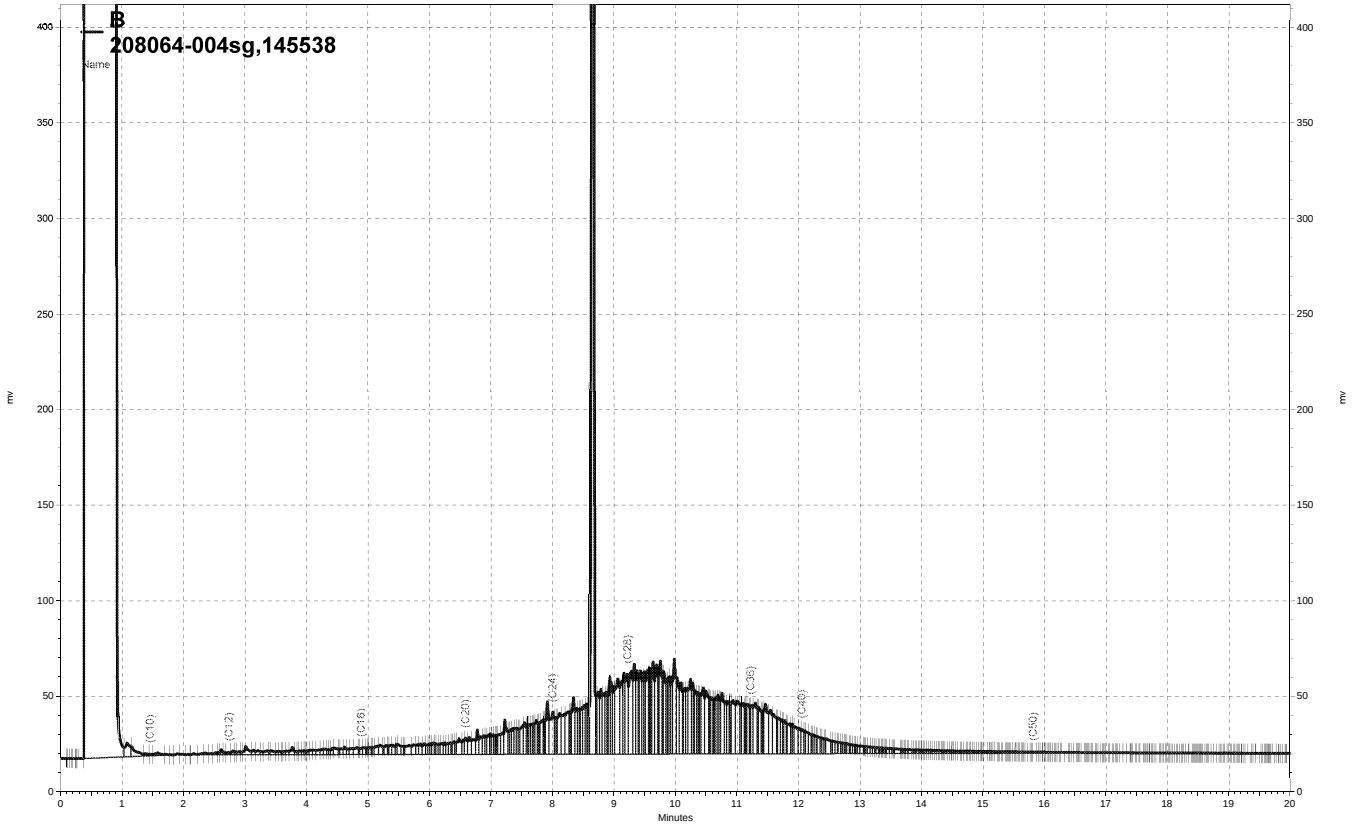

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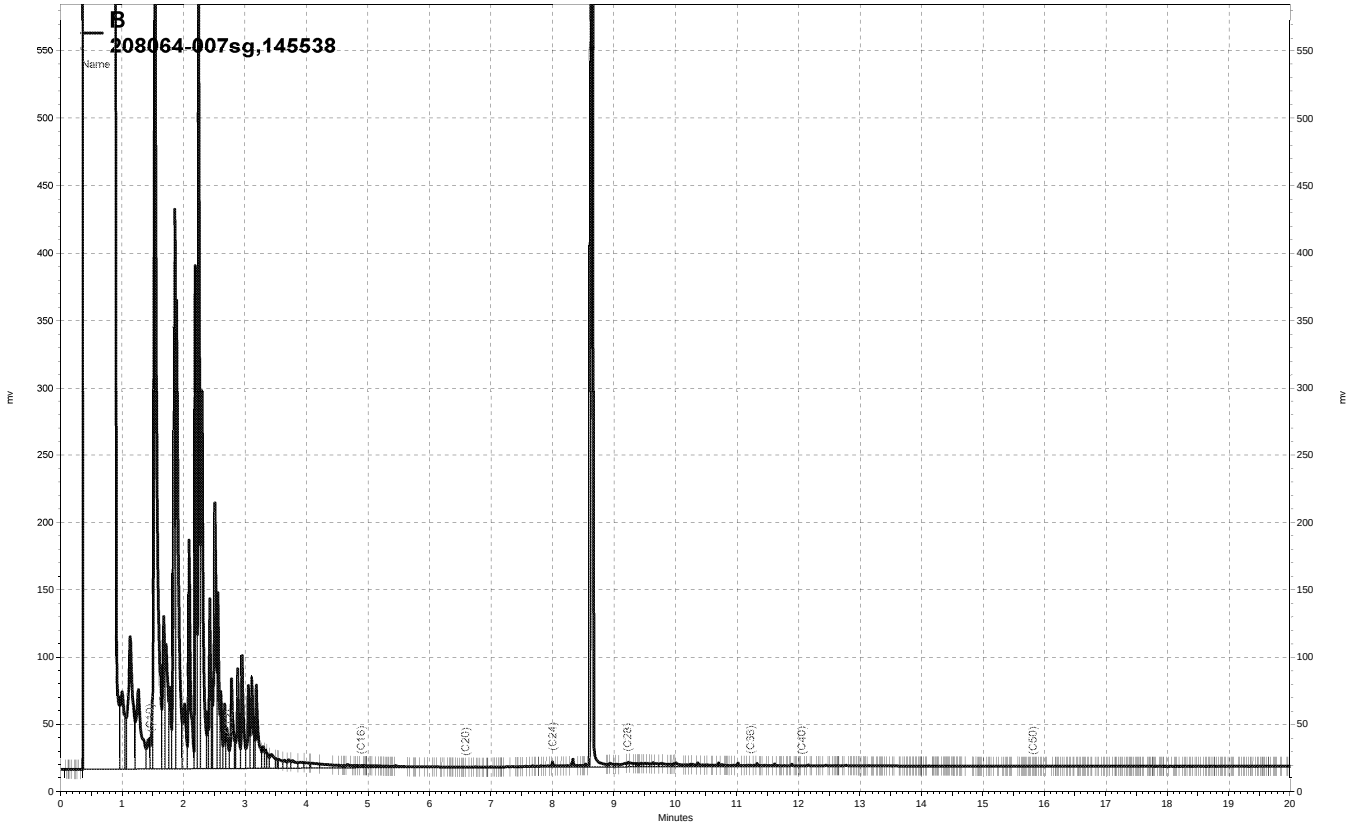

