Air Injection System Installation, Start-up, and First Quarter Operations Report
Hanson Aggregates Mission Valley Rock Facility
7999 Athenour Way
Sunol, Alameda County, California
(SLIC Case #RO0000207 and GeoTracker ID T0600102092)

August 17, 2009
001-09480-08

Prepared for
Hanson Aggregates Northern California
3000 Busch Road
Pleasanton, California 94566

Prepared by
LFR Inc.
1900 Powell Street, 12th Floor
Emeryville, California 94608

Hanson
HEIDELBERGCEMENT Group
Hanson Aggregates Mid-Pacific, Inc.
12667 Alcosta Blvd., Suite 400
San Ramon, CA 94583

August 17, 2009

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Health Care Services
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: **Air Injection System Installation, Start-up, and First Quarter Operations Report, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California (SLIC Case #RO0000207 and GeoTracker ID T0600102092)**

Dear Mr. Wickham:

The enclosed report entitled "Air Injection System Installation, Start-up, and First Quarter Operations Report" was prepared by LFR Inc. an ARCADIS company (LFR), on behalf of Lehigh Hanson West Region, for the asphalt plant area of the Hanson Aggregates Former Mission Valley Rock Facility, located at 7999 Athenour Way, Sunol, California ("the Site"). This report summarizes the results from groundwater monitoring conducted during the initial three months of operation of the air injection system at the Site. The system was installed and operated in accordance with the "Work Plan to Conduct Air Injection and Implement Monitored Natural Attenuation," submitted on October 3, 2008 and approved by Alameda County Environmental Health (ACEH) on October 24, 2008.

In summary, groundwater monitoring conducted during the initial three months of operation indicated that air injection effectively delivered oxygen to the treatment area as designed, and that the delivery of air and oxygen resulted in decreases in the concentrations of hydrocarbon in groundwater. Based on groundwater and performance monitoring results, LFR recommends that the system operation be continued with slight modifications to the air injection flow rate, system pulse rate, and injection well configuration. In accordance with ACEH, LFR recommends quarterly groundwater monitoring be performed in seven groundwater wells and three injection wells located in the vicinity of the system, and annual sampling of soil gas be performed to confirm that soil-gas concentrations do not pose a health risk to workers at the Site.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

If you have any questions or comments concerning this report, please call me at (925) 244-6584 or Katrin Schliewen of LFR at (510) 652-4500.

Sincerely,

Lee W. Cover
Environmental Manager
Lehigh Hanson West Region

Attachment

cc: Bill Butler, Hanson Aggregates Mid-Pacific, Inc.

CONTENTS

CERTIFICATION

LFR Inc. has prepared this "Air Sparge System Installation, Start-up, and First Quarter Operations Report" to present the methodology and results of the first three months of operation and monitoring of an air injection system in the asphalt plant area of the former Mission Valley Rock Facility in Sunol, California, on behalf of Lehigh Hanson West Region, in a manner consistent with the level of care and skill ordinarily exercised by professional engineers and geologists. This report was prepared under the technical direction of the undersigned California Professional Engineer and California Professional Geologist.*

August 17, 2009

E. Max MacLeod, P.E. — Date
Senior Project Engineer
California Professional Engineer No. C69846

August 17, 2009

Katrin M. Schliewen, P.G. — Date
Senior Hydrogeologist
California Professional Geologist No. 7808

* A registered geologist's or registered engineer'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

LFR Inc. (LFR) has prepared this "Air Sparge System Installation, Start-up, and First Quarter Operations Report" on behalf of Lehigh Hanson West Region ("Lehigh Hanson") for the asphalt plant area of the aggregate mining facility located at 7999 Athenour Way in Sunol, Alameda County, California ("the Site"; Figure 1). An air injection (AI) system has been installed for the purpose of forcing an air stream into the saturated subsurface as a means of accelerating the degradation of petroleum hydrocarbons that have affected groundwater beneath the Site. The system uses two injection wells that were installed during an air sparging pilot test conducted in January and February 2008 (OXY-1D and OXY-1LF; Figure 3).

Field activities for the system installation were performed in accordance with the scope of work presented in the "Work Plan to Conduct Air Injection and Implement Monitored Natural Attenuation" ("the Work Plan"), submitted to Alameda County Environmental Health (ACEH) on October 3, 2008 (LFR 2008b). ACEH approved the Work Plan on October 24, 2008 (ACEH 2008b). This report summarizes activities conducted to install, operate, and monitor the AI system, and to complete monthly groundwater monitoring and sampling for an initial period of three months. Note that results from the site-wide routine quarterly monitoring conducted by Tait Environmental Management, Inc. ("Tait") will be submitted under separate cover by Tait.

The field activities completed during system start-up and the initial three months of operation consisted of the following:

- Installing the AI system, including:
  - Underground piping from the compressor to the injection wells installed in a trench;
  - A temporary building to house system components;
  - An electrical converter box to provide the electrical supply; and
  - Electrical and compressed air conduit connections to the compressor, solenoids, and timer.
- System start-up and testing.
- Operation and maintenance (O&M) of the AI system and collecting weekly performance data.
- Conducting monthly to quarterly groundwater monitoring and sampling in seven groundwater monitoring wells and three injection wells.

This report is organized as follows.

- Section 2.0 presents a summary of the site history, investigations conducted to date, ACEH requirements, and pilot test results.
- Section 3.0 describes the activities undertaken to install and operate the system, and the system's operational parameters.
- Section 4.0 presents the results of groundwater monitoring conducted during the initial three months of operation.
- Section 5.0 summarizes conclusions and presents recommendations for the future operation of the system and groundwater monitoring.
- Section 6.0 is a limitations statement.
- Section 7.0 is a list of document references relevant to the project.

2.0 BACKGROUND

This section provides a summary of the site history and site conditions; previous investigations conducted, including results from the pilot test; and ACEH requirements. A more detailed presentation of the site history and conditions is provided in the Site Conceptual Model (SCM) previously presented in the "Site Assessment Report of Additional Lateral and Vertical Characterization and Plan for Interim Remediation at the Asphalt Plant," submitted on April 10, 2007 (LFR 2007a) and in the Work Plan (LFR 2008b).

2.1 Site Description

The asphalt plant is located near the center of the approximately 588-acre former Mission Valley Rock Facility owned and operated by Lehigh Hanson since early 2005 ("the Hanson-Sunol facility"). The property previously was owned by Mission Valley Rock Company since the 1950s. The Hanson-Sunol facility is operated as a sand and gravel quarry with an asphalt manufacturing facility and ready mix concrete plant. Additionally, various areas throughout the property are leased for industrial, agricultural, and storage purposes.

2.2 Site Geology and Hydrogeology

Sediments beneath the Site consist of approximately 5 to 20 feet of relatively low-permeability silts, clays, and clayey gravels overlying approximately 20 to 30 feet of relatively permeable fine- to coarse-grained gravels considered to be the main water-bearing stratum. The Livermore Formation encountered at approximately 30 to 40 feet below ground surface (bgs) underlies the main water-bearing stratum and appears to be somewhat less permeable than the overlying strata due to increased fines content.

The depth to groundwater beneath the Site typically ranges from 2 to 6 feet bgs. Groundwater flow conditions in the vicinity of the Site are influenced by

low-permeability features such as the former gravel pits filled with relatively less permeable, finer-grained sediment, and by groundwater removal from adjacent former mining pits. The local flow direction generally has been to the south, southeast, and east, as measured in site groundwater monitoring wells since approximately 1998. Historically, including during the period of former underground storage tank (UST) usage, the groundwater flow directions likely were toward nearby open gravel pits to the east or west. Historically, the groundwater table likely rose and fell significantly as nearby aggregate mining pits were advanced, dewatered, and then filled with water and silt.

2.3 History of Potential Environmental Impacts

The asphalt plant has been in operation since approximately 1980. Operation from 1980 to 1996 included the use of two 10,000-gallon diesel fuel USTs and one 2,000-gallon gasoline UST with fuel dispenser used to fuel company vehicles. During the removal of these three USTs in June 1996 by Tank Protect Engineering (1996), an impact to soil and groundwater was found. The USTs were found to be in good condition with no holes evident, although a ¼-inch-diameter hole was observed in one of the fuel lines. Several subsurface investigations have been completed by LFR and other consultants from 1996 through the present in the vicinity of the asphalt plant.

A fourth UST (10,000-gallon diesel; designated "D-4") was located approximately in the southeastern portion of the Site and apparently was partially buried. D-4 reportedly was abandoned and removed and is not believed to have released significant quantities of petroleum hydrocarbons to the environment. A fifth UST (diesel, approximately 8,000 to 10,000 gallons) may have been located in the southern portion of the Site, approximately beneath the two existing 25,000-gallon asphalt cement aboveground storage tanks (ASTs). This fifth UST reportedly was used for a few years before being abandoned in place (likely filled with cement) during the 1970s, before the asphalt plant was built. No other USTs or ASTs are reported to have existed at the Site since approximately 1970. The existing 25,000-gallon ASTs contain asphalt cement and are not considered a potential source of fuel hydrocarbons detected in the subsurface. The approximate locations of all known former USTs and current ASTs are shown on Figure 2.

2.4 Previous Environmental Site Investigations and Agency Determinations

Several investigations have been completed in the vicinity of the Site since the three USTs were removed, including the advancement of approximately 17 temporary soil borings, and the installation and monitoring of 27 groundwater monitoring wells (currently there are 26 groundwater monitoring wells; former well MW-2 was abandoned in 2005). Groundwater monitoring wells MW-1 through MW-8 were installed as single, double, or triple completion wells where one or more wells are completed in a single boring. Well clusters MW-9 through MW-12 were installed

during April and May 2006 as groups of single completion wells with well screens at three different depths. Groundwater monitoring wells at the Site are designated based on their well screen depths as shallow ("S", screened approximately from 5 to 10 feet bgs), deep ("D", screened approximately between 15 and 25 feet bgs), and Livermore Formation ("LF", screened approximately from 35 to 40 feet bgs and believed to be approximately within the top 5 to 10 feet of the Livermore Formation).

Based on the results of previous investigations and groundwater monitoring, ACEH concurred with LFR in an April 27, 2007 letter that no additional characterization investigations are necessary for this Site, and requested that a scope of work be submitted to implement pilot testing of the proposed remedial alternative (ACEH 2007a). LFR submitted a work plan on August 3, 2007 describing the scope of work to perform a pilot study to test the effectiveness of injecting air to enhance the natural biodegradation in the vicinity of well cluster MW-9 (LFR 2007b). The pilot test work plan was approved by ACEH on August 30, 2007 (ACEH 2007b), and LFR conducted the pilot test during January and February 2008.

The methodology and results of the approximately three-week pilot test were presented in a summary report submitted to ACEH on March 28, 2008 ("Air Sparge Pilot Test Completion Report"; LFR 2008a). For reference, the results of the pilot test are summarized in the following section. Following the successful completion of the pilot test, a technical discussion meeting was held between ACEH, Lehigh Hanson, LFR, and Malcolm Pirnie (representing the technical interests of Berkeley-Sunol Holdings, LLC, the previous owners of the Hanson-Sunol facility) on July 18, 2008 to review the SCM and results of the pilot study, and discuss the recommended remediation alternative for the Site. In a July 24, 2008 letter, ACEH requested a work plan be prepared to install and operate an AI system in the source area (i.e., the vicinity of well cluster MW-9; LFR 2008a). LFR submitted the October 3, 2008 Work Plan describing a scope of work to install a more permanent AI system at the Site, operate it for an initial period of three months, and conduct monthly groundwater monitoring and sampling (LFR 2008b). The Work Plan was approved by ACEH on October 24, 2008 (ACEH 2008b).

Results from monitoring conducted during the initial three months of operation of the AI system are presented and discussed in this report.

2.4.1 Summary of Pilot Test Results and Recommendations

The AI pilot study was completed during January and February 2008 to test the feasibility of injecting air into the subsurface in the source area. Prior to the test, three AI wells and four soil-gas probes were installed in the vicinity of well cluster MW-9. The three injection wells (OXY-1S, OXY-1D, and OXY-1LF) were completed to three depths, with 2-foot-long well screens placed approximately 3 to 7 feet deeper than the well cluster MW-9 well screens. The pilot test consisted of injecting air at various pressures and rates, in the three injection wells either singly, in pairs, or three at a time. Data monitored and collected during the pilot test included system operation, flow

rates and pressures, hydraulic pressure as evidenced by groundwater elevations in nearby wells, and helium concentrations in soil gas during tracer tests. Groundwater samples were collected from seven groundwater monitoring wells (MW-1, MW-7S, MW-7D, MW-8, MW-9S, MW-9D, and MW-9LF) and the three injection wells before and after, the pilot test to obtain baseline and post-injection concentrations of total petroleum hydrocarbons (TPH) and TPH-related compounds, selected water-quality parameters, and microbial populations.

As described in the Air Sparge Pilot Test Completion Report (LFR 2008a), results of the pilot test indicated that effective delivery of oxygen into groundwater to approximately 45 feet bgs (into the "S", "D," and "LF" groundwater depth intervals) can be achieved using a conventional AI approach. Increases in microbial populations, oxidation-reduction potential (ORP), and dissolved oxygen (DO) concentrations, and decreases in TPH and TPH-related compound concentrations observed during and/or after the pilot test indicated that oxygen injection created conditions that enhanced biodegradation in the source area.

Observed changes in groundwater elevations and chemistry during the pilot test indicated that sparging into injection wells OXY-1D and OXY-1LF effectively delivered oxygen within the significantly large radius of influence (ROI), approximately 35 feet. Within this area, increases in ORP, DO, microbial populations, and/or the presence of tracer gas provided direct evidence of an influence from the injection into wells OXY-1D/LF. No significant added benefit was observed by sparging into the shallowest injection well (OXY-1S).

The four soil-gas probes were sampled during the pilot test to verify whether AI resulted in increased TPH concentrations in soil gas. TPH concentrations in soil gas were elevated; however, the observed increases were below levels of concern to human health for this Site.

Based on results of the pilot test, LFR recommended that the proposed remedial alternative for the Site is to enhance the biodegradation of petroleum hydrocarbons and related compounds in the source area through air sparging, coupled with a program of monitored natural attenuation for the downgradient dissolved plume area. LFR recommended that air sparging be conducted in the source area using existing injection wells OXY-1D and OXY-1LF, and that groundwater monitoring be conducted using the existing groundwater monitoring well network.

2.5 Air Injection System Objectives

The objectives of the AI system operation and associated performance monitoring are to:

- Confirm that injection of air into wells OXY-1D and OXY-1LF is an effective remedial alternative for TPH contamination in the source area.

- Evaluate groundwater analytical data within the source area for evidence of biodegradation, including:
  - increasing concentrations of DO and ORP;
  - increasing microbial population counts; and
  - decreasing concentration trends of TPH and TPH-related compounds, particularly in wells clusters MW-7 and MW-9.
- Evaluate groundwater analytical data from wells downgradient from the source area for evidence of natural attenuation as a result of active remediation in the source area.
- Confirm that AI is not resulting in TPH concentrations within the vadose zone that exceed acceptable human health risk levels.

Performance monitoring data are being used to assess whether contingency measures for this proposed system may be warranted. Potential contingency measures for this proposed remedy could include:

- Increasing the concentration of oxygen in the injected air stream through addition of an air filter system (i.e., injecting oxygen-enriched air)
- Increasing the air injection flow rate(s)
- Increasing the number of injection wells

3.0 AIR INJECTION SYSTEM

The current AI system uses an air compressor to inject air through a series of regulators, filters, valves, flow meters, hoses, and eventually through the screened intervals of injection wells OXY-1D and OXY-1LF. Figure 3 is a schematic of the current AI system. The system was started up on April 6, 2009. Below is a summary of activities conducted to construct and operate the system, and the results of performance monitoring conducted during operation.

3.1 Air Injection System Construction

3.1.1 Permitting

A permit from the Bay Area Air Quality Management District (BAAQMD) typically is required for operating an AI system, which could generate potentially contaminated soil gas discharged to the atmosphere. However, based on BAAQMD Rule 2-1-103, Exemption Source Not Subject to Any District Rule, an exemption request was filed for operation of the current AI system. The BAAQMD approved the exemption request on March 26, 2009. A copy of the exemption approval is included as Appendix A.

3.1.2 Subsurface Utility Clearance

Installation of the AI system involved digging a trench to house underground piping leading from the air compressor to the AI wells. Prior to intrusive work, LFR conducted utility clearance including reviewing site engineering plans, notifying Underground Service Alert (USA), and contracting a private utility locator. An underground electrical line was identified by the private utility locator (C. Cruz Subsurface Locators). As a result, the location and depth of the trench were modified. In addition, because of the large number of underground utilities in the area, and evidence that certain utilities are difficult to locate, the trench was dug using hand tools rather than a backhoe. Appendix B includes a photograph of the trench (which terminates at well OXY-1D) when it was open.