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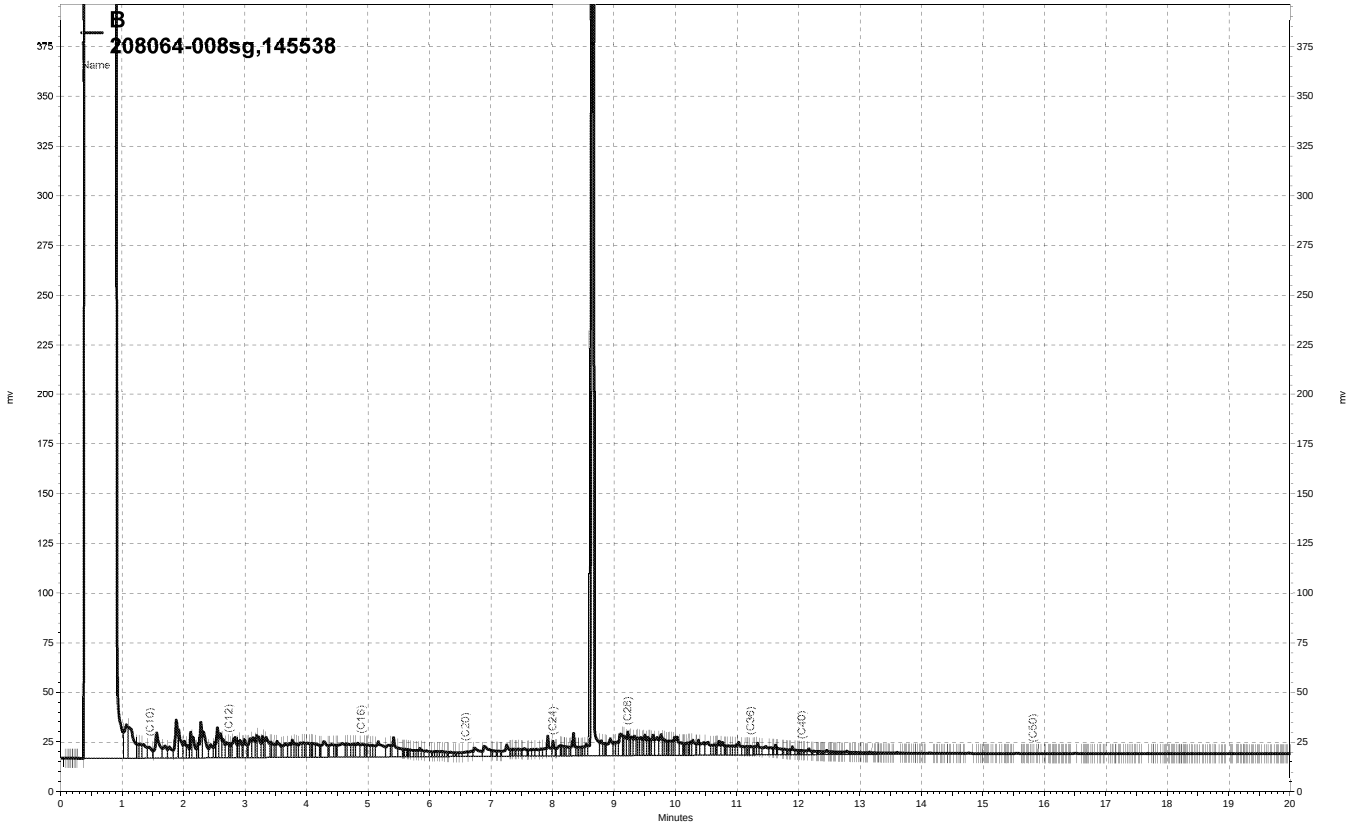

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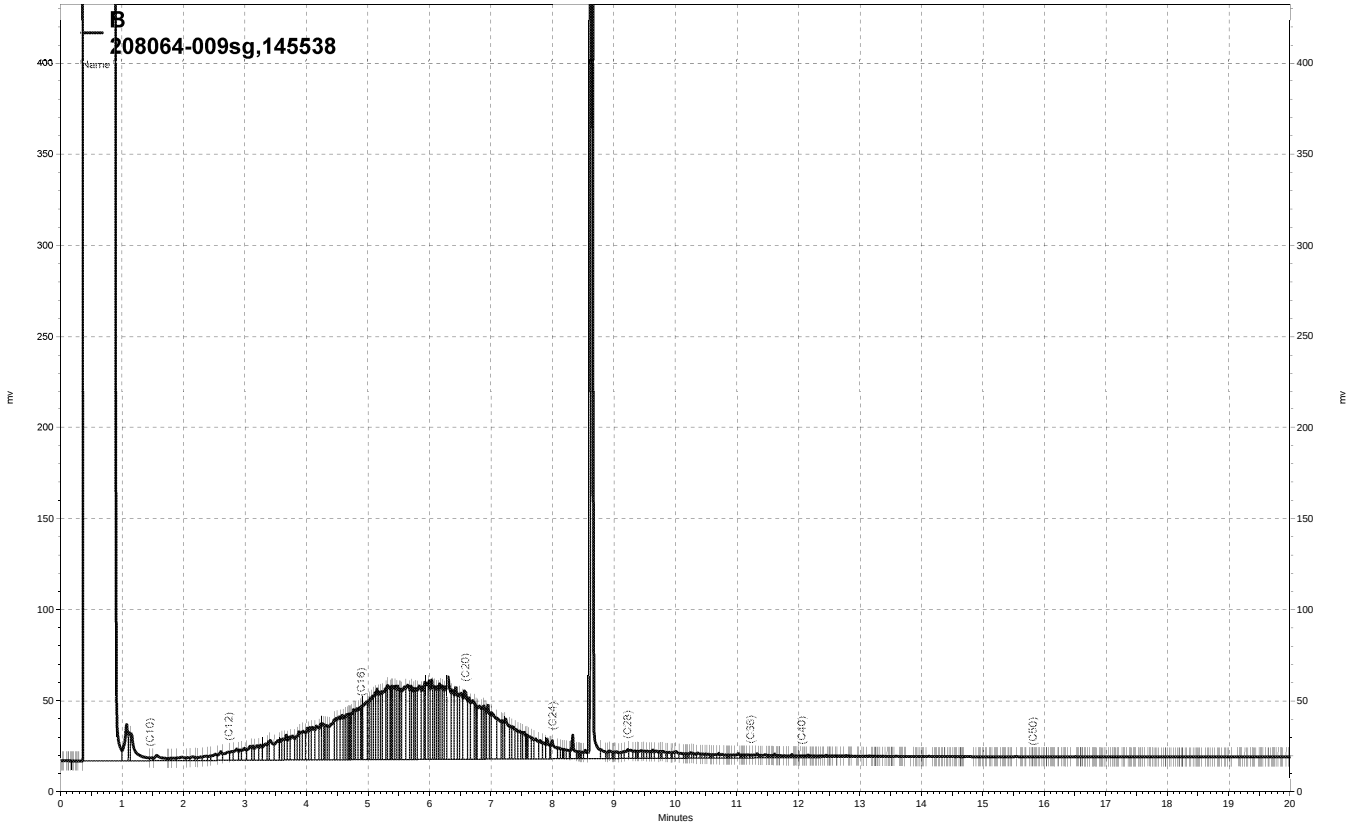

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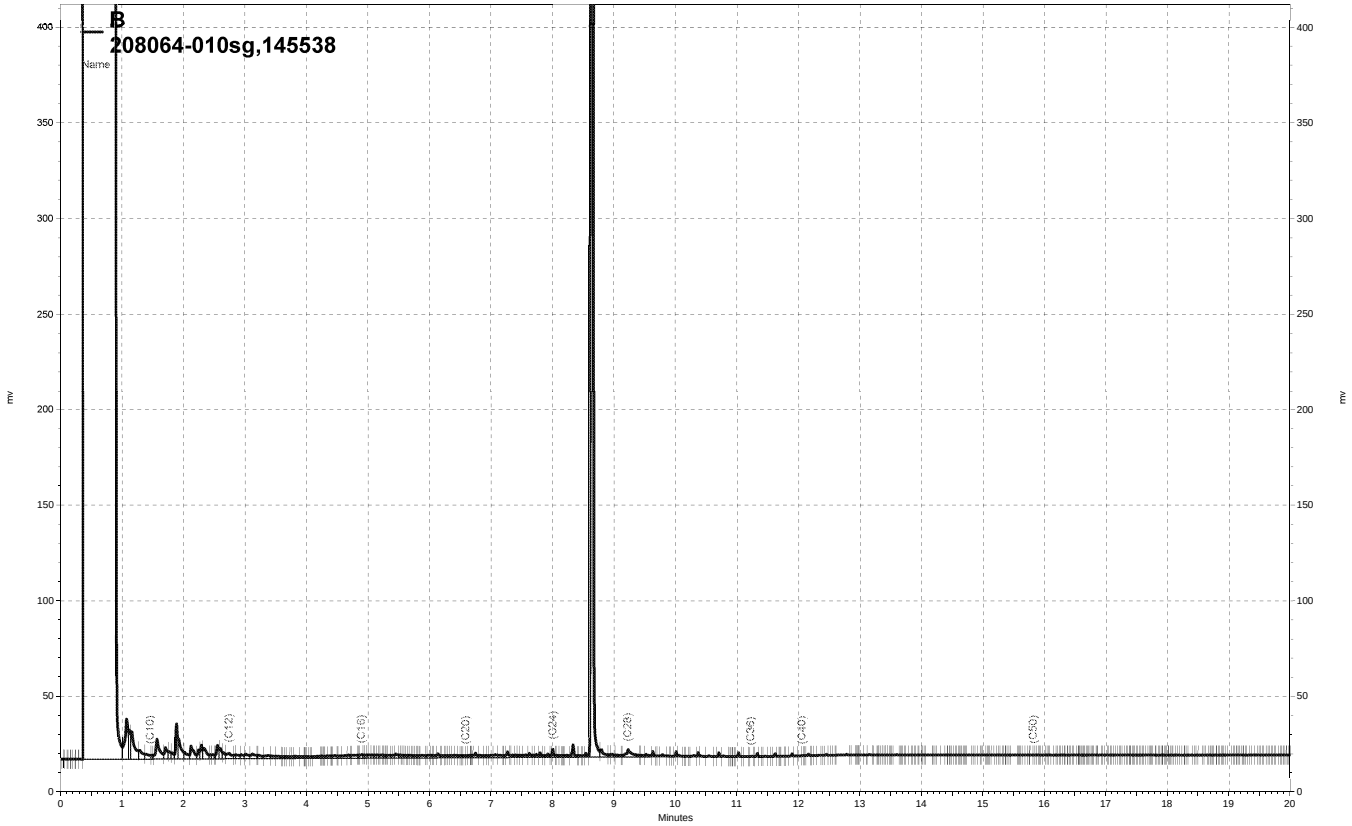

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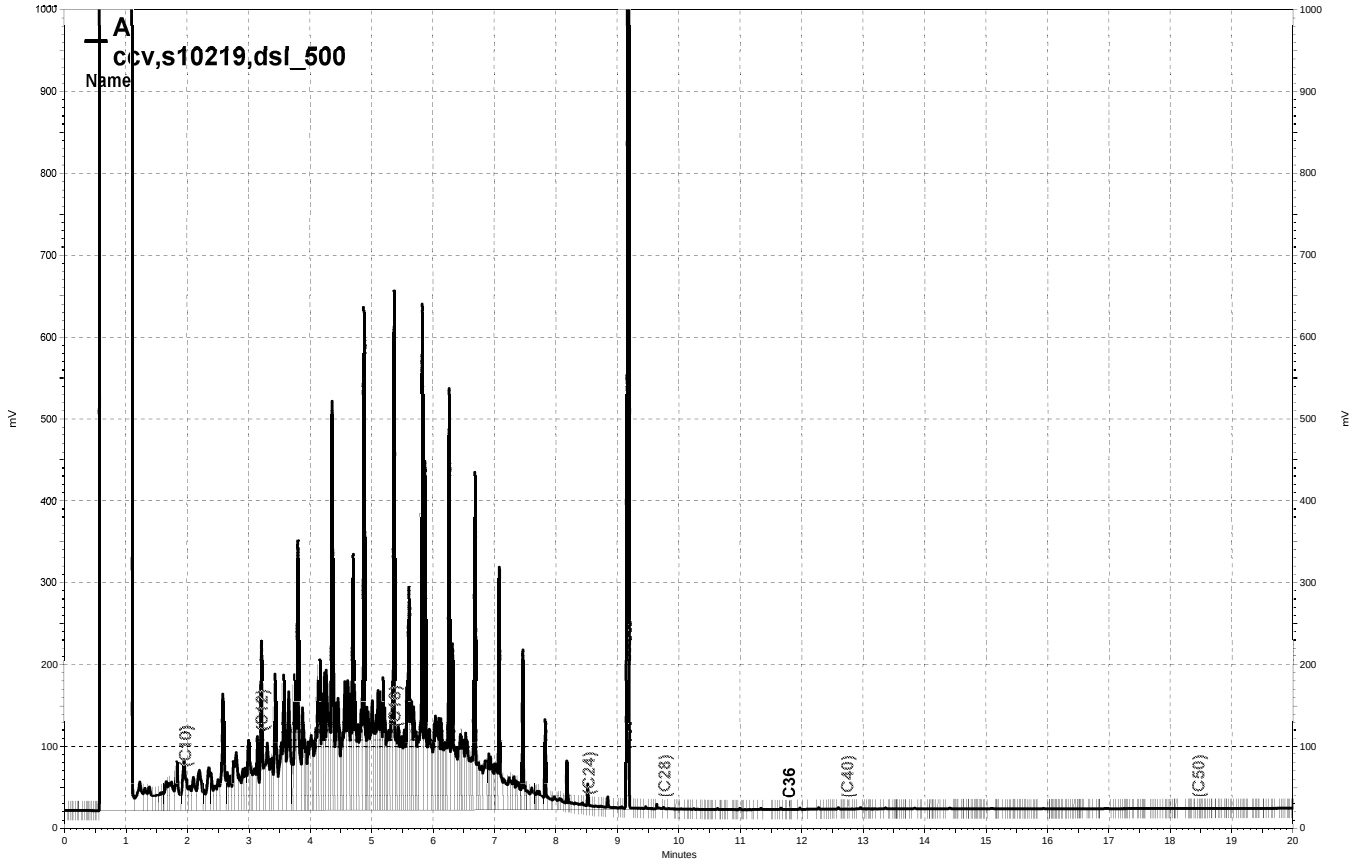