3.1.3 Health and Safety Plan

An existing site-specific Health and Safety Plan (HSP) previously prepared by LFR for drilling and well installation work conducted during January 2008 was amended to apply to activities conducted to install the AI system. The HSP documents the potential hazards to worker health and safety at the Site during field activities and specifies the appropriate means to mitigate or control these hazards. The potential for exposure to hazardous constituents and general safety procedures are described. A tailgate health and safety meeting was conducted by LFR personnel each day before commencing fieldwork. In addition, LFR and its subcontractors attended on-site health and safety training conducted by facility personnel as required by Lehigh Hanson.

3.1.4 Injection Wells

Based on the results of the pilot test, existing injection wells OXY-1D and OXY-1LF (installed for the pilot test) were selected for the current AI system. These two wells were constructed with wells screens located somewhat deeper than well screens for wells MW-9D and MW-9LF, respectively (see construction details summarized in Table 1).

3.1.5 Well Box Modification

The 8-inch-diameter well box for well OXY-1LF was replaced by a 12-inch-diameter well box to better accommodate the compressed air hose connections from the polyvinyl chloride (PVC) conduit in the trench to the well. All connections were housed underground to protect them from vehicle traffic (Photograph 1 of Appendix B).

3.1.6 Air Injection System Equipment Enclosure

An approximately 6-foot by 6-foot equipment storage shed (by Tuff Shed) was installed to house the air compressor and aboveground AI system components, to protect them

from the elements. The shed was outfitted with ventilation screens (two in the walls and one on the roof), and openings in the walls for electrical supply lines and compressed air hoses. Photograph 2 of Appendix B shows the AI system compressor inside the shed.

3.1.7 System Components and Controls

The AI system is designed to operate with minimal active involvement by a field engineer or technician. The range of settings for regulators, solenoids, and the timer can be quickly re-set as desired, and once they are set the system may operate with only occasional operator adjustments. System operating parameters were recorded approximately weekly since start-up on April 6, 2009.

AI System Components and Controls (Presented in Order of Air Flow Direction From Compressor to Injection Well)

A conceptual diagram of the system is included as Figure 3 of this report. The air compressor is a two-stage unit with a compressed air tank. An automatic condensation discharge valve opens briefly during each compression cycle to eject moisture that has accumulated in the tank. Metal piping is used as the conveyance line from the tank exit point. The air exits the tank and is routed through a regulator that drops the pressure from approximately 160 pounds per square inch (psi) on its inlet side to less than 50 psi on its outlet side. Downstream from the regulator are two filters in series. The filters were integrated into the system to remove compressor oil and/or other contaminants that might enter the compressed air tank before the air is injected into the subsurface. On the outlet side of the second filter are two more pressure regulators, one for each branch of the AI system (one that injects air into AI well OXY-1D and one that injects air into OXY-1LF). These two pressure regulators are used to adjust the flow rate of air to each injection well and they further reduce the working pressure on their outlet sides. While the regulators control the flow rate, it is the position of the solenoid valves (open or closed) that determines whether or not there is flow through their respective branch. The solenoids are normally closed, which stops all flow through them, but when activated by an electrical signal from the two-channel timer, the solenoids open and allow air to flow through them. The two-channel timer allows the solenoids to be activated (opened) independently, and also allows them to open at operator-determined frequencies and periods. On the outlet side of the two solenoids are air flow meters.

List and Specifications of System Components

The components that make up the AI system include the following:

- An enclosure to house the injection system equipment
- A five-horsepower compressor
- Piping attached to convey compressed air

- Three pressure regulators
- Two filters to remove contaminants from the compressed air
- A two-branch air distribution manifold with a third bleed branch
- A two-channel timer
- Two normally closed solenoid valves
- Two flow meters with a range of 0 to 10 cubic feet per minute (cfm)
- Hoses to convey the compressed air from the system enclosure to the wellheads
- Air injections wells

3.2 Air Injection System Installation, Start-up, and Operation

The AI system was installed on March 23, 24, and 25, 2009. Installation activities were described above and included clearing underground utilities, installing the equipment enclosure, replacing the well box for well OXY-1LF, digging a shallow trench to house the compressed air supply hoses, modifying the electrical power source and connections, installing the pre-assembled air compressor (by Environmental Instruments of Concord, California), and connecting the compressor to the distribution manifold and wellheads. The system was started up and the timer, regulators, flow meters, and valves were tested. After a short period of testing, the system was turned off pending the issuance of an air permit exemption from the BAAQMD.

The air injection system was started on April 6, 2009 and has been operating without unscheduled shutdowns since start-up. After the system was started, the compressor and flow rate were adjusted to meet operation parameters specified in the Work Plan. The system timer was preset by the system vendor according to requested specifications. The pressure from the compressor was adjusted to compensate for the system's piping, valves, and hoses. Flow rates and pressure were recorded, as well as compressor "on" time.

O&M visits have been conducted approximately weekly since the system was started. During the O&M site visits, the field technician records system flow rates and pressure at various points, adjusts the flow of air into each injection well (if necessary), and provides periodic system equipment maintenance as needed. Upgrades to the equipment have been performed, including installation of check valves and a new pressure switch that can be set to operate over a wider range of pressures than the factory-supplied switch.

In accordance with the sequencing specified in the Work Plan, the system operates 24 hours a day, seven days a week, and the timer has been programmed to open the two solenoid valves that provide air flow to wells OXY-1D and OXY-1LF for a 20-minute interval per hour for each well. The current air injection sequence is approximately as follows.

Table 3.2 Start-up to Present Air Injection Sequence

Time Interval	OXY-1LF	OXY-1D
20 Minutes	Off	Injection at approximately 5 scfm
20 Minutes	Injection at approximately 5 scfm	Off
20 Minutes	Off	Off

Note: scfm = standard cubic feet per minute

4.0 GROUNDWATER MONITORING

In accordance with the Work Plan, seven groundwater monitoring wells located in the vicinity of the injection wells (MW-1, MW-7S/D, MW-8, and MW-9S/D/LF) and the shallowest injection well that was not part of the AI system (OXY-1S) were sampled on a monthly basis during the initial three months of the AI system operation. In addition, the two deeper AI wells (OXY-1D and OXY-1LF) were sampled once during July, after the system had been in operation for three months. Groundwater samples were analyzed for field parameters, TPH and TPH-related compounds, general water-quality and biodegradation indicator parameters, and microbial population counts, as described below. Table 1 presents a matrix summarizing the sampling frequency and analyses conducted. For reference, well construction details also are included in Table 1.

4.1 Methodology

The AI system was started on April 6, 2009, and groundwater samples were collected approximately monthly after start-up (May 6, June 8-9, and July 14-15, 2009). The second monthly system sampling event coincided with the second quarter 2009 routine quarterly groundwater sampling event for the Site and was completed by Tait. For consistency and as a quality assurance measure, LFR measured field parameters in three of the wells sampled by Tait during the second monthly event.

Sample Collection. All wells monitored during the initial three months of AI system operation were purged and sampled using "low-flow" sampling protocols. An electrical peristaltic pump was used to minimize the drawdown during purging. General water-quality parameters, including DO and ORP, were monitored during well purging using an in-line water-quality monitoring device. Groundwater samples were collected after the general water-quality parameters stabilized for three successive readings to approximately within the standard criteria for pH (±0.1 standard units), electrical conductivity (±3%), DO (±10%), and ORP (±10 millivolts). The final stabilized general water-quality readings recorded immediately prior to samples are presented in Table 1.

Groundwater samples were collected into the appropriate laboratory-provided sample containers using the low-flow pump. Containers were properly labeled and transported in ice-chilled coolers under strict chain-of-custody protocol to the analytical laboratories.

Chemical and Microbial Analysis. The May and July 2009 samples collected by LFR for analysis of conventional inorganic and organic parameters were sent to TestAmerica, a state-certified analytical laboratory in Pleasanton, California. The June 2009 samples collected by Tait for these same analyses were sent to SunStar, a state-certified analytical laboratory in Tustin, California. Inorganic and field indicator parameters were measured and analyzed in four groundwater monitoring wells (MW-7D, MW-9S, MW-9D, and MW-9LF) during the July monitoring event. The same parameters were analyzed for in the same four wells in pre- and post-pilot test samples (except for well MW-9D from which only post-pilot test samples were analyzed for these parameters).

Microbial population counts including heterotrophic plate counts (HPC) and gasoline-specific degrader counts (SDg) were analyzed for the samples collected from wells MW-7D, MW-9S, MW-9D, and MW-9LF during the July monitoring event. Microbial population counts were completed in the same four wells in pre- and post-pilot test samples (except for well MW-9D from which only post-pilot test samples were analyzed). Microbial analysis was performed by RespirTek, a state-certified specialized laboratory in Biloxi, Mississippi.

4.2 Groundwater Analytical Results

Analytical results for the groundwater samples collected during the initial three months of AI system operation are summarized in Table 2 and presented on Figures 5 and 6. For reference, Table 2 also includes analytical results for the groundwater samples collected as part of the pilot test conducted in January and February 2009 under pre- and post-test conditions. Certified laboratory analytical reports are included in Appendix C. Analytical results are discussed below.

4.2.1 Petroleum Hydrocarbons and Related Compounds

Consistent with historical results, the primary TPH and TPH-related compounds detected in groundwater samples were TPH as diesel (TPHd), TPH as gasoline (TPHg), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) compounds. Methyl tertiary-butyl ether (MTBE) was not detected in any sample (MTBE historically has been detected primarily in samples collected from wells located in the southern portion of the Site). The highest concentrations of petroleum hydrocarbons were detected in samples collected from wells MW-7D and MW-9D.

In general, detected concentrations of petroleum hydrocarbons decreased in all wells during the initial three months of AI system operation. Only TPHg concentrations

detected in samples collected from well MW-7D remained constant during this period (12,000 micrograms per liter [μg/l]). In comparison to the significant concentration decreases observed in samples collected from wells MW-9 and OXY-1, the concentration decreases observed in well MW-7D were relatively smaller. The most significant decreases in hydrocarbon concentrations were observed in samples collected from well MW-9D, which historically has contained some of the highest TPH and BTEX concentrations at the Site. For example, in well MW-9D, TPHg decreased from 9,400 to 180 μg/l and TPHd decreased from 2,900 to 170 μg/l. Similar order of magnitude decreases were observed for the BTEX compounds in well MW-9D.

4.2.2 Inorganic and Field Parameters

Inorganic and field parameter monitoring results are summarized in Table 2 and presented on Figure 6.

Concentrations of DO increased substantially in the two injection wells (OXY-1D and -1LF), in OXY-1S, and in each of the MW-9 wells (MW-9S, -9D, and -9LF; Table 2). In each of these wells, DO concentrations increased from less than 1 milligram per liter (mg/l) to greater than 3.5 mg/l. Consistent with these increases in DO, the concentration of ferrous iron decreased in wells MW-9S and -9D (iron was not measured in the OXY wells). These results indicate the delivery of oxygen into the formation, subsequent oxidation of ferrous iron, and buildup of DO. In the case of wells MW-9S and -9D, the increase in DO and decrease in ferrous iron corresponded with a decrease in petroleum hydrocarbons (see Section 4.2.1).

Concentrations of DO did not increase in wells MW-7S/7D, located approximately 30 feet south of the OXY injection wells. This lack of DO increase corresponds with relatively less significant decreases in petroleum hydrocarbon concentrations in wells MW-7S/7D when compared with decreases observed in wells MW-9 and OXY-1. However, the concentration of ferrous iron in MW-7D decreased from 12 to 2.6 mg/l (iron was not monitored in MW-7S). This result is indicative of the delivery of oxygen to the vicinity of MW-7D, and the subsequent consumption of that oxygen through the oxidation of ferrous iron. Based on this evaluation, it is anticipated that less of the oxygen delivered to the vicinity of MW-7D in the future will be consumed in the oxidation of ferrous iron, allowing a greater percent of that oxygen to be available for aerobic respiration of petroleum hydrocarbons.

4.2.3 Microbial Population Counts

Plate counts of both HPC and SDg for wells MW-7D, -9S, and -9D were significantly lower than plate count data collected for those wells just after the pilot test, and were only slightly higher than the initial (pre-pilot test) plate count data (Table 2). Results are summarized in Table 2 and presented on Figure 6. These plate count results are not consistent with the observed decreases in hydrocarbon concentrations and increases in DO observed in wells MW-9S and -9D. According to the analytical laboratory, mold

was observed in the samples collected from wells MW-7D, -9S, and -9D, and may have interfered with the results. In contrast, slight increases in plate counts were observed in the sample collected from injection well OXY-LF. Mold was not noted in the microcosm for OXY-LF, further indicating that the mold may have interfered or otherwise inhibited microbial growth in several of the laboratory cultures. In general, the lack of microbial plate count response in well MW-9D (where significant decreases in hydrocarbon concentrations were observed) indicates that microcosm data may not provide a reliable performance indicator for this Site.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary and Conclusions

The AI system was installed in March 2009 and has operated without unscheduled interruptions since it was started on April 6, 2009. During the initial three months of operation, air was injected into injection wells OXY-1D and OXY-1LF at flow rates of approximately 5 scfm and following a schedule of 20 minutes of injection into each well in turn and then 20 minutes of no injection in either well. Routine performance O&M was conducted approximately weekly.

Groundwater monitoring was conducted approximately monthly in seven groundwater monitoring wells located in the vicinity of the AI system and in the shallowest injection well not used in the current system, and once in the two injection wells. Results from the first three months of operation indicate that the AI system was successful in reducing the concentrations of hydrocarbons in the injection wells and in shallow and deep observation wells located in the vicinity of the injection wells, in particular in wells OXY-1 and MW-9. The decreases in hydrocarbon concentrations observed in these wells coincided with observed increases in DO and decreases in ferrous iron. These data indicate that the AI system was successful in delivering oxygen to the treatment area as designed, and that the delivery of air and oxygen resulted in decreases in the concentrations of hydrocarbon in groundwater.

Results also indicate that operation of the AI system improved groundwater quality in the vicinity of monitoring wells MW-7S/7D, located approximately 30 feet south of the injection area, although the decreases in hydrocarbon concentrations were somewhat less significant than observed in wells MW-9S/D/LF. The large decrease in the concentration of ferrous iron in well MW-7D is indicative of oxygen delivery to that area, and it is anticipated that oxygen delivered to the vicinity of MW-7D through further operation of the AI system will contribute to accelerated aerobic respiration (destruction) of hydrocarbons in the future.

Compared to results from the pilot test, the effective ROI observed during the initial three months of system operation was smaller. This likely is because the system was

operated at relatively lower flow rates during the initial three months and injections were into each injection well separately and not simultaneously.

5.2 Recommendations

Continued operation of the AI system and performance monitoring are recommended to confirm the findings presented in this report, and to provide additional performance data to help optimize the system operation parameters.

5.2.1 AI System Adjustments

To increase the effectiveness of the AI system, LFR recommends that the system be operated at somewhat higher flow rates and that air injection periodically be conducted simultaneously into wells OXY-1D and OXY-1LF.

Increases to the duration of injection periods and to the flow rate will be of a magnitude that ensures that the time-weighted average flow rate does not exceed 10 scfm (to remain within flow rates used in calculations provided to the BAAQMD in support of LFR's request for an air permit exemption). Changes in the air injection flow rate, injection time, and frequency of system pulsing all were potential contingencies proposed in the Work Plan approved by ACEH. As such, LFR proposes to modify the sequence, period, and flow rate as soon as possible, likely during August 2009, and approximately as follows: inject air during approximately 15-minute intervals and at a flow rate of approximately 5 scfm, first only into one well (e.g., OXY-1D), then into both wells OXY-1D/LF, then only into the second well (e.g., OXY-1LF), and then cease air injection. The new system operating parameters will be evaluated and system operation will be modified as necessary to ensure that the system capacity is not exceeded and based on preliminary monitoring results. System operation parameters will continue to be monitored approximately weekly and results will be documented in the next system monitoring report.

5.2.2 Groundwater Sampling

The State Water Resources Control Board recently approved resolution No. 2009-0042, which states that the "Regional Water Board and LOP agencies shall reduce quarterly groundwater monitoring requirements to semiannual or less frequent monitoring at all site *[sic]* unless site-specific needs warrant otherwise and shall notify all responsible parties of the new requirements…." In response to this resolution, ACEH notified Mr. Lee Cover of Lehigh Hanson in a letter dated July 23, 3009 that the site-wide sampling program could be reduced to a semiannual schedule but that the nine wells used to monitor the performance of the AI system should remain on a quarterly monitoring schedule. The AI system performance monitoring sampling program to date has included 10 wells (MW-1, MW-7S/D, MW-8, MW-9S/D/LF, and OXY 1S/D/LF). LFR believes that ACEH intended that all 10 of these wells continue to be sampled on a quarterly basis.