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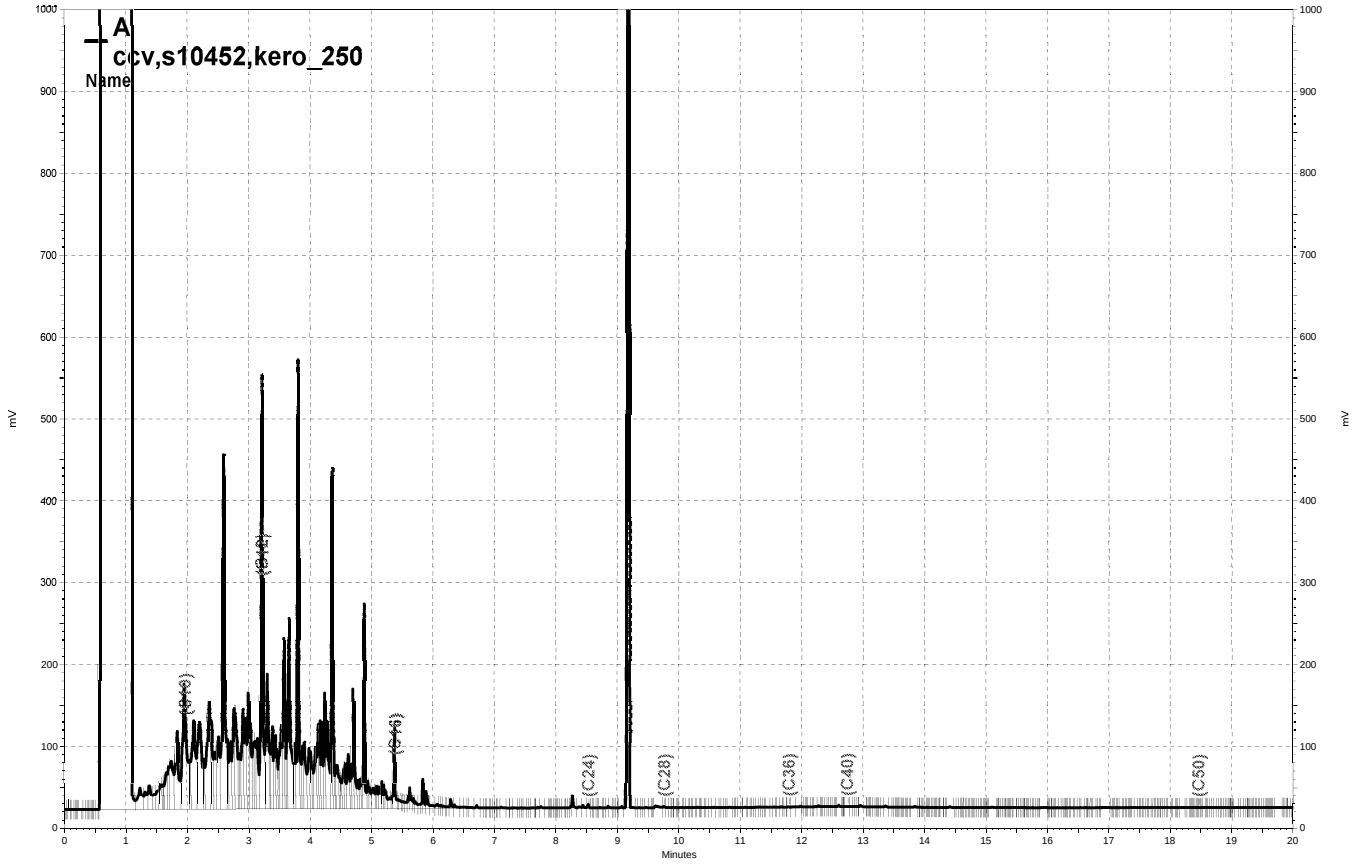

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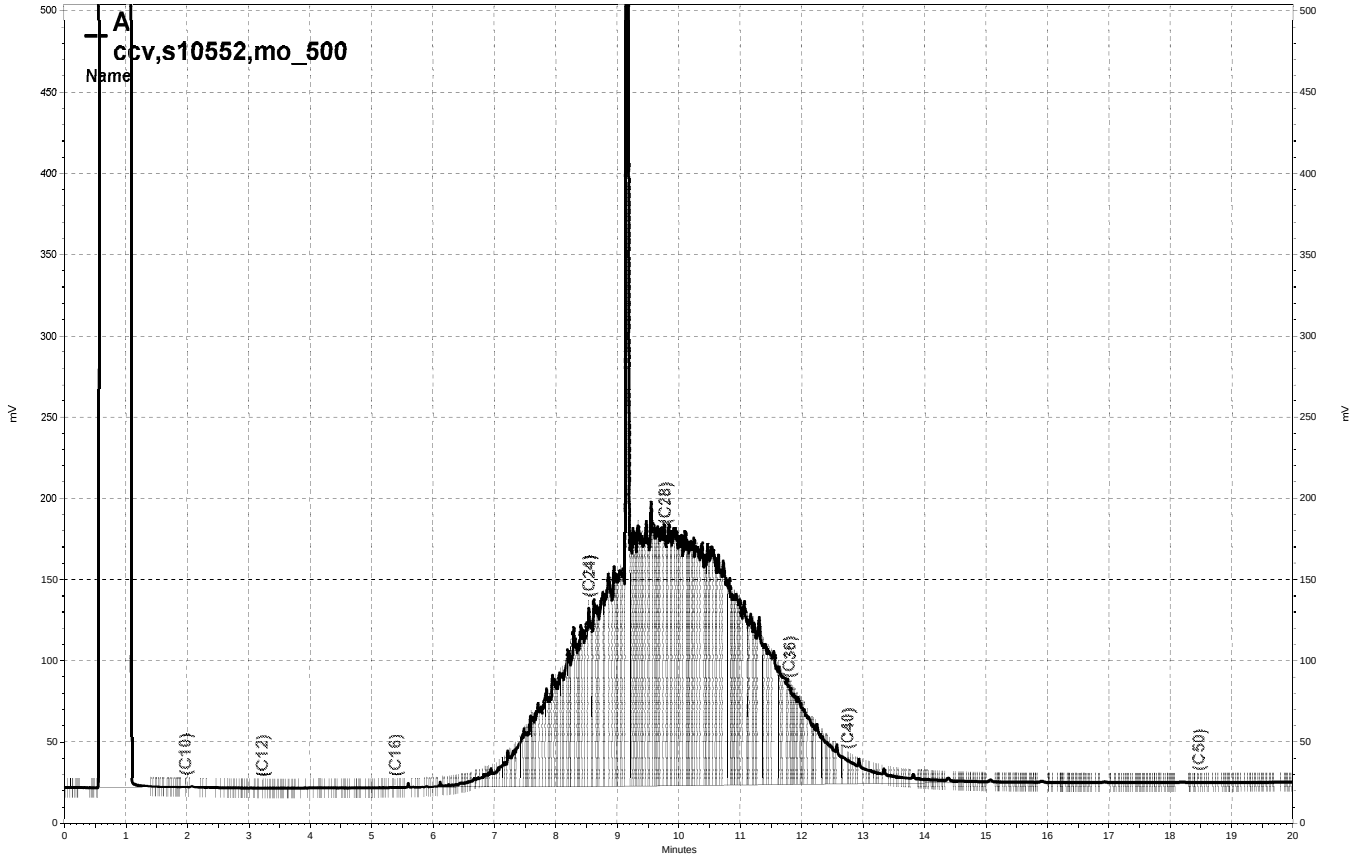

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Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Field ID:	MW-13	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145422
Lab ID:	208064-001	Analyzed:	11/27/08

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	80-125
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	127 *	80-122

Field ID:	MW-6	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145422
Lab ID:	208064-002	Analyzed:	11/27/08

Analyte	Result	RL
Gasoline C7-C12	450 Y	50
MTBE	5.7	0.50
Benzene	96	0.50
Toluene	1.9	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	1.2	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-122

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Field ID:	MW-1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145422
Lab ID:	208064-003	Analyzed:	11/27/08

Analyte	Result	RL
Gasoline C7-C12	210 Y	50
MTBE	ND	0.50
Benzene	2.4	0.50
Toluene	0.52	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	1.3	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-122

Field ID:	MW-14	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145462
Lab ID:	208064-004	Analyzed:	11/30/08

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	96	80-125
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	119	80-122

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Field ID:	MW-9-FB	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145462
Lab ID:	208064-005	Analyzed:	12/01/08

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

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	118	80-122

Field ID:	MW-9	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145561
Lab ID:	208064-006	Analyzed:	12/03/08

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

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	120	80-122

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Field ID:	MW-5	Diln Fac:	3.333
Type:	SAMPLE	Batch#:	145561
Lab ID:	208064-007	Analyzed:	12/03/08

Analyte	Result	RL
Gasoline C7-C12	2,600	170
MTBE	20	1.7
Benzene	11	1.7
Toluene	1.7	1.7
Ethylbenzene	240	1.7
m,p-Xylenes	6.5	1.7
o-Xylene	ND	1.7

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-122

Field ID:	MW-12	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145561
Lab ID:	208064-008	Analyzed:	12/03/08

Analyte	Result	RL
Gasoline C7-C12	59 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	93	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	118	80-122

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Field ID:	RW-A2	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145462
Lab ID:	208064-009	Analyzed:	12/01/08

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	96	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	119	80-122

Field ID:	RW-A1	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	145561
Lab ID:	208064-010	Analyzed:	12/03/08

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	4.5	0.50
Benzene	8.8	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	115	80-122

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Type: BLANK
Lab ID: QC472774
Diln Fac: 1.000

Batch#: 145422
Analyzed: 11/26/08

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	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	129 *	80-122

Type: BLANK
Lab ID: QC472775
Diln Fac: 1.000

Batch#: 145422
Analyzed: 11/26/08

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	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	126 *	80-122

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Type: BLANK
Lab ID: QC472943
Diln Fac: 1.000

Batch#: 145462
Analyzed: 11/30/08

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

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	122	80-122

Type: BLANK
Lab ID: QC473427
Diln Fac: 1.000

Batch#: 145561
Analyzed: 12/03/08

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

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	119	80-122

*= Value outside of QC limits; see narrative
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Sampled:	11/21/08
Units:	ug/L	Received:	11/21/08

Type:	BLANK	Batch#:	145561
Lab ID:	QC473428	Analyzed:	12/03/08
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	93	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	114	80-122

*= Value outside of QC limits; see narrative
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 #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145422
Units:	ug/L	Analyzed:	11/26/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472776

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.58	94	70-125
Benzene	25.00	26.84	107	80-120
Toluene	25.00	25.71	103	80-120
Ethylbenzene	25.00	24.69	99	80-122
m,p-Xylenes	50.00	48.29	97	80-126
o-Xylene	25.00	24.60	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	107	80-122

Type: BSD Lab ID: QC472777

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	25.00	23.50	94	70-125	0	20
Benzene	25.00	25.17	101	80-120	6	20
Toluene	25.00	23.64	95	80-120	8	20
Ethylbenzene	25.00	23.38	94	80-122	5	20
m,p-Xylenes	50.00	45.95	92	80-126	5	20
o-Xylene	25.00	23.39	94	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	106	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145422
Units:	ug/L	Analyzed:	11/26/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472778

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	907.1	91	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-122

Type: BSD Lab ID: QC472779

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	855.1	86	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	111	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145462
Units:	ug/L	Analyzed:	11/30/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472944

Analyte	Spiked	Result	%REC	Limits
MTBE	22.50	20.68	92	70-125
Benzene	22.50	22.81	101	80-120
Toluene	22.50	21.61	96	80-120
Ethylbenzene	22.50	21.21	94	80-122
m,p-Xylenes	45.00	41.07	91	80-126
o-Xylene	22.50	21.27	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

Type: BSD Lab ID: QC472945

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	22.50	20.82	93	70-125	1	20
Benzene	22.50	23.68	105	80-120	4	20
Toluene	22.50	22.55	100	80-120	4	20
Ethylbenzene	22.50	22.22	99	80-122	5	20
m,p-Xylenes	45.00	43.54	97	80-126	6	20
o-Xylene	22.50	22.20	99	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	108	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145462
Units:	ug/L	Analyzed:	11/30/08
Diln Fac:	1.000		

Type: BS Lab ID: QC472946

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	825.0	82	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC472947

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	804.5	80	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-125
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	110	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145561
Units:	ug/L	Analyzed:	12/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473429

Analyte	Spiked	Result	%REC	Limits
MTBE	22.50	19.34	86	70-125
Benzene	22.50	23.69	105	80-120
Toluene	22.50	22.45	100	80-120
Ethylbenzene	22.50	22.40	100	80-122
m,p-Xylenes	45.00	44.62	99	80-126
o-Xylene	22.50	22.66	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	84	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-122

Type: BSD Lab ID: QC473430

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	22.50	19.24	86	70-125	1	20
Benzene	22.50	23.76	106	80-120	0	20
Toluene	22.50	22.51	100	80-120	0	20
Ethylbenzene	22.50	21.87	97	80-122	2	20
m,p-Xylenes	45.00	43.68	97	80-126	2	20
o-Xylene	22.50	22.09	98	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-125
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-122

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	208064	Location:	Oakland MSC
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	028-10060-00	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	145561
Units:	ug/L	Analyzed:	12/03/08
Diln Fac:	1.000		

Type: BS Lab ID: QC473431

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	972.7	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-125
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-122