The first and third quarter AI system performance quarterly monitoring events will be scheduled to coincide with the routine semiannual groundwater monitoring program, during which all 26 existing groundwater monitoring wells are monitored. All groundwater samples will be analyzed for the following parameters:

- TPHd
- TPHg
- BTEX compounds
- MTBE

In addition, LFR recommends that the following water-quality parameters be measured each quarter: temperature, conductivity, pH, turbidity, DO, and ORP. LFR also recommends that ferrous iron be measured for each well during each quarter for the next year. Finally, we recommend that microbial analysis of groundwater samples be discontinued.

5.2.3 Soil-Gas Sampling

Soil-gas samples were collected during the pilot test to verify concentrations of TPH and TPH-related compounds in the vadose zone during AI. Based on the results of the pilot test and known site conditions, it was concluded that increased risk to human health from AI activities is not considered to be significant. However, periodic soil-gas sampling is recommended to confirm that TPH concentrations in soil gas continue to pose no significant risk to human health. As observed during the pilot test, which was conducted during the rainy season, the shallow groundwater table hindered the collection of soil-gas samples. LFR proposes to collect soil-gas samples from each of the four soil-gas probes during AI system operation at the end of the current dry season (i.e., sometime during the third quarter) when the groundwater table is expected to be at its lowest elevation.

6.0 LIMITATIONS STATEMENT

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by LFR and the party for whom this report was originally prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representation, warranty, or guarantee, expressed or implied, is intended or given. To the extent that LFR relied upon any information prepared by other parties not under contract to LFR, LFR makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose.

Only the party for whom this report was originally prepared and/or other specifically named parties have the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

Results of any investigations or testing and any findings presented in this report apply solely to conditions existing at the time when LFR's investigative work was performed. It must be recognized that any such investigative or testing activities are inherently limited and do not represent a conclusive or complete characterization. Conditions in other parts of the Site may vary from those at the locations where data were collected. LFR's ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. As such, 100% confidence in environmental investigation conclusions cannot reasonably be achieved.

LFR, therefore, does not provide any guarantees, certifications, or warranties regarding any conclusions regarding environmental contamination of any such property. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.

7.0 REFERENCES

Alameda County Environmental Health (ACEH). 2005. Letter to Mr. W.M. Calvert, Mission Valley Rock Company from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California. November 3.

———. 2006a. Letter to Mr. W.M. Calvert of Mission Valley Rock Company from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California – Work Plan Approval. February 3.

———. 2006b. Letter to Mr. Steven Zacks of Hanson Aggregates Mid-Pacific, Inc., and to Mr. W.M. Calvert of Mission Valley Rock Company from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California. August 3.

———. 2006c. Letter to Lee Cover of Hanson Aggregates West Region from Jerry Wickham, re: Fuel Leak Case No. RO0000207, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, California – Work Plan Approval. November 3.

———. 2007a. Letter to Lee Cover of Hanson Aggregates West Region from Jerry Wickham, re: Fuel Leak Case No. RO0000207 and Geotracker Global ID

T0600102092, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, CA 94586. April 27.

———. 2007b. Letter to Lee Cover of Hanson Aggregates West Region from Jerry Wickham, re: Fuel Leak Case No. RO0000207 and Geotracker Global ID T0600102092, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, CA 94586. August 30.

———. 2008a. Letter to Lee Cover of Hanson Aggregates West Region from Jerry Wickham, re: Fuel Leak Case No. RO0000207 and Geotracker Global ID T0600102092, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, CA 94586. July 24.

———. 2008b. Letter to Lee Cover of Hanson Aggregates West Region from Jerry Wickham, re: Fuel Leak Case No. RO0000207 and Geotracker Global ID T0600102092, Mission Valley Rock and Asphalt, 7999 Athenour Way, Sunol, CA 94586. October 24.

Bay Area Air Quality Management District. 2009. Letter to Thomas Jackson from Jack P. Broadbent, letter of exemption. March 26.

LFR Inc. (LFR). 2006a. Work Plan for Additional Investigation at the Asphalt Plant, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California. January 17.

———. 2006b. Additional Investigation at the Asphalt Plant, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California. July 10.

———. 2006c. Work Plan to Conduct Additional Lateral and Vertical Characterization and Plan for Interim Remediation at the Asphalt Plant, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California. October 10.

———. 2007a. Site Assessment Report of Additional Lateral and Vertical Characterization and Plan for Interim Remediation at the Asphalt Plant, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California. April 10.

———. 2007b. Work Plan to Conduct a Groundwater Remediation Pilot Test at the Asphalt Plant and Additional Subsurface Characterization in the Former Diesel Spray Area, Hanson Aggregates Mission Valley Rock Facility. August 3.

———. 2008a. Air Sparge Pilot Test Completion Report, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California. March 28.

———. 2008b. Work Plan to Conduct Air Injection and Implement Monitored Natural Attenuation, Hanson Aggregates Mission Valley Rock Facility, 7999 Athenour Way, Sunol, Alameda County, California. October 3.

Tait Environmental Management, Inc. (Tait). 2003. Site Assessment and Fourth Quarter 2002 Groundwater Monitoring Report, Mission Valley Rock Company, 7999 Athenour Way, Sunol, California. March 23.

———. 2005. Site Assessment and First Quarter 2005 Groundwater Monitoring and Sampling Report, Mission Valley Rock Company, 7999 Athenour Way, Sunol, California. April 1.

———. 2006a. Summary Report Environmental Activities, Mission Valley Rock Company, 7999 Athenour Way, Sunol, California. May 16.

Tait Environmental Services, Inc. (Tait). 2009. First Quarter 2009 Groundwater Monitoring and Sampling Report, Hanson-Aggregate Mid-Pacific, Inc., Mission Valley Rock Company, 7999 Athenour Way, Sunol, California. April 15.

Tank Protect Engineering (TPE). 1996. Tank Closure Report, Mission Valley Rock. August 12.

———. 1998. Preliminary Site Assessment Report, Mission Valley Rock, 7999 Athenour Way, Sunol, California. October 30.

United States Environmental Protection Agency. 1996. Ground Water Issue. Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures. EPA/540/S-95/504. April.

———. 2004. Technologies for Treating MTBE and Other Fuel Oxygenates. May.

Table 1
Groundwater Sampling Frequency for First Three Months of System Operation
Hanson Aggregates Sunol Facility, Asphalt Plant
7999 Athenour Way, Sunol, California

		Approximate Distance from Center of Sparge Wells Cluster	Approximate Well Screen Interval	Field Parameters	Organic	Inorganic		Microbial	
				Temp, EC, pH, DO, ORP	TPHd, TPHg, BTEX, MTBE	Nitrate/Nitrite, TKN, Orthophosphate, BOD, COD, Fe	Fe+2	HPC	SD (gasoline)
Well Type	Well ID	(feet)	(feet bgs)	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency
Air Injection Well	OXY-1S	3	15 - 17	M [1]	Q	-	-	-	-
	OXY-1D	3	30 - 32	-	Q	-	-	-	-
	OXY-1LF	3	42.5 - 44.5	-	Q	-	-	-	-
Groundwater Monitoring Well	MW-1	35	5 - 20	M	M	-	-	-	-
	MW-7S	28	5 - 8	M	M	-	-	-	-
	MW-7D	28	20 - 25	M	M	Q	Q	Q	Q
	MW-8	37	5 - 15	M	M	-	-	-	-
	MW-9S	24	5.3 - 12.3	M	M	Q	Q	Q	Q
	MW-9D	19	18.9 - 23.9	M	M	Q	Q	Q	Q
	MW-9LF	10	33.3 - 38.3	M	M	Q	Q	Q	Q

Notes:
feet bgs = feet below ground surface
M = monthly during first three months of operation
Q = quarterly; after three of operation
- = not sampled for the given analyte

Temp = temperature in degrees Celsius (°C)
EC = electrical conductivity in micro Siemens per centimeter (µS/cm)
DO = dissolved oxygen in milligrams per liter (mg/l)
ORP = oxidation-reduction potential in millivolts (mV)
TPHd = total petroleum hydrocarbons as diesel by EPA Method 8015
TPHg = total petroleum hydrocarbons as gasoline by EPA Method 8260B
BTEX = benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8260B
MTBE = methyl tertiary-butyl ether by EPA Method 8260B
nitrate and nitrite by EPA Method 354.1
TKN = total Kjeldahl nitrogen by EPA Method 4500
ortho-phosphate by EPA Method 365.3
BOD = biological oxygen demand by EPA Method 5210B
COD = chemical oxygen demand by EPA Method 410.1
Fe = dissolved iron by EPA Method 410.1
Fe+2 = dissolved ferrous iron by EPA Method 410.1
HPC = heterotrophic plate count by EPA Method 9215-A
SD (gasoline) = specific degrader for gasoline count by EPA Method 9215-A

[1] Field parameters measured monthly in injection well OXY-1S at the request of the Alameda County Environmental Health Department in its October 24, 2008 work plan approval letter.

Table 2
Analytical Results, Groundwater Monitoring Well Samples
Hanson Aggregates Sunol Facility, Asphalt Plant
7999 Athenour Way, Sunol, California

Monitoring Well ID		MW-1					MW-7S					MW-7D					MW-8					*ESLs*
Date Sampled		1/22/08	2/18/08	5/6/09 / Dup	6/9/09	7/14/09	1/22/08	2/18/08	5/6/09	6/8/09	7/14/09	1/22/08	2/19/08	5/6/09	6/8/09	7/15/09	1/22/08	2/18/08	5/6/09	6/8/09	7/14/2009 / Dup	
Air Injection Timing		baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	
Petroleum Hydrocarbon-Related Compounds (units)																						
TPHd	(µg/l)	**440** [1]	**1,000** [1]	**54** [1,6] / <50 [6]	**470** [7]	<50	**460** [1]	**1,000** [1]	<50 [6]	<50	<50	**2,700** [1]	**13,000**	**3,300** [1,6]	**2,000** [7]	**1,200**	**530** [1]	**450** [1]	<50 [6]	<50	<50 / <50	*100*
TPHg	(µg/l)	**460** [1]	**2,000** [1]	**380** [1] / **380** [1]	**250**	**97**	**68** [1]	**2,800** [1]	**440** [1]	**500**	**240**	**13,000** [1]	**56,000**	**12,000** [1]	**12,000**	**12,000**	<50	<50	<50	<50	<50 / <50	*100*
Benzene	(µg/l)	**4.6**	**6.3**	<0.50/<0.50	<0.50	**0.51**	<0.50	**15**	<0.50	<0.50	<0.50	**47**	**140**	**95**	**85**	**60**	<0.50	<0.50	<0.50	<0.50	<0.50 / <0.50	*1*
Toluene	(µg/l)	**0.52**	**1.2**	<0.50/<0.50	<0.50	<0.50	<0.50	**68**	<0.50	<0.50	<0.50	**67**	**520**	**110**	**110**	**78**	<0.50	<0.50	<0.50	<0.50	<0.50 / <0.50	*40*
Ethylbenzene	(µg/l)	**1.3**	**43**	**2.4 / 2.4**	**2.0**	<0.50	<0.50	**74**	**1.1**	<0.50	<0.50	**760**	**2,500**	**1,100**	**1,000**	**830**	<0.50	<0.50	<0.50	<0.50	<0.50 / <0.50	*30*
m,p-Xylene	(µg/l)	<0.50	**33**	**1.7 / 1.8**	<1.0	<1.0	**0.99**	**140**	**1.1**	<1.0	<1.0	**740**	**3,100**	**490**	**390**	**320** [8]	<0.50	<0.50	<0.50	<1.0	<1.0 / <1.0	*20*
o-Xylene	(µg/l)	<0.50	**4.2**	<0.50/<0.50	<0.50	<1.0	<0.50	**12**	<0.50	<0.50	<1.0	**61**	**370**	**30**	**23**	**320** [8]	<0.50	<0.50	<0.50	<0.50	<1.0 / <1.0	*20*
MTBE	(µg/l)	<0.50	<0.50	<0.50/<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<5.0	<0.50	<8.3	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50 / <0.50	*5*
Water Quality Parameters (units)																						
Nitrate	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	<1.0	-	-	-	-	-	-
Nitrite	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	<1.0	-	-	-	-	-	-
TKN	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	**1.5**	-	-	<0.40	-	-	-	-	-	-
Orthophosphate	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	**0.21** [2]	-	-	**0.27**	-	-	-	-	-	-
Total Phosphorous	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	**0.19** [3]	-	-	-	-	-	-	-	-	-
BOD	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	**63**	-	-	<20	-	-	-	-	-	-
COD	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	**16**	-	-	**20**	-	-	-	-	-	-
Dissolved Iron	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	**0.35**	-	-	**0.21**	-	-	-	-	-	-
Ferrous Iron	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	**12**	-	-	**2.6**	-	-	-	-	-	-
Microbial Populations (units)																						
HPC (48 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	13,400-16,900	-	-	2,000-2,200	-	-	-	-	-	-
HPC (96 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	30,000-37,000	-	-	2,500-2,900	-	-	-	-	-	-
SDg (48 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	17,400-17,600	-	-	700-1,000	-	-	-	-	-	-
SDg (96 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	50,000-61,000	-	-	2,500-2,800	-	-	-	-	-	-
Comments		-	-	-	-	-	-	-	-	-	-	-	Mixed consortium	-	-	(HPC) 5 colonies of mold present	-	-	-	-	-	-
Field Parameters (units) *(Measured by LFR unless noted otherwise)*					*(Tait)*					*(Tait)*						*(Tait)*					*(Tait)*	
DO [4]	(mg/l)	0.62	0.54	2.08	3.30	1.34	0.43	0.50	0.14	3.07	0.43	0.44	0.27	0.10	2.27	0.50	0.55	0.38	0.24	2.22	0.35	-
ORP	(mV)	-124.3	-54	1.7	-94	-68.4	-122.6	-12.8	-99.1	-190	-221.1	-186.7	-125.3	-196.3	-220	-238.7	14.9	40.1	-16	-93	-59.5	-
Temperature	(ºC)	14.7	16.7	17.4	17.7	22.4	14.5	14.5	18.8	19.9	23.4	16.3	15.8	18.1	18.7	22.2	14.9	14.8	16.6	18.6	19.2	-
Conductivity	(µS/cm)	3,956	3,148	2,689	2,700	2,811	2,168	1,542	2,005	2,300	2,156	2,068	2,035	1,855	2,100	1,904	1,548	1,238	1,711	1,900	1,776	-
pH	(SU)	6.88	6.85	7.26	6.26	6.89	6.68	6.80	6.46	6.44	6.69	6.77	6.91	6.93	6.46	6.77	0.55	6.75	7.22	6.45	6.82	-
Turbidity	(NTU)	5.5	9.1	3.2	0	clear	1.5	13.6	28.1	13	clear	40.7	529	37.9	7.6	clear	0.9	16	0.1	0	clear	-
DTW	(ft TOC)	-	-	3.39	4.09	4.74	-	-	3.32	3.50	4.83	-	-	4.53	4.41	5.75	-	-	2.58	2.68	4.40	-
General field observations		none	none	pumping slow due to slow recharge	none	none	none	none	none	none	none	none	none	none	none	hydrocarbon odor	none	none	none	none	none	-

Table 2
Analytical Results, Groundwater Monitoring Well Samples
Hanson Aggregates Sunol Facility, Asphalt Plant
7999 Athenour Way, Sunol, California