Type: BSD Lab ID: QC473432

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	997.8	100	80-120	3	20

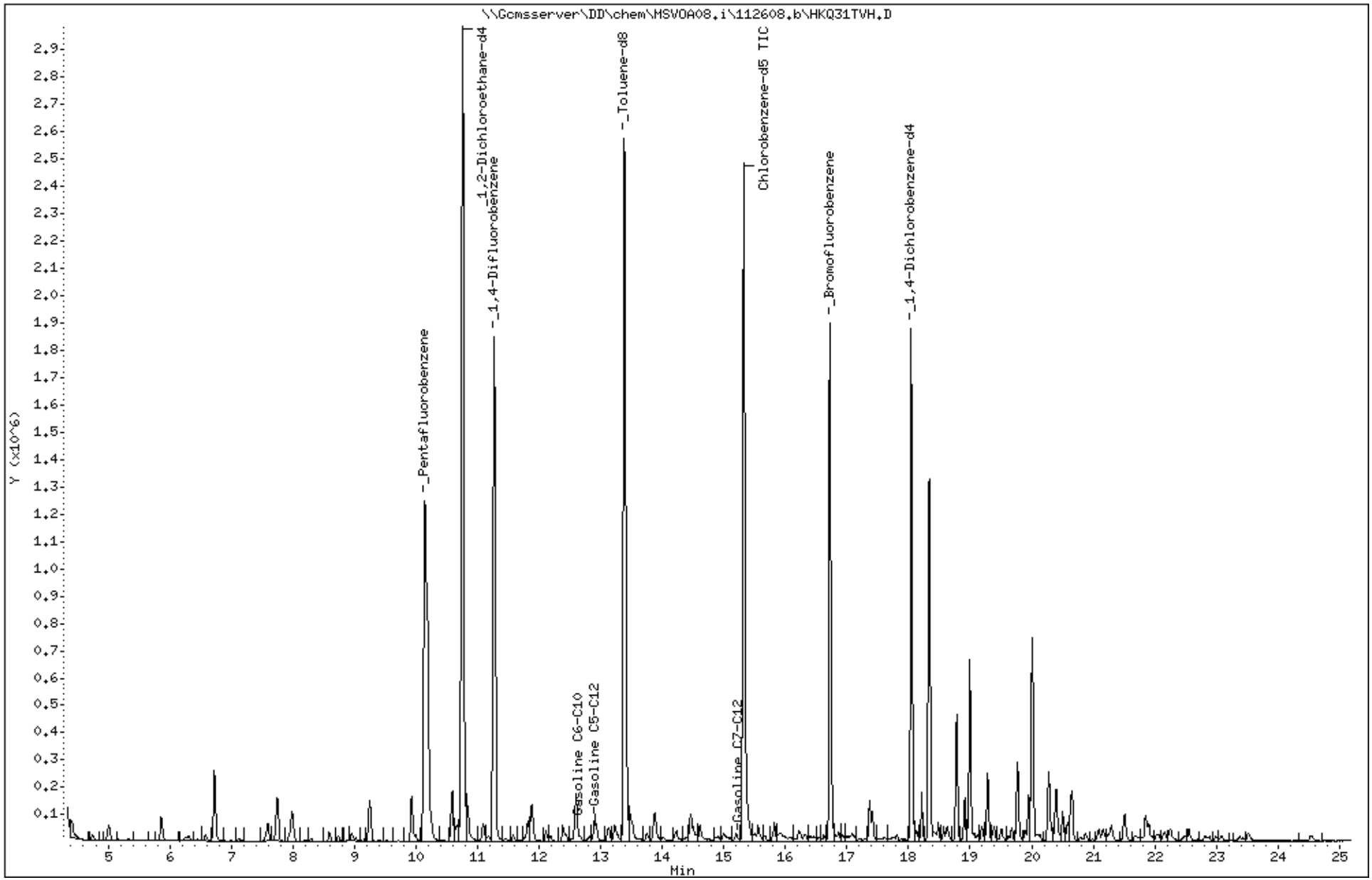
Surrogate	%REC	Limits
Dibromofluoromethane	93	80-125
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-122

RPD= Relative Percent Difference

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\112608.b\HKQ31TVH.D
Date : 27-NOV-2008 04:12
Client ID: DYNA P&T
Sample Info: S,208064-002

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:



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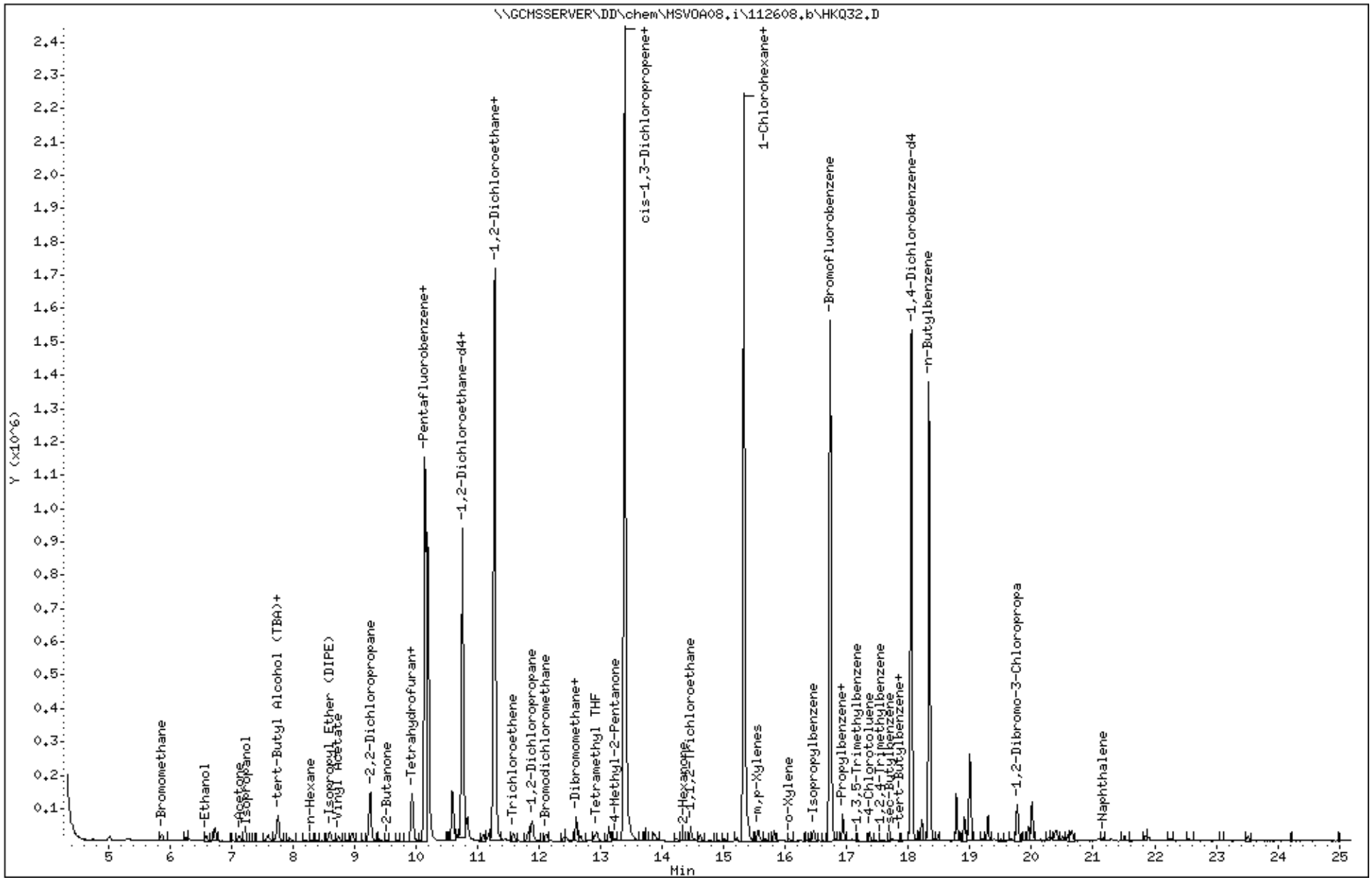
Purge Volume: 5.0
Operator: voc
Column phase: RTX 624
Column diameter: 0.25