Monitoring Well ID		MW-9S					MW-9D					MW-9LF					*ESLs*
Date Sampled		1/21/08	2/19/08	5/6/09	6/8/09	7/15/09	1/21/08	2/19/08	5/6/09	6/8/09	7/15/09	1/21/08	2/19/08	5/6/09	6/8/09	7/15/09	
Sparge Timing		baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	
Petroleum Hydrocarbon-Related Compounds (units)																	
TPHd	(µg/l)	**540** [1]	**9,500** [1]	**160** [1,6]	**370** [7]	<50	**4,700** [1]	**15,000**	**2,900** [1,6]	**740** [7]	**170**	**100** [1]	**180** [1]	<50 [6]	<50	<50	*100*
TPHg	(µg/l)	<50	**25,000** [1]	**810** [1]	**400**	<50	**54,000**	**34,000**	**9,400** [1]	**870**	**180**	**90**	<50	<50	<50	<50	*100*
Benzene	(µg/l)	<0.50	**9.8**	<0.50	<0.50	<0.50	**1,000**	**290**	**61**	**3.2**	**1.0**	<0.50	<0.50	<0.50	<0.50	<0.50	*1*
Toluene	(µg/l)	<0.50	**75**	**1.2**	<0.50	<0.50	**3,100**	**1,300**	**150**	**4.0**	**1.4**	<0.50	<0.50	<0.50	<0.50	<0.50	*40*
Ethylbenzene	(µg/l)	<0.50	**18**	**1.6**	<0.50	<0.50	**2,300**	**840**	**91**	**2.9**	**2.8**	<0.50	<0.50	<0.50	<0.50	<0.50	*30*
m,p-Xylene	(µg/l)	<0.50	**2,100**	**57**	**16**	<1.0	**4,300**	**3,200**	**940**	**57**	**32** [8]	**0.92**	<0.50	<0.50	<1.0	<1.0	*20*
o-Xylene	(µg/l)	<0.50	**1,900**	**30**	**16**	<1.0	**950**	**1,000**	**500**	**79**	**32** [8]	<0.50	<0.50	<0.50	<0.50	<1.0	*20*
MTBE	(µg/l)	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<7.1	<3.6	<1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	*5*
Water Quality Parameters (units)																	
Nitrate	(mg/l)	<0.10	<0.05	-	-	**3.2**	<0.10	<0.05	-	-	<1.0	<0.10	<0.05	-	-	<1.0	-
Nitrite	(mg/l)	<0.10	<0.05	-	-	<1.0	<0.10	<0.05	-	-	<1.0	<0.10	<0.05	-	-	<1.0	-
TKN	(mg/l)	<1.0	**2.1**	-	-	<0.40	<1.0	**1.6**	-	-	<0.40	<1.0	<1.0	-	-	<0.40	-
Orthophosphate	(mg/l)	**0.65**	**0.30** [2]	-	-	**0.12**	**0.66**	**0.48** [2]	-	-	**0.14**	**0.35**	**0.16** [2]	-	-	**0.25**	-
Total Phosphorous	(mg/l)	**-**	**0.44** [3]	-	-	-	**-**	**0.2** [3]	-	-		**-**	**0.16** [3]	-	-		-
BOD	(mg/l)	<5.0	**32**	-	-	<6	**23**	**81**	-	-	<6	**13**	<5.0	-	-	<6	-
COD	(mg/l)	<10	**20**	-	-	<20	56	**100**	-	-	**24**	<10	**100**	-	-	<20	-
Dissolved Iron	(mg/l)	**0.13** [4]	**0.1**	-	-	<0.010	**2.5** [4]	<0.100	-	-	**0.72**	<0.1 [4]	<0.100	-	-	**2.7**	-
Ferrous Iron	(mg/l)	-	**0.51**	-	-	**0.15**	-	**30**	-	-	**1.5**	-	**1.4**	-	-	**0.89**	-
Microbial Populations (units)																	
HPC (48 Hours)	(cfu/mL)	3,100-3,400	1,270,000-1,620,000	-	-	13,900-15,500	100-200*	1,210,000-1,620,000	-	-	5,800-5,900	0-100*	0-100*	-	-	1,600-1,800	-
HPC (96 Hours)	(cfu/mL)	11,100-12,000	1,460,000-1,840,000	-	-	4,100-9,000	800-900*	1,480,000-1,790,000	-	-	13,000-14,900	1,100-1,600*	0-200*	-	-	3,300-4,400	-
SDg (48 Hours)	(cfu/mL)	-	1,390,000-1,450,000	-	-	4,700-6,400	200-300*	1,520,000-1,600,000	-	-	5,500-5,900	-	0-100*	-	-	1,600-1,700	-
SDg (96 Hours)	(cfu/mL)	-	1,700,000-1,860,000	-	-	4,000-4,300	1,800-2,300*	1,630,000-1,800,000	-	-	12,200-15,800	-	100*	-	-	3,500-3,600	-
Comments		Mixed consortium	Mixed consortium	-	-	(HPC) 2 mold colonies, 1 spreader	(HPC) Little Growth; (SD) Small white colonies	Mixed consortium	-	-	(SD) 73 colonies of mold present	Small white colonies	Little to no growth	-	-		-
Field Parameters (units) *(Measured by LFR unless noted otherwise)*		*(LFR / Tait)**						*(Tait)*					*(LFR / Tait)**				
DO [4]	(mg/l)	0.94	0.73	0.77	6.26 / 3.53	3.53	0.86	0.17	0.31	3.70	4.61	0.62	6.44	7.87	12.1 / 3.65	10.09	-
ORP	(mV)	-196.2	11.5	17.4	166.3 / 47	-4.5	-267.2	-102.2	-13.9	-338	18.0	-216.1	375	6.4	211.8 / 77	-15.6	-
Temperature	(°C)	16.0	14.6	17.6	21.9 / 21.1	21.6	18.1	16.8	18.5	25.0	21.4	15.4	17.3	18.4	19.9 / 19.0	19.2	-
Conductivity	(µS/cm)	3,825	3,053	2,234	2,181 / 2,400	2,273	3,111	2,664	2,259	3,000	2,010	2,065	1,607	1,749	1,716 / 1,900	1,671	-
pH	(SU)	6.76	7.16	7.48	7.24 / 6.75	7.10	6.65	6.98	6.99	6.75	6.99	6.91	7.48	7.43	7.38 / 7.16	7.53	-
Turbidity	(NTU)	6	21.6	8.1	NM / 10.5	clear	11	1,352	20.7	107	light gray	1.8	288	58.7	NM / 8.8	light gray	-
DTW	(ft TOC)	-	-	2.48	4.10	4.35	-	-	3.88	3.45	6.14	-	-	3.71	4.97	5.83	-
General field observations		none	none	none	none	none	sheen, some product detected with oil/water interface probe (~0.03 ft)	oily sheen on top of discharge water	none	none	none	none	none	none	none	none	-

Table 2
Analytical Results, Groundwater Monitoring Well Samples
Hanson Aggregates Sunol Facility, Asphalt Plant
7999 Athenour Way, Sunol, California

Monitoring Well ID		OXY-1S					OXY-1D					OXY-1LF					*ESLs*
Date Sampled		1/25/08	2/20/08	5/6/09	6/8/09	7/14/09	1/25/08	2/20/08	5/6/09	6/8/09	7/14/09	1/25/08	2/20/08	5/6/09	6/8/09	7/15/09	
Sparge Timing		baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	baseline pre-pilot test	post-pilot test	1 month after system start-up	2 months after system start-up	3 months after system start-up	
Petroleum Hydrocarbon-Related Compounds (units)																	
TPHd	(µg/l)	**3,800** [1]	**3,700**	-	-	<50	**1,000** [1]	**1,300**	-	-	<50	**160** [1]	**110** [1]	-	-	<50	*100*
TPHg	(µg/l)	**10,000** [1]	**2,000**	-	-	<50	**2,400** [1]	**280**	-	-	<50	**60** [1]	<50	-	-	<50	*100*
Benzene	(µg/l)	**73**	**3.3**	-	-	<0.50	**23**	**3.7**	-	-	<0.50	**0.73**	<0.50	-	-	<0.50	*1*
Toluene	(µg/l)	**44**	**6.4**	-	-	<0.50	**5**	**3.2**	-	-	<0.50	<0.50	<0.50	-	-	<0.50	*40*
Ethylbenzene	(µg/l)	**650**	**24**	-	-	<0.50	**92**	**0.52**	-	-	<0.50	**0.65**	<0.50	-	-	<0.50	*30*
m,p-Xylene	(µg/l)	**160**	**24**	-	-	<1.0	**52**	**5.5**	-	-	<1.0	**0.70**	<0.50	-	-	<1.0	*20*
o-Xylene	(µg/l)	**22**	**17**	-	-	<1.0	**5.6**	**12**	-	-	<1.0	<0.50	<0.50	-	-	<1.0	*20*
MTBE	(µg/l)	<1.0	<0.50	-	-	<0.50	**0.51**	<0.50	-	-	<0.50	<0.50	<0.50	-	-	<0.50	*5*
Water Quality Parameters (units)																	
Nitrate	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrite	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TKN	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Orthophosphate	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Phosphorous	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BOD	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COD	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Iron	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microbial Populations (units)																	
HPC (48 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HPC (96 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDg (48 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SDg (96 Hours)	(cfu/mL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Comments		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Parameters (units) *(Measured by LFR unless noted otherwise)*					*(LFR / Tait)**												
DO [4]	(mg/l)	-	0.12	7.56	9.24 / 3.27	8.22	-	0.64	-	-	6.71	-	1.11	-	-	5.30	-
ORP	(mV)	-	20.5	12.5	143.9 / 20	-143.1	-	83.4	-	-	-44.0	-	77.4	-	-	-83.0	-
Temperature	(°C)	15.4	16.4	18.0	21.3 / 21.4	21.6	16.3	17.1	-	-	20.6	13.1	16.4	-	-	20.2	-
Conductivity	(µS/cm)	3,540 [5]	3,065	2,240	2,129 / 2,300	2,159	2,380 [5]	2,228	-	-	1,663	1,750 [5]	1,943	-	-	1,779	-
pH	(SU)	7.16	7.44	8.23	7.84 / 7.42	7.72	7.27	7.33	-	-	7.55	7.53	7.32	-	-	7.11	-
Turbidity	(NTU)	-	72	11.5	NM / high	light gray	-	1,343	-	-	gray, cloudy	-	734	-	-	dark gray	-
DTW	(ft TOC)	-	-	4.15	5.20	5.48	-	-	-	-	5.33	-	-	-	-	-	-
General field observations		none	none	none	well bubbling during air injection	none	none	none	-	-	well under pressure	none	none	-	-	none	-

Table 2
Analytical Results, Groundwater Monitoring Well Samples
Hanson Aggregates Sunol Facility, Asphalt Plant
7999 Athenour Way, Sunol, California

Notes:
Dash indicates not analyzed, not available, or not applicable
Bold = analyte detected at or above the laboratory reporting limit
Highlighted results equal or exceed the ESL value.
"<" = analyte not detected at or above the noted laboratory reporting limit
ID = identification; monitoring well identification number
µg/l = micrograms per liter; parts per billion (ppb)
mg/l = milligrams per liter; parts per million (ppm)
(cfu/mL) = colony forming units per milliliter
°C = degrees Celsius
µS/cm = microSiemens per centimeter
DTW = depth to groundwater
SU = standard units
NTU = Nephelometric turbidity units
mV = milliVolts
ft TOC = feet below top of casing
TPHd = total petroleum hydrocarbons as diesel
TPHg = total petroleum hydrocarbons as gasoline
MTBE = methyl tertiary-butyl ether
TKN = Total Kjeldahl Nitrogen
BOD = biochemical oxygen demand
COD = chemical oxygen demand
HPC = heterotrophic plate count
SD = specific degrader for gasoline count
DO = dissolved ozygen
ORP = oxidation-reduction potential
[1] Sample exhibits chromatographic pattern that does not resemble standard.
[2] Due to a laboratory error, samples collected on 2/19/08 for orthophosphate were analyzed 7 days out of the EPA recommended hold time.
[3] Due to a laboratory error, samples collected on 2/19/08 were analyzed for total phosphorous and not for orthophosphate as requested on the chain of custody; samples were re-analyzed (see note 2).
[4] DO field measurements made by LFR were periodically verified using a Lamotte field titration kit for DO. In all instances, the result from the titration kit confirmed the field measurement made by LFR.
[5] Conductivity values not corrected for temperature.
[6] TPHd analysis after silica-gel cleanup in samples collected on 5/6/09.
[7] Result in the diesel organics range is primarily due to overlap from a gasoline range product.
[8] The laboratory that analyzed the samples for xylenes did not separate into m,p-Xylene and o-Xylene, result is for total xylenes.
* On June 8, 2009, LFR measured field parameters in groundwater samples collected from wells OXY-1S, MW-9S, and MW-9LF by Tait to compare with field measurements made by Tait.
LFR confirmed DO field measurments using a Lamotte field titration test kit for DO. Only the field measurements are included in this table.
ESLs = Environmental Screening Levels by San Francisco Bay Regional Water Quality Control Board, Interim Final - November 2007 (Revised May 2008), Shallow or Deep Soils,
Groundwater is a Current or Potential Source of Drinking Water beneath Residential or Industrial/Commercial Land Use Areas (values for Groundwater).

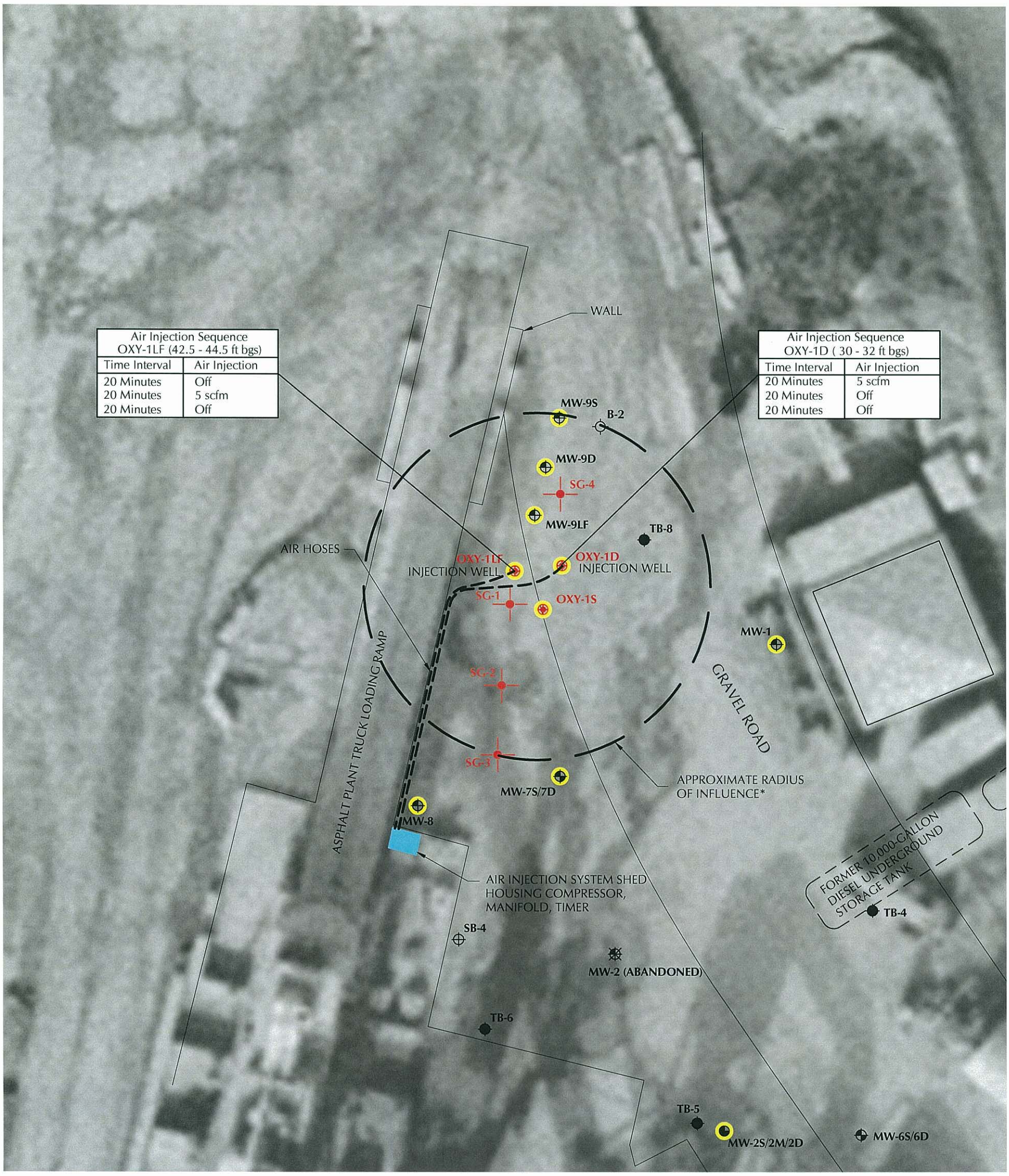
K:\001_EMV\P00000_PROPOSALS\Hanson_sunol\HansonSunolProp2.mxd - 3/18/2008 @ 3:58:30 PM

Site Location Map

Hanson Aggregates, 7999 Athenour Way, Sunol, CA

LFR

Figure 1



EXPLANATION:

MW-9S	Groundwater monitoring well by LFR Inc. (single completion; well cluster)
MW-1	Groundwater monitoring well by Tait (single completion)
MW-7S/7D	Groundwater monitoring well by Tait (dual nested)
MW-2S/SM/2D	Groundwater monitoring well by Tait (triple nested)
MW-2	Abandoned groundwater monitoring well
TB-6	Grab groundwater sample location
SB-4	Temporary soil boring location
B-2	Sonic boring / grab groundwater
OXY-1S	Air injection well (approximate location)
SG-1	Soil gas monitoring probe (approximate location)
MW-1	Well monitored during air injection
*	During air injection into wells OXY-ID and OXY-1LF for 20 minutes each/hour at 5 scfm
scfm	Standard cubic feet per minute
ft bgs	Feet below ground surface (approximate well screen interval)

N

0 15 FEET

APPROXIMATE SCALE

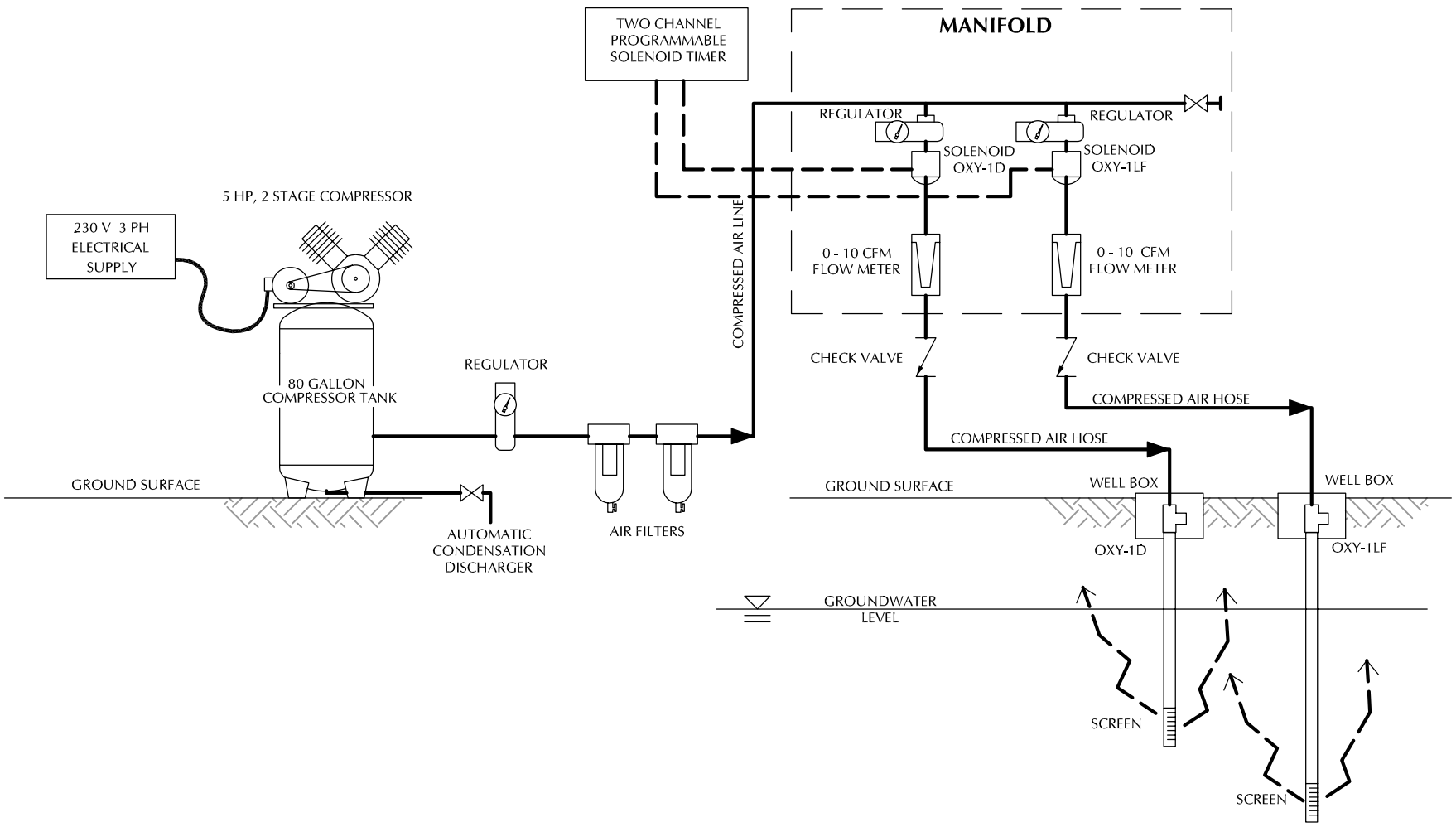
Site Plan Showing Air Injection System Layout and Well Locations

Hanson Aggregates, Sunol, California

LFR

Figure 2

I:\Design\001\09480\06\000\dwg\Sparge System Layout.dwg Aug 17,2009-1:11pm



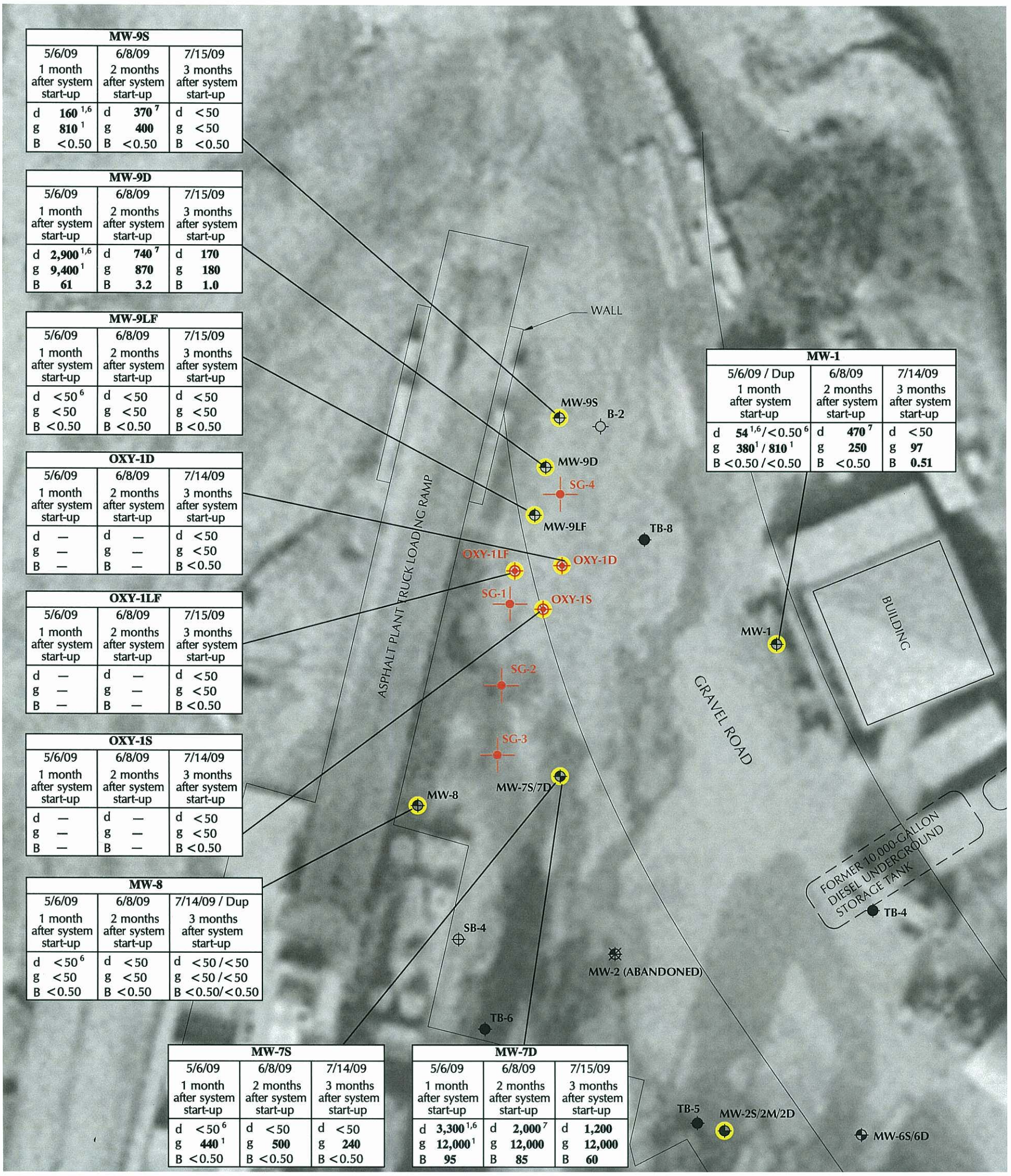
Schematic of Air Injection System

Hanson Aggregates, Sunol, California

LFR

Figure 3

I:\Design\001\09480\07\dwg\Air Sparging Conceptual Diagram.dwg Aug 10,2009-2:42pm



MW-9S		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/15/09 3 months after system start-up
d **160** [1,6]	d **370** [7]	d <50
g **810** [1]	g **400**	g <50
B <0.50	B <0.50	B <0.50

MW-9D		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/15/09 3 months after system start-up
d **2,900** [1,6]	d **740** [7]	d **170**
g **9,400** [1]	g **870**	g **180**
B **61**	B **3.2**	B **1.0**

MW-9LF		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/15/09 3 months after system start-up
d <50 [6]	d <50	d <50
g <50	g <50	g <50
B <0.50	B <0.50	B <0.50

OXY-1D		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/14/09 3 months after system start-up
d —	d —	d <50
g —	g —	g <50
B —	B —	B <0.50

OXY-1LF		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/15/09 3 months after system start-up
d —	d —	d <50
g —	g —	g <50
B —	B —	B <0.50

OXY-1S		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/14/09 3 months after system start-up
d —	d —	d <50
g —	g —	g <50
B —	B —	B <0.50

MW-8		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/14/09 / Dup 3 months after system start-up
d <50 [6]	d <50	d <50 / <50
g <50	g <50	g <50 / <50
B <0.50	B <0.50	B <0.50/ <0.50

MW-1		
5/6/09 / Dup 1 month after system start-up	6/8/09 2 months after system start-up	7/14/09 3 months after system start-up
d **54** [1,6] / <0.50 [6]	d **470** [7]	d <50
g **380** [1] / **810** [1]	g **250**	g **97**
B <0.50 / <0.50	B <0.50	B **0.51**

MW-7S		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/14/09 3 months after system start-up
d <50 [6]	d <50	d <50
g **440** [1]	g **500**	g **240**
B <0.50	B <0.50	B <0.50

MW-7D		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/15/09 3 months after system start-up
d **3,300** [1,6]	d **2,000** [7]	d **1,200**
g **12,000** [1]	g **12,000**	g **12,000**
B **95**	B **85**	B **60**

EXPLANATION:

- MW-9S — Groundwater monitoring well by LFR Inc. (single completion; well cluster)
- MW-1 — Groundwater monitoring well by Tait (single completion)
- MW-7S/7D — Existing groundwater monitoring well by Tait (dual nested)
- MW-2S/SM/2D — Existing groundwater monitoring well by Tait (triple nested)
- MW-2 — Abandoned groundwater monitoring well
- TB-6 — Grab groundwater sample location
- SB-4 — Temporary soil boring location
- B-2 — Sonic boring / grab groundwater
- OXY-1D — Pilot test air injection well
- SG-1 — Soil gas monitoring probe
- MW-1 — Well monitored during pilot test

NOTES:

[1] Sample exhibits chromatographic pattern that does not resemble standard

See Table 2 for additional notes.

d Total petroleum hydrocarbons as diesel
g Total petroleum hydrocarbons as gasoline
B Benzene

MW-9S		
5/6/09 1 month after system start-up	6/8/09 2 months after system start-up	7/15/09 3 months after system start-up
d **160** [1,6]	d **370** [1]	d <50
g **810** [1]	g **400**	g <50
B <0.50	B <0.50	B <0.50

Sample identification
Date sampled
Concentration in micrograms per liter (µg/L)
Constituent

0 15 FEET
APPROXIMATE SCALE

Groundwater Analytical Results, Petroleum Hydrocarbons

Hanson Aggregates, Sunol, California

Figure 4

LFR an ARCADIS company

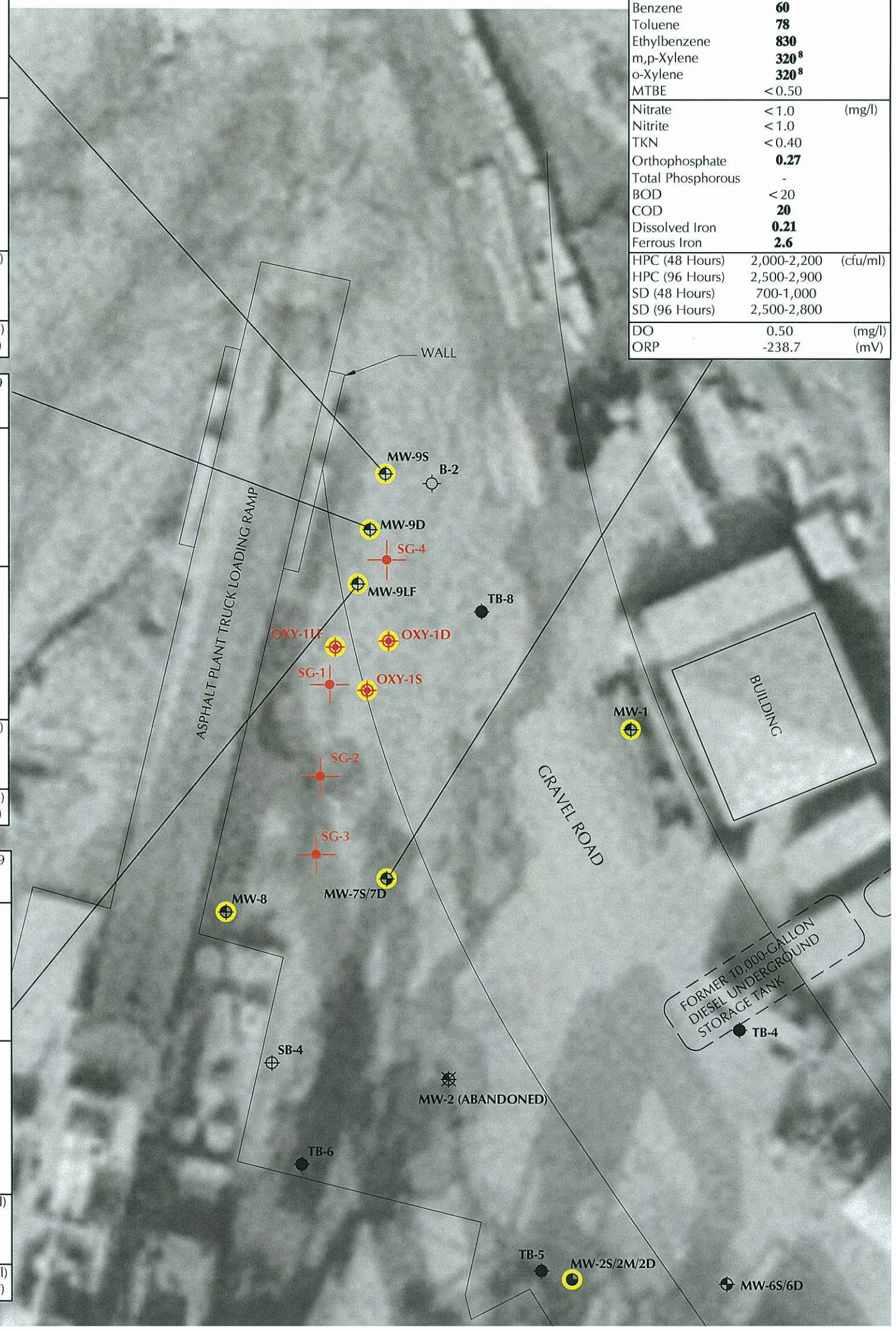
I:\Design\001\09480\06\000\dwg\GW Data PRE and POST ASPT July 2009.dwg Aug 10,2009-2:44pm

MW-9S	3 months after system start-up	7/15/09
Parameter		Units
TPHd	< 50	(µg/l)
TPHg	< 50	
Benzene	< 0.50	
Toluene	< 0.50	
Ethylbenzene	< 0.50	
m,p-Xylene	< 1.0	
o-Xylene	< 1.0	
MTBE	< 0.50	
Nitrate	**3.2**	(mg/l)
Nitrite	< 1.0	
TKN	< 0.40	
Orthophosphate	**0.12**	
Total Phosphorous	-	
BOD	< 6	
COD	< 20	
Dissolved Iron	< 0.010	
Ferrous Iron	**0.15**	
HPC (48 Hours)	13,900-15,500	(cfu/ml)
HPC (96 Hours)	4,100-9,000	
SD (48 Hours)	4,700-6,400	
SD (96 Hours)	4,000-4,300	
DO	3.53	(mg/l)
ORP	-4.5	(mV)

MW-9D	3 months after system start-up	7/15/09
Parameter		Units
TPHd	**170**	(µg/l)
TPHg	**180**	
Benzene	**1.0**	
Toluene	**1.4**	
Ethylbenzene	**2.8**	
m,p-Xylene	**3.2** [8]	
o-Xylene	**3.2** [8]	
MTBE	< 0.50	
Nitrate	< 1.0	(mg/l)
Nitrite	< 1.0	
TKN	< 0.40	
Orthophosphate	**0.14**	
Total Phosphorous	-	
BOD	< 6	
COD	**24**	
Dissolved Iron	**0.72**	
Ferrous Iron	**1.5**	
HPC (48 Hours)	5,800-5,900	(cfu/ml)
HPC (96 Hours)	13,000-14,900	
SD (48 Hours)	5,500-5,900	
SD (96 Hours)	12,200-15,800	
DO	4.61	(mg/l)
ORP	18.0	(mV)

MW-9LF	3 months after system start-up	7/15/09
Parameter		Units
TPHd	< 50	(µg/l)
TPHg	< 50	
Benzene	< 0.50	
Toluene	< 0.50	
Ethylbenzene	< 0.50	
m,p-Xylene	< 1.0	
o-Xylene	< 1.0	
MTBE	< 0.50	
Nitrate	< 1.0	(mg/l)
Nitrite	< 1.0	
TKN	< 0.40	
Orthophosphate	**0.25**	
Total Phosphorous	-	
BOD	< 6	
COD	< 20	
Dissolved Iron	**2.7**	
Ferrous Iron	**0.89**	
HPC (48 Hours)	1,600-1,800	(cfu/ml)
HPC (96 Hours)	3,300-4,400	
SD (48 Hours)	1,600-1,700	
SD (96 Hours)	3,500-3,600	
DO	10.09	(mg/l)
ORP	-15.6	(mV)

MW-7D	3 months after system start-up	7/15/09
Parameter		Units
TPHd	**1,200**	(µg/l)
TPHg	**12,000**	
Benzene	**60**	
Toluene	**78**	
Ethylbenzene	**830**	
m,p-Xylene	**320** [8]	
o-Xylene	**320** [8]	
MTBE	< 0.50	
Nitrate	< 1.0	(mg/l)
Nitrite	< 1.0	
TKN	< 0.40	
Orthophosphate	**0.27**	
Total Phosphorous	-	
BOD	< 20	
COD	**20**	
Dissolved Iron	**0.21**	
Ferrous Iron	**2.6**	
HPC (48 Hours)	2,000-2,200	(cfu/ml)
HPC (96 Hours)	2,500-2,900	
SD (48 Hours)	700-1,000	
SD (96 Hours)	2,500-2,800	
DO	0.50	(mg/l)
ORP	-238.7	(mV)



EXPLANATION:

- MW-9S — Groundwater monitoring well by LFR Inc. (single completion; well cluster)
- MW-1 — Groundwater monitoring well by Tait (single completion)
- MW-7S/7D — Existing groundwater monitoring well by Tait (dual nested)
- MW-2S/SM/2D — Existing groundwater monitoring well by Tait (triple nested)
- MW-2 — Abandoned groundwater monitoring well
- TB-6 — Grab groundwater sample location
- SB-4 — Temporary soil boring location
- B-2 — Sonic boring / grab groundwater
- OXY-1D — Pilot test air injection well
- SG-1 — Soil gas monitoring probe
- MW-1 — Well monitored during pilot test

TPHd	Total Petroleum Hydrocarbons as Diesel
TPHg	Total Petroleum Hydrocarbons as Gas
TKN	Total Kjeldahl Nitrogen
BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
HPC	Heterotrophic Plate Count
SD	Specific Degrader for Gasoline Count
DO	Dissolved Oxygen
ORP	Oxidation Reduction Potential
MTBE	Methyl Tertiary Butyl Ether

See Table 2 for additional notes.

N

0 15 FEET

APPROXIMATE SCALE

Groundwater Analytical Results, Indicator Parameters

Hanson Aggregates, Sunol, California

Figure 5

LFR an ARCADIS company

I:\Design\001\09480\06\000\dwg\GW Analytical Data July 2009.dwg Aug 10,2009-2:52pm

APPENDIX A

BAAQMD Exemption Letter

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT
SINCE 1955

March 26, 2009

Hanson Aggregates Northern California
3000 Busch Road
Pleasanton, CA 94566

Attention: Thomas Jackson

Application Number 20301
Plant Number: 19581
Equipment Location:
7999 Athenour Way
Sunol, CA 94586

Dear Applicant:

SUBJECT: LETTER OF EXEMPTION

We have completed our evaluation of your application for a Permit to Operate the following equipment:

Air Injection System

We have determined that your operation is exempt from permitting per the following:

2-1-103 **Exemption, Source not Subject to any District Rule:** Any source that is not already exempt from the requirements of Section 2-1-301 and 302 as set forth in Sections 2-1-105 to 2-1-128, is exempt from Section 2-1-301 and 302 if the source meets all of the following criteria:

103.1 The source is not in a source category subject to any of the provisions of Regulation 6[(1)], Regulation 8[(2)] excluding Rules 1 through 4, Regulations 9 through 12; and

103.2 The source is not subject to any of the provisions of Sections 2-1-316 through 319; and

103.3 Actual emissions of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NOx), sulfur dioxide (SO_2), PM_{10} and carbon monoxide (CO) from the source are each less than 10 pounds per highest day. A source also satisfies this criterion if actual emissions of each pollutant are greater than 10 lb/highest day, but total emissions are less than 150 pounds per year, per pollutant.
Note 1: Typically, any source may be subject to Regulation 6, Particulate Matter and Visible Emissions. For the purposes of this section, Regulation 6 applicability shall be limited to the following types of sources that emit PM_{10}: combustion source; material handling/processing; sand, gravel or rock processing; cement, concrete and asphaltic concrete production; tub grinder; or similar PM_{10}-emitting source, as deemed by the APCO.
Note 2: If an exemption in a Regulation 8 Rule indicates that the source is subject to Regulation 8, Rules 1 through 4, then the source must comply with all applicable provisions of Regulation 8, Rules 1 through 4, to qualify for this exemption.

103.4 The source is not an ozone generator (a piece of equipment designed to generate ozone) emitting 1 lb/day or more of ozone.

(Adopted 6/7/95; Amended 5/17/00, 12/21/04)

This exemption applies solely to permits. The equipment must be operated in compliance with any applicable District regulations and with other regulatory agency requirements. The District's regulations may be viewed online at www.baaqmd.gov/. Note that this exemption is not permanent. Any change in your operation or in District regulations may require you to obtain permits in the future.

Please include your application number with any correspondence with the District If you have any questions on this matter, please call **Flora W Chan at (415) 749-4630**.

Very truly yours,

Jack P. Broadbent
Executive Officer/APCO

by
Engineering Division

SBL.PWC
101.1

APPENDIX B

Field Photographs

Photograph 1. Injection Well OXY-1D, Compressed Air Hose Conduit, and Trench

Photograph 2. Air Injection System and Enclosure

APPENDIX C

Certified Laboratory Analytical Reports

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

Laboratory Job Number 211989
ANALYTICAL REPORT

LFR Levine Fricke	Project : 001-09480-08
1900 Powell Street	Location : Hanson Sunol
Emeryville, CA 94608	Level : II

Sample ID	Lab ID
TB	211989-001
MW-1	211989-002
MW-1D	211989-003
MW-8	211989-004
MW-7S	211989-005
MW-7D	211989-006
MW-9LF	211989-007
MW-9S	211989-008
MW-9D	211989-009

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: 05/28/2009
Project Manager

Signature: _____ Date: 05/28/2009
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**211989**
Client:	**LFR Levine Fricke**
Project:	**001-09480-08**
Location:	**Hanson Sunol**
Request Date:	**05/07/09**
Samples Received:	**05/07/09**

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 05/07/09. The samples were received cold and intact. All data were e-mailed to Katrin Schliewen on 05/20/09.

TPH-Extractables by GC (EPA 8015B):

Low recovery was observed for diesel C10-C24 in the MS for batch 150885; the parent sample was not a project sample, and the LCS was within limits. High recovery was also observed for diesel C10-C24 in the MSD for batch 150885; the LCS was within limits. High RPD was also observed for diesel C10-C24 in the MS/MSD for batch 150885. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

CHAIN OF CUSTODY

C & T LOGIN #: 211989

Project No.: 001-09480-06
Project Name: Hanson Sunol
Project P.O.: 001-09480-06
Turnaround Time: Standard

Sampler: ENW
Report To: Katrin Schliewen
Company: LFR, Inc
Telephone: 510-652-4500
Fax:

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	Analysis: TPHd w/ Silica Gel Cleanup (8015M)	TPHg/BTEX/MTBE (8260B)
1	TB	5/6/09 0700		X		1	X					X
2	MW-1	5/6/09 1010		X		5	X				X	X
3	MW-1D	5/6/09 1015		X		5	X				X	X
4	MW-6	5/6/09 1120		X		5	X				X	X
5	MW-7S	5/6/09 1345		X		5	X				X	X
6	MW-7D	5/6/09 1450		X		5	X				X	X
7	MW-9LF	5/6/09 1630		X		5	X				X	X
8	MW-9S	5/7/09 0935		X		5	X				X	X
9	MW-9D	5/7/09 1045		X		5	X				X	X

Notes:
Silica Gel Cleanup on TPHd

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

RELINQUISHED BY:
SIGNATURE — 5/7/09 1532 DATE / TIME
DATE / TIME
DATE / TIME

RECEIVED BY:
SIGNATURE — 5/7/09 1532 DATE / TIME
DATE / TIME
DATE / TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 211989 Date Received 5/7/07 Number of coolers 1
Client CFR Project Hanson Sunol

Date Opened 5/7/07 By (print) Phuong (sign) P.L
Date Logged in 5/7/07 By (print) Phuong (sign) P.L

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) 2.8

☐ 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) P.L.
16. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09480-08	Analysis:	EPA 8015B
Matrix:	Water	Received:	05/07/09
Units:	ug/L	Prepared:	05/11/09
Diln Fac:	1.000	Analyzed:	05/13/09
Batch#:	150885		

Field ID:	MW-1	Sampled:	05/06/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-002		

Analyte	Result	RL
Diesel C10-C24	54 Y	50

Surrogate	%REC	Limits
o-Terphenyl	112	61-127

Field ID:	MW-1D	Sampled:	05/06/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-003		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	100	61-127

Field ID:	MW-8	Sampled:	05/06/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-004		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	120	61-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09480-08	Analysis:	EPA 8015B
Matrix:	Water	Received:	05/07/09
Units:	ug/L	Prepared:	05/11/09
Diln Fac:	1.000	Analyzed:	05/13/09
Batch#:	150885		

Field ID:	MW-7S	Sampled:	05/06/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-005		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	105	61-127

Field ID:	MW-7D	Sampled:	05/06/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-006		

Analyte	Result	RL
Diesel C10-C24	3,300 Y	50

Surrogate	%REC	Limits
o-Terphenyl	93	61-127

Field ID:	MW-9LF	Sampled:	05/06/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-007		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	95	61-127

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09480-08	Analysis:	EPA 8015B
Matrix:	Water	Received:	05/07/09
Units:	ug/L	Prepared:	05/11/09
Diln Fac:	1.000	Analyzed:	05/13/09
Batch#:	150885		

Field ID:	MW-9S	Sampled:	05/07/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-008		

Analyte	Result	RL
Diesel C10-C24	160 Y	50

Surrogate	%REC	Limits
o-Terphenyl	96	61-127

Field ID:	MW-9D	Sampled:	05/07/09
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	211989-009		

Analyte	Result	RL
Diesel C10-C24	2,900 Y	50

Surrogate	%REC	Limits
o-Terphenyl	106	61-127

Type:	BLANK	Cleanup Method:	EPA 3630C
Lab ID:	QC495486		

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
o-Terphenyl	96	61-127

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 #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09480-08	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC495487	Batch#:	150885
Matrix:	Water	Prepared:	05/11/09
Units:	ug/L	Analyzed:	05/14/09

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,868	75	50-120

Surrogate	%REC	Limits
o-Terphenyl	92	61-127

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09480-08	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	150885
MSS Lab ID:	211944-006	Sampled:	05/04/09
Matrix:	Water	Received:	05/06/09
Units:	ug/L	Prepared:	05/11/09
Diln Fac:	1.000	Analyzed:	05/13/09

Type: MS Lab ID: QC495488

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	9,122	2,500	8,392	-29 *	38-127

Surrogate	%REC	Limits
o-Terphenyl	93	61-127

Type: MSD Lab ID: QC495489

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	13,920	192 *	38-127	50 *	37

Surrogate	%REC	Limits
o-Terphenyl	76	61-127

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 3520C
Project#:	001-09480-08	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	150885
MSS Lab ID:	212005-001	Sampled:	05/07/09
Matrix:	Water	Received:	05/08/09
Units:	ug/L	Prepared:	05/11/09
Diln Fac:	1.000	Analyzed:	05/15/09

Type: MS Lab ID: QC495490

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	12,270	2,500	11,190	-43 NM	38-127

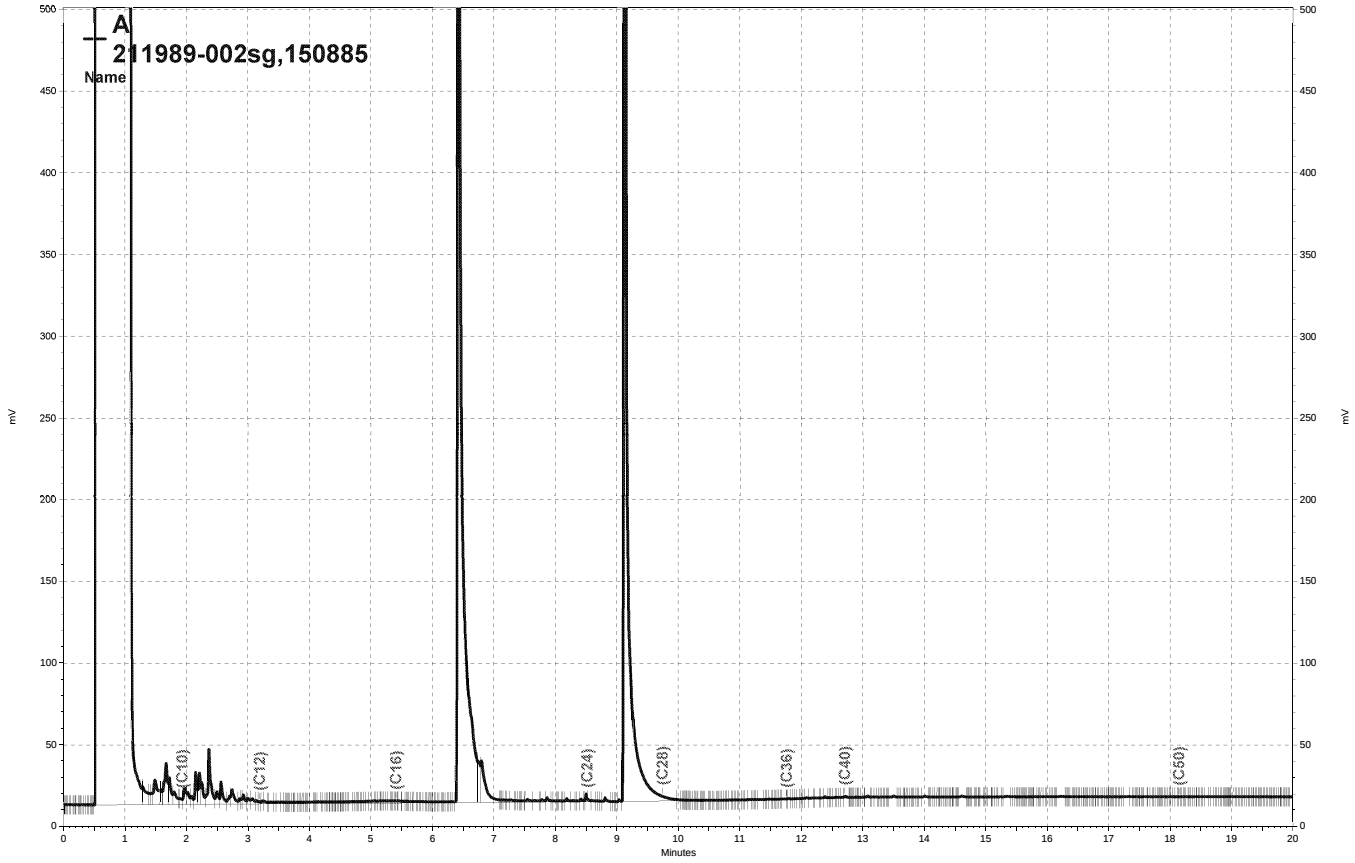
Surrogate	%REC	Limits
o-Terphenyl	88	61-127

Type: MSD Lab ID: QC495491

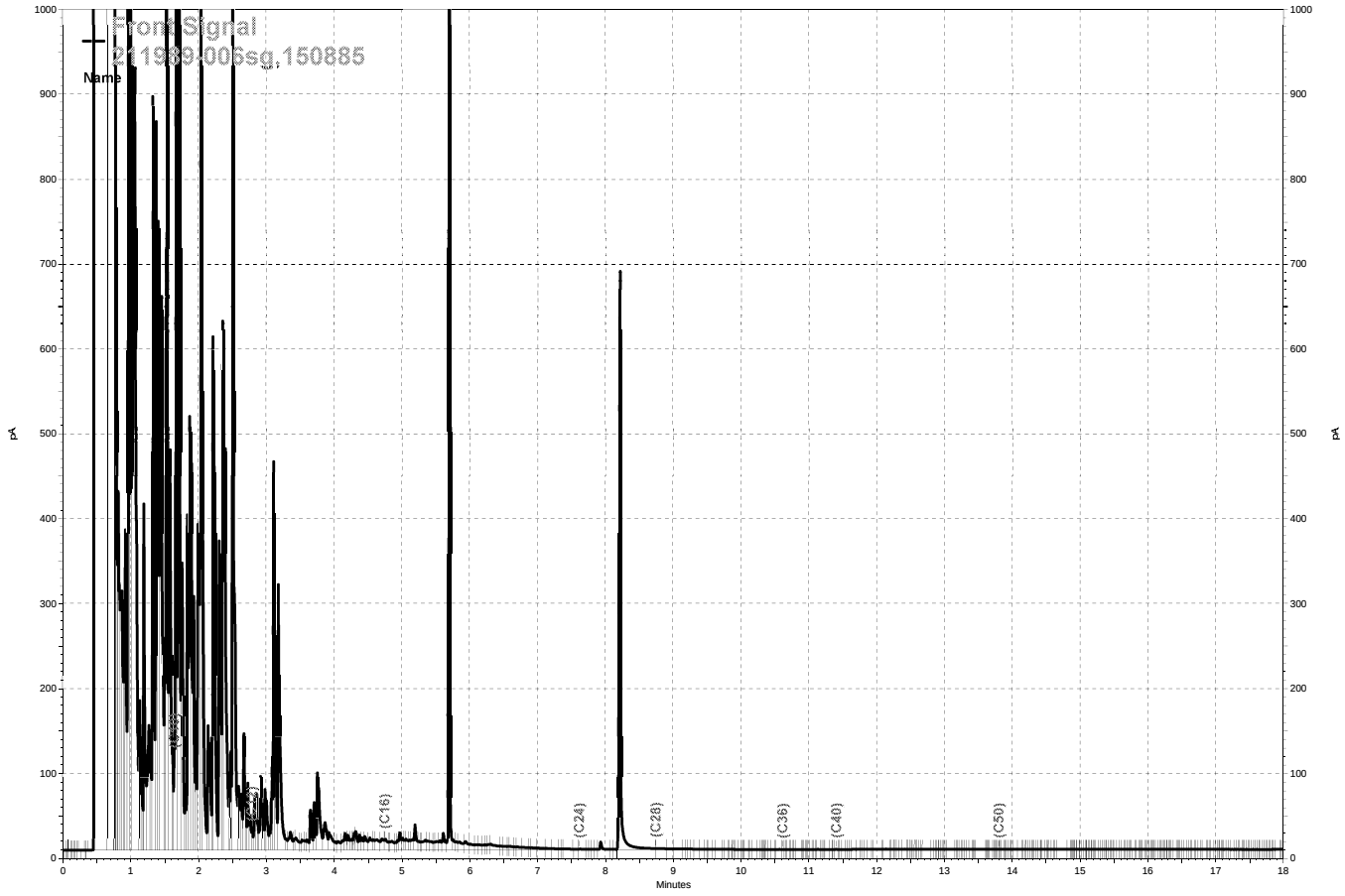
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	11,490	-31 NM	38-127	3	37

Surrogate	%REC	Limits
o-Terphenyl	90	61-127

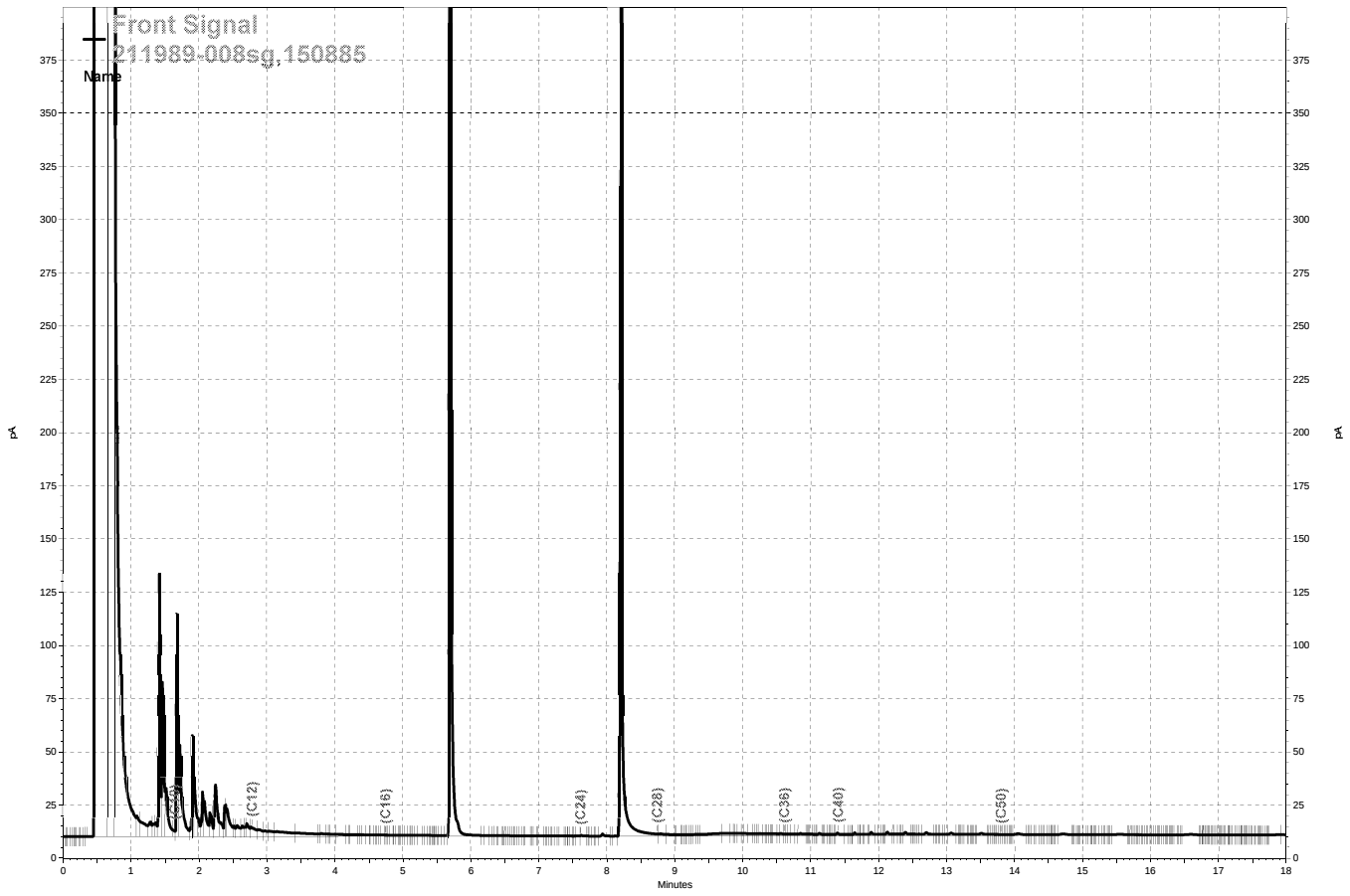
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference



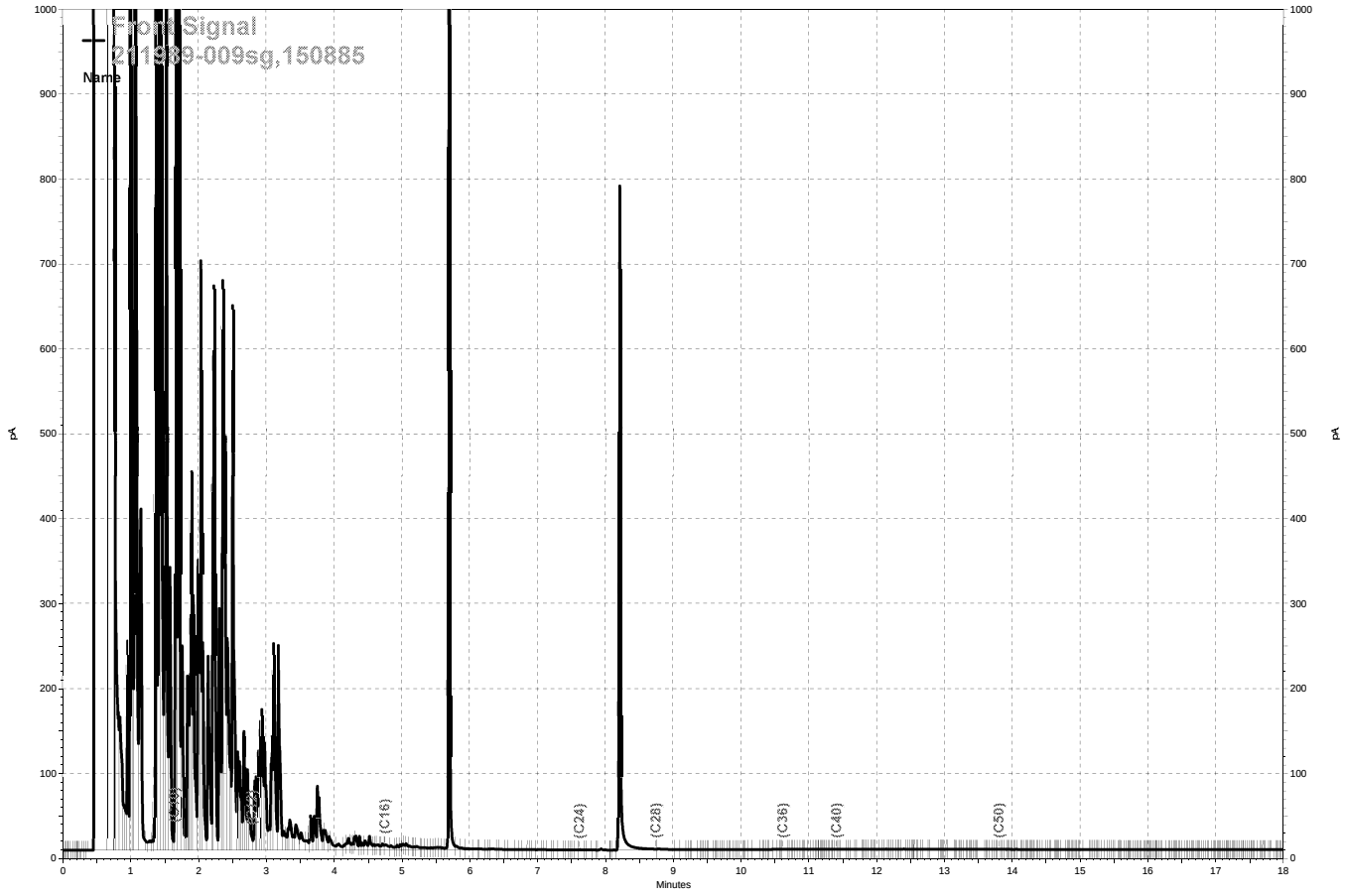
\\Lims\gdrive\ezchrom\Projects\GC17A\Data\132a044, A



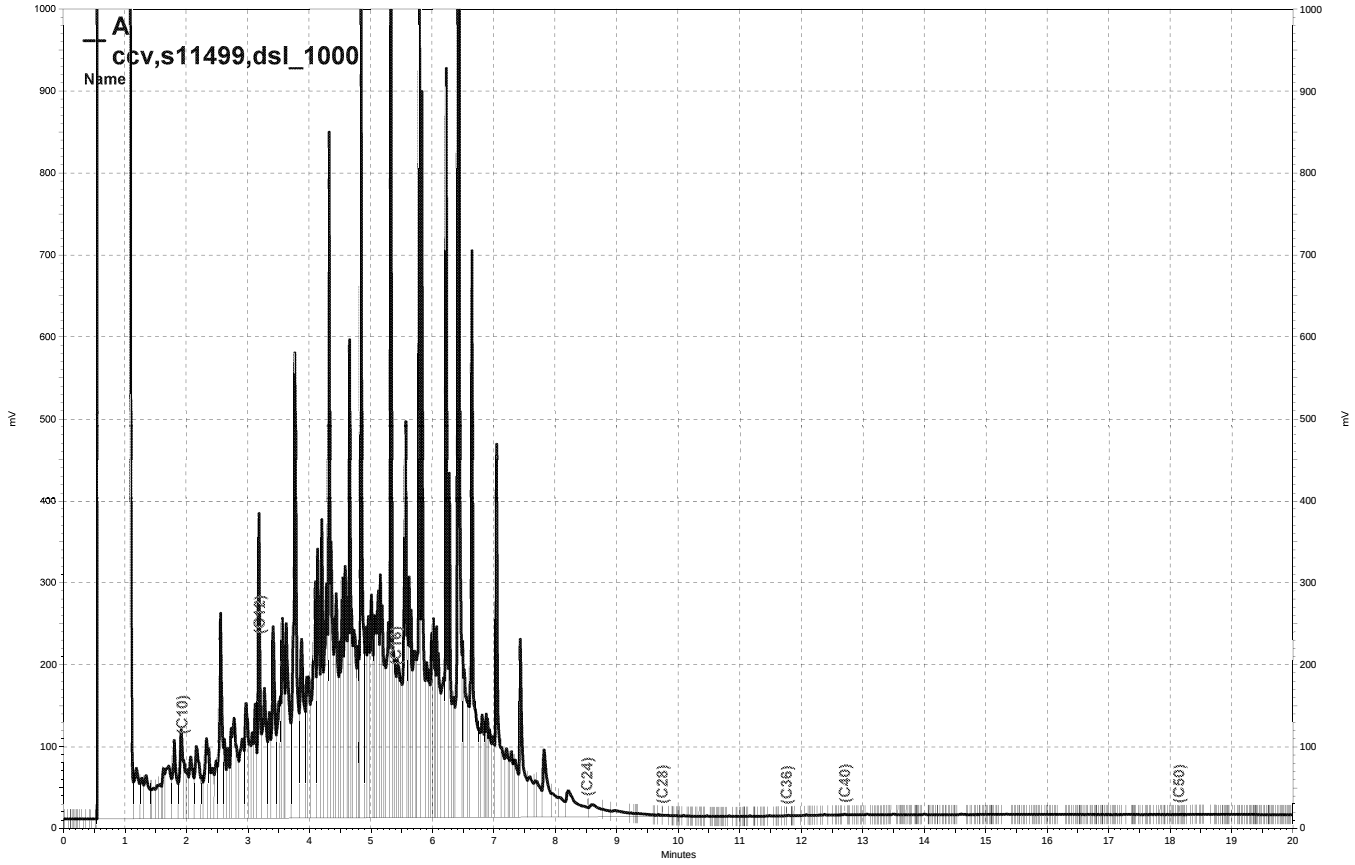
G:\ezchrom\Projects\GC27\Data\133a009.dat, Front Signal



G:\ezchrom\Projects\GC27\Data\133a011.dat, Front Signal



G:\ezchrom\Projects\GC27\Data\133a012.dat, Front Signal



\\Lims\gdrive\ezchrom\Projects\GC17A\Data\132a034, A

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Received:	05/07/09
Units:	ug/L		

Field ID:	TB	Batch#:	151053
Type:	SAMPLE	Sampled:	05/06/09
Lab ID:	211989-001	Analyzed:	05/15/09
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	96	80-122
1,2-Dichloroethane-d4	96	77-137
Toluene-d8	97	80-120
Bromofluorobenzene	108	80-125

Field ID:	MW-1	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	05/06/09
Lab ID:	211989-002		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	380 Y	50	151053	05/15/09
MTBE	ND	0.50	151201	05/20/09
Benzene	ND	0.50	151201	05/20/09
Toluene	ND	0.50	151201	05/20/09
Ethylbenzene	2.4	0.50	151201	05/20/09
m,p-Xylenes	1.7	0.50	151201	05/20/09
o-Xylene	ND	0.50	151201	05/20/09

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	98	80-122	151201	05/20/09
1,2-Dichloroethane-d4	94	77-137	151201	05/20/09
Toluene-d8	97	80-120	151201	05/20/09
Bromofluorobenzene	109	80-125	151201	05/20/09

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Received:	05/07/09
Units:	ug/L		

Field ID:	MW-1D	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	05/06/09
Lab ID:	211989-003		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	380 Y	50	151053	05/15/09
MTBE	ND	0.50	151201	05/20/09
Benzene	ND	0.50	151201	05/20/09
Toluene	ND	0.50	151201	05/20/09
Ethylbenzene	2.4	0.50	151201	05/20/09
m,p-Xylenes	1.8	0.50	151201	05/20/09
o-Xylene	ND	0.50	151201	05/20/09

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	97	80-122	151201	05/20/09
1,2-Dichloroethane-d4	92	77-137	151201	05/20/09
Toluene-d8	97	80-120	151201	05/20/09
Bromofluorobenzene	109	80-125	151201	05/20/09

Field ID:	MW-8	Batch#:	151053
Type:	SAMPLE	Sampled:	05/06/09
Lab ID:	211989-004	Analyzed:	05/15/09
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-122
1,2-Dichloroethane-d4	95	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	109	80-125

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Received:	05/07/09
Units:	ug/L		

Field ID:	MW-7S	Diln Fac:	1.000
Type:	SAMPLE	Sampled:	05/06/09
Lab ID:	211989-005		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	440 Y	50	151053	05/15/09
MTBE	ND	0.50	151201	05/20/09
Benzene	ND	0.50	151201	05/20/09
Toluene	ND	0.50	151201	05/20/09
Ethylbenzene	1.1	0.50	151201	05/20/09
m,p-Xylenes	1.1	0.50	151201	05/20/09
o-Xylene	ND	0.50	151201	05/20/09

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	96	80-122	151201	05/20/09
1,2-Dichloroethane-d4	92	77-137	151201	05/20/09
Toluene-d8	98	80-120	151201	05/20/09
Bromofluorobenzene	109	80-125	151201	05/20/09

Field ID:	MW-7D	Batch#:	151087
Type:	SAMPLE	Sampled:	05/06/09
Lab ID:	211989-006	Analyzed:	05/17/09
Diln Fac:	16.67		

Analyte	Result	RL
Gasoline C7-C12	12,000 Y	830
MTBE	ND	8.3
Benzene	95	8.3
Toluene	110	8.3
Ethylbenzene	1,100	8.3
m,p-Xylenes	490	8.3
o-Xylene	30	8.3

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-122
1,2-Dichloroethane-d4	93	77-137
Toluene-d8	97	80-120
Bromofluorobenzene	107	80-125

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Received:	05/07/09
Units:	ug/L		

Field ID:	MW-9LF	Batch#:	151053
Type:	SAMPLE	Sampled:	05/06/09
Lab ID:	211989-007	Analyzed:	05/15/09
Diln Fac:	1.000		

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

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-122
1,2-Dichloroethane-d4	93	77-137
Toluene-d8	98	80-120
Bromofluorobenzene	108	80-125

Field ID:	MW-9S	Batch#:	151087
Type:	SAMPLE	Sampled:	05/07/09
Lab ID:	211989-008	Analyzed:	05/16/09
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	810 Y	50
MTBE	ND	0.50
Benzene	ND	0.50
Toluene	1.2	0.50
Ethylbenzene	1.6	0.50
m,p-Xylenes	57	0.50
o-Xylene	30	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-122
1,2-Dichloroethane-d4	95	77-137
Toluene-d8	98	80-120
Bromofluorobenzene	110	80-125

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Received:	05/07/09
Units:	ug/L		

Field ID:	MW-9D	Batch#:	151087
Type:	SAMPLE	Sampled:	05/07/09
Lab ID:	211989-009	Analyzed:	05/17/09
Diln Fac:	7.143		

Analyte	Result	RL
Gasoline C7-C12	9,400 Y	360
MTBE	ND	3.6
Benzene	61	3.6
Toluene	150	3.6
Ethylbenzene	91	3.6
m,p-Xylenes	940	3.6
o-Xylene	500	3.6

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-122
1,2-Dichloroethane-d4	95	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-125

Type:	BLANK	Batch#:	151053
Lab ID:	QC496162	Analyzed:	05/15/09
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	96	80-122
1,2-Dichloroethane-d4	93	77-137
Toluene-d8	96	80-120
Bromofluorobenzene	106	80-125

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Received:	05/07/09
Units:	ug/L		

Type:	BLANK	Batch#:	151053
Lab ID:	QC496163	Analyzed:	05/15/09
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	96	80-122
1,2-Dichloroethane-d4	93	77-137
Toluene-d8	97	80-120
Bromofluorobenzene	106	80-125

Type:	BLANK	Batch#:	151087
Lab ID:	QC496325	Analyzed:	05/16/09
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	96	80-122
1,2-Dichloroethane-d4	93	77-137
Toluene-d8	97	80-120
Bromofluorobenzene	106	80-125

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

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Received:	05/07/09
Units:	ug/L		

Type: BLANK
Lab ID: QC496788
Diln Fac: 1.000

Batch#: 151201
Analyzed: 05/20/09

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	80-122
1,2-Dichloroethane-d4	94	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-125

Type: BLANK
Lab ID: QC496789
Diln Fac: 1.000

Batch#: 151201
Analyzed: 05/20/09

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	80-122
1,2-Dichloroethane-d4	92	77-137
Toluene-d8	100	80-120
Bromofluorobenzene	107	80-125

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 #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	151053
Units:	ug/L	Analyzed:	05/15/09
Diln Fac:	1.000		

Type: BS Lab ID: QC496164

Analyte	Spiked	Result	%REC	Limits
MTBE	22.50	21.55	96	73-122
Benzene	22.50	23.71	105	80-120
Toluene	22.50	23.54	105	80-120
Ethylbenzene	22.50	25.44	113	80-121
m,p-Xylenes	45.00	50.87	113	80-122
o-Xylene	22.50	25.23	112	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	90	77-137
Toluene-d8	98	80-120
Bromofluorobenzene	107	80-125

Type: BSD Lab ID: QC496165

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	22.50	22.23	99	73-122	3	20
Benzene	22.50	25.00	111	80-120	5	20
Toluene	22.50	24.73	110	80-120	5	20
Ethylbenzene	22.50	26.00	116	80-121	2	20
m,p-Xylenes	45.00	52.77	117	80-122	4	20
o-Xylene	22.50	25.91	115	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-122
1,2-Dichloroethane-d4	90	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	151053
Units:	ug/L	Analyzed:	05/15/09
Diln Fac:	1.000		

Type: BS Lab ID: QC496166

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,004	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-122
1,2-Dichloroethane-d4	95	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-125

Type: BSD Lab ID: QC496167

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,006	101	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-122
1,2-Dichloroethane-d4	92	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	151087
Units:	ug/L	Analyzed:	05/16/09
Diln Fac:	1.000		

Type: BS Lab ID: QC496326

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	18.30	91	73-122
Benzene	20.00	22.09	110	80-120
Toluene	20.00	21.60	108	80-120
Ethylbenzene	20.00	23.01	115	80-121
m,p-Xylenes	40.00	46.10	115	80-122
o-Xylene	20.00	22.55	113	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-122
1,2-Dichloroethane-d4	92	77-137
Toluene-d8	97	80-120
Bromofluorobenzene	104	80-125

Type: BSD Lab ID: QC496327

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	18.41	92	73-122	1	20
Benzene	20.00	21.00	105	80-120	5	20
Toluene	20.00	21.09	105	80-120	2	20
Ethylbenzene	20.00	22.17	111	80-121	4	20
m,p-Xylenes	40.00	44.33	111	80-122	4	20
o-Xylene	20.00	21.72	109	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-122
1,2-Dichloroethane-d4	91	77-137
Toluene-d8	98	80-120
Bromofluorobenzene	104	80-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	151087
Units:	ug/L	Analyzed:	05/16/09
Diln Fac:	1.000		

Type: BS Lab ID: QC496328

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	750.0	809.1	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-122
1,2-Dichloroethane-d4	93	77-137
Toluene-d8	98	80-120
Bromofluorobenzene	106	80-125

Type: BSD Lab ID: QC496329

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	750.0	746.2	99	80-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-122
1,2-Dichloroethane-d4	92	77-137
Toluene-d8	98	80-120
Bromofluorobenzene	107	80-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	151201
Units:	ug/L	Analyzed:	05/20/09
Diln Fac:	1.000		

Type: BS Lab ID: QC496790

Analyte	Spiked	Result	%REC	Limits
MTBE	23.75	22.36	94	73-122
Benzene	23.75	25.75	108	80-120
Toluene	23.75	25.36	107	80-120
Ethylbenzene	23.75	26.95	113	80-121
m,p-Xylenes	47.50	55.77	117	80-122
o-Xylene	23.75	27.13	114	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-122
1,2-Dichloroethane-d4	90	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-125

Type: BSD Lab ID: QC496791

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	23.75	22.28	94	73-122	0	20
Benzene	23.75	25.00	105	80-120	3	20
Toluene	23.75	24.46	103	80-120	4	20
Ethylbenzene	23.75	26.13	110	80-121	3	20
m,p-Xylenes	47.50	52.73	111	80-122	6	20
o-Xylene	23.75	25.83	109	80-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	91	77-137
Toluene-d8	100	80-120
Bromofluorobenzene	107	80-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	211989	Location:	Hanson Sunol
Client:	LFR Levine Fricke	Prep:	EPA 5030B
Project#:	001-09480-08	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	151201
Units:	ug/L	Analyzed:	05/20/09
Diln Fac:	1.000		

Type: BS Lab ID: QC496792

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	900.0	895.0	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	94	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	106	80-125

Type: BSD Lab ID: QC496793

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	900.0	882.2	98	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-122
1,2-Dichloroethane-d4	93	77-137
Toluene-d8	99	80-120
Bromofluorobenzene	107	80-125

RPD= Relative Percent Difference

Data File: \\Gcmsserver\DD\chem\MSVOA08.i\051509.b\HEF19TVH.D

Date : 15-MAY-2009 21:01

Client ID: DYNA P&T

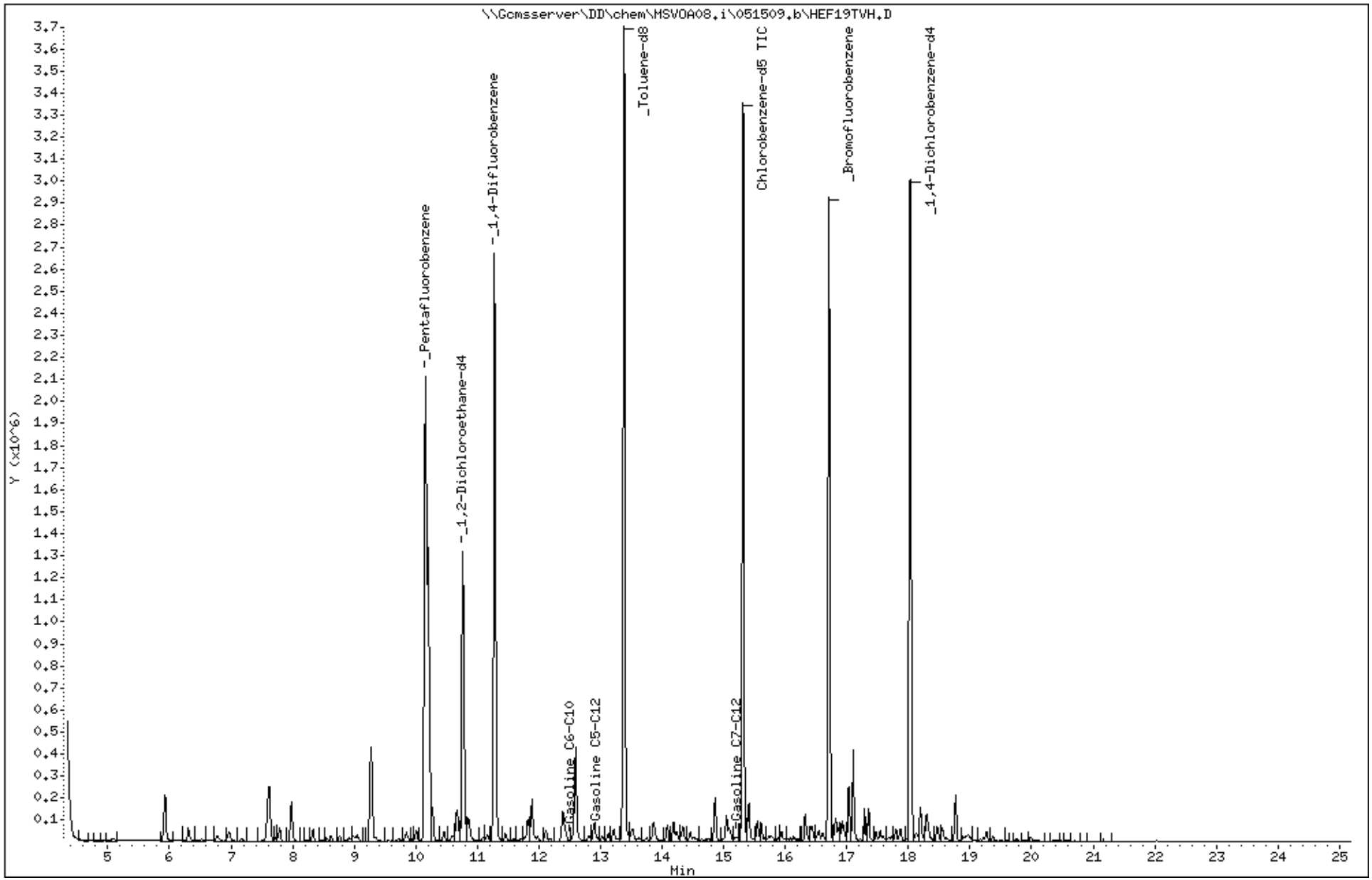
Instrument: MSVOA08.i

Sample Info: S,211989-002

Operator: voc

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\051509.b\HEF20TVH.D

Date : 15-MAY-2009 21:37

Client ID: DYNA P&T

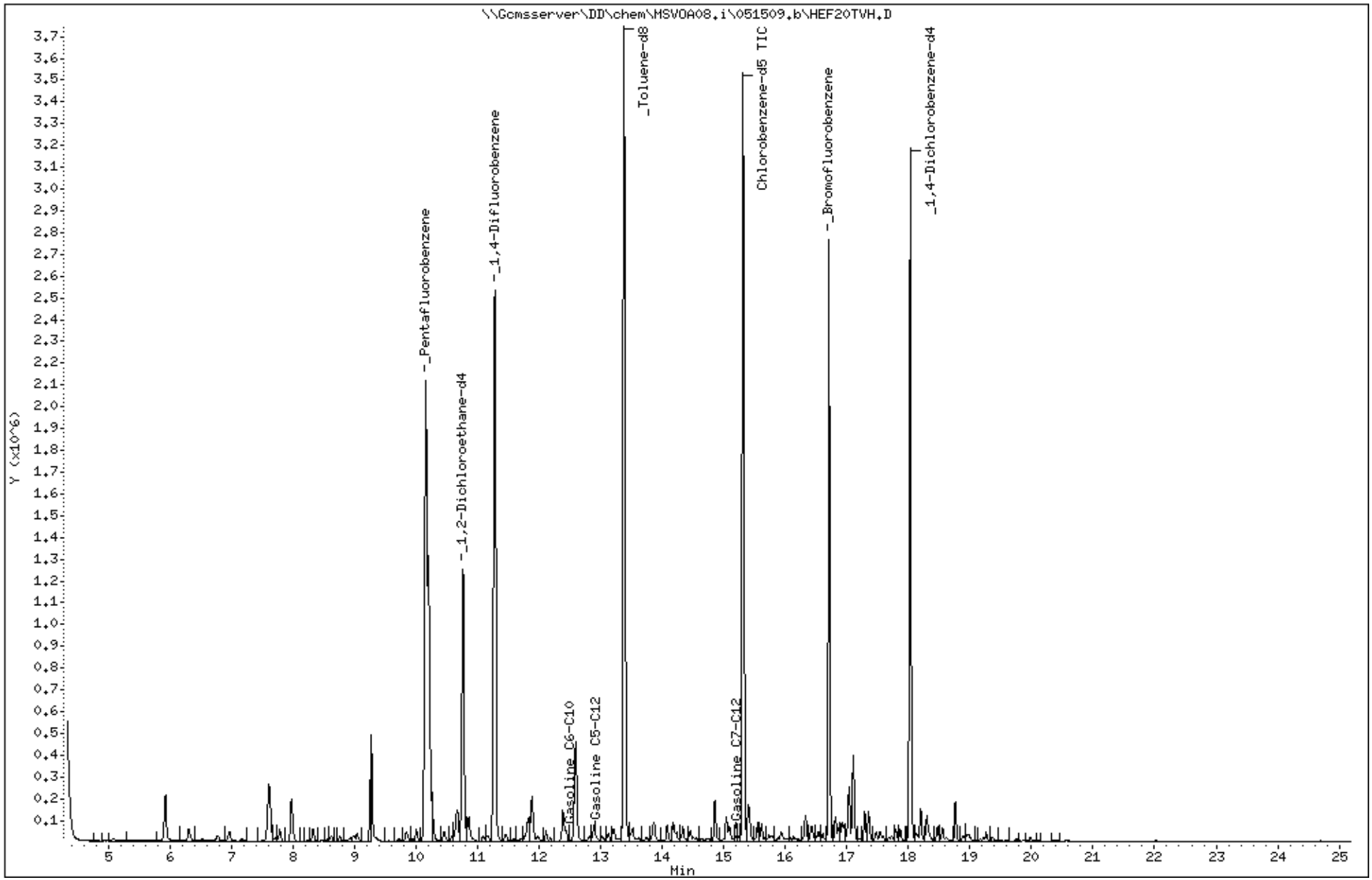