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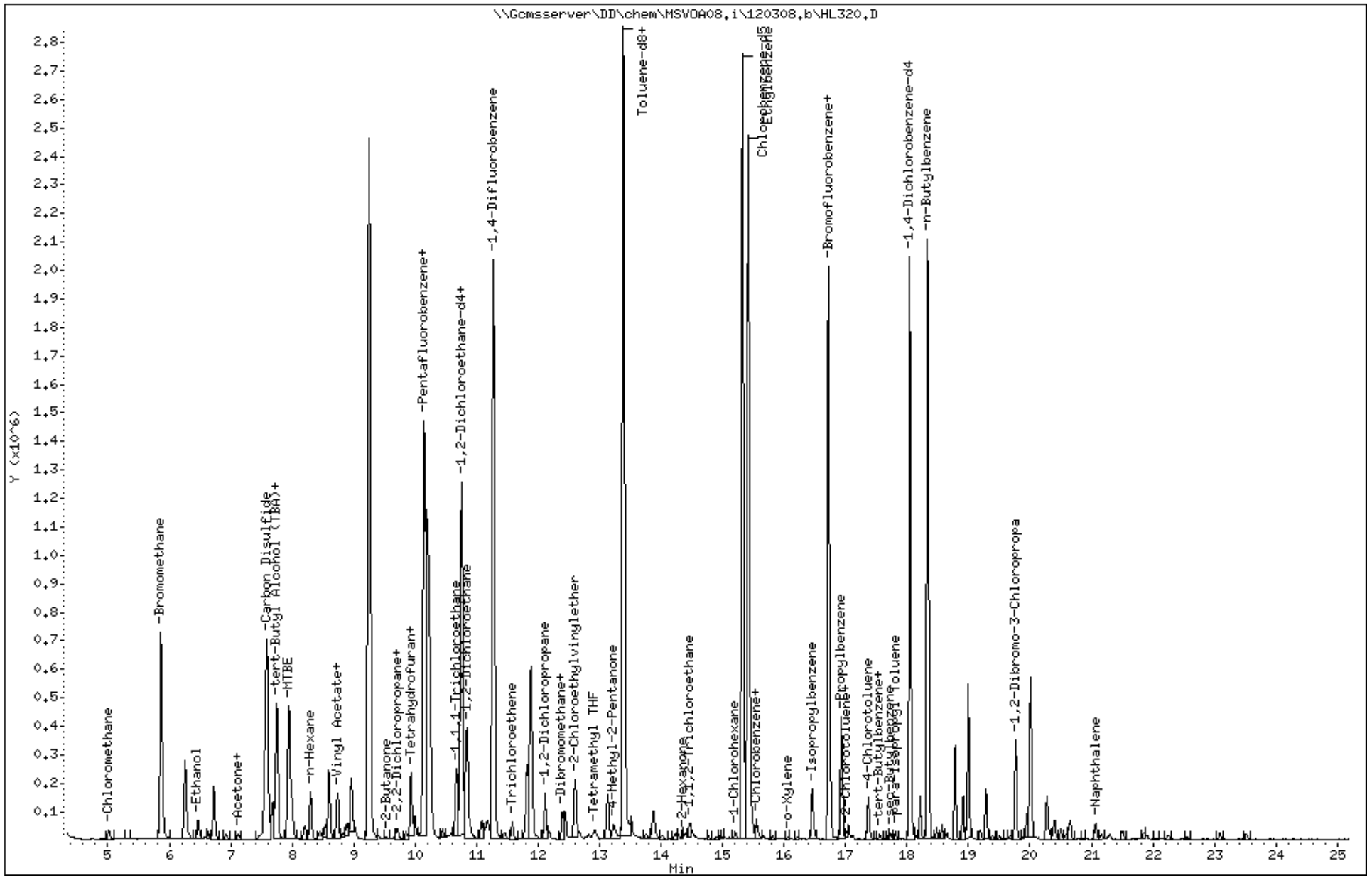
Client ID: DYNA P&T
Instrument: MSVOA08.i
Sample Info: S,208064-007
Purge Volume: 5.0
Operator: voc
Column phase: RTX 624
Column diameter: 0.25



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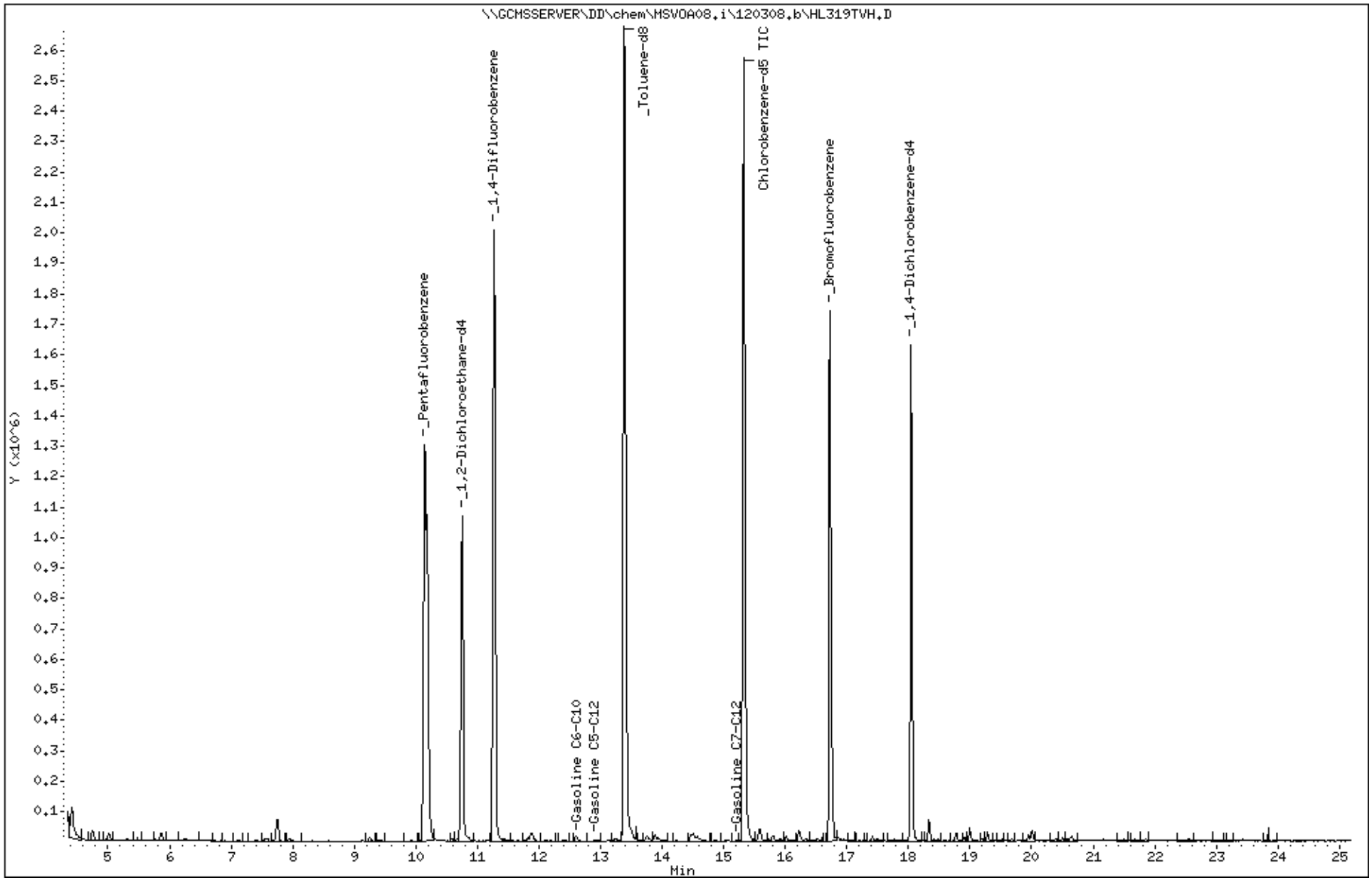
Date : 03-DEC-2008 21:30
Client ID: DYNA P&T
Sample Info: S,208064-008

Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:



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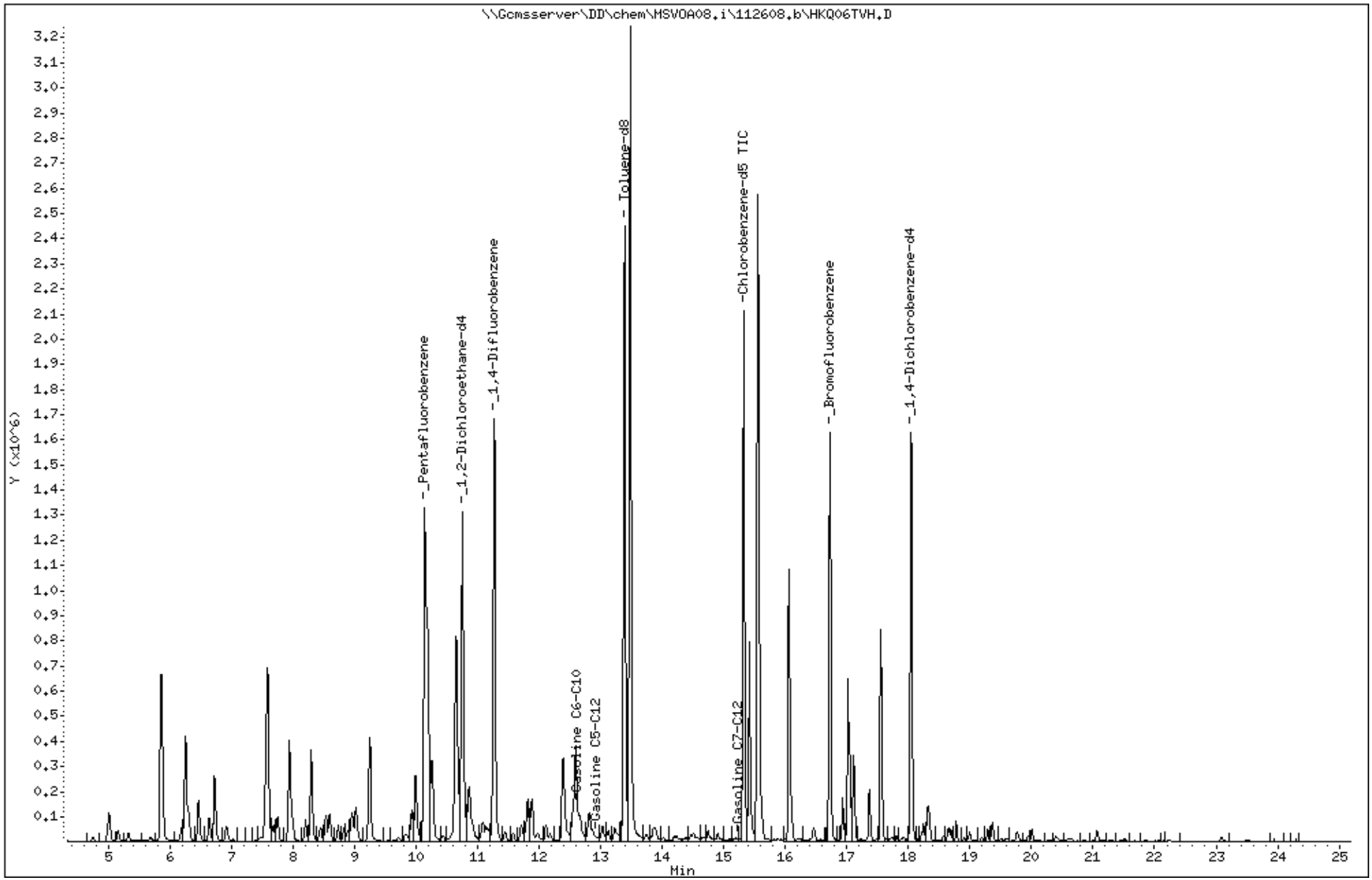
Instrument: MSVOA08.i
Operator: voc
Column diameter: 2.00

Column phase:



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Analytical Laboratory Since 1878
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CHAIN OF CUSTODY

Page _____ of _____

C & T LOGIN #: 208064

Project No.: 028-10860-00
Project Name: Oakland MSC
Project P.O.: 028-10860-00
Turnaround Time: Standard

Sampler: GW/ST
Report To: Daren Roth
Company: LFR, Inc
Telephone: 510 652 4500
Fax: 510 652 2246

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analysis: TPHg, BTEX, MTBE (8260)	Analysis: TPHd, TPHmo, TPHk (8015)
1	MW-13	11/21/08 1420		X		4	X			X	X	X
2	MW-6	11/21/08 918		X		4	X			X	X	X
3	MW-1	11/21/08 1220		X		4	X			X	X	X
4	MW-14	11/21/08 1340		X		4	X			X	X	X
5	MW-9-FB	11/21/08 1130		X		4	X			X	X	X
6	MW-9	11/21/08 1302		X		4	X			X	X	X
7	MW-5	11/21/08 1055		X		4	X			X	X	X
8	MW-12	11/21/08 1010		X		4	X			X	X	X
9	RW-A2	11/21/08 905		X		4	X			X	X	X
10	RW-A1	11/21/08 910		X		4	X			X	X	X
11	TB-112108	11/21/08 0700		X		1	X				HOLD	

Notes: * Use Silica Gel Prep upon TPHd/mo/k samples Prior to analysis

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

RELINQUISHED BY:
SIGNATURE — 11/21/08 1654 DATE / TIME
DATE / TIME
DATE / TIME

RECEIVED BY:
Pat Hongsley — 11/21/08 1654 DATE / TIME
DATE / TIME
DATE / TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd

Login # 208064 Date Received 11-21-07 Number of coolers 2
Client LFR Inc Project Oakland MSC

Date Opened 11-21-07 By (print) J. Rasmussen (sign)
Date Logged in By (print) (sign)

1. Did cooler come with a slupping slip (airbill, etc)? YES NO
Slupping info

2A. Were custody seals present? ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.9 / 1.1

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

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.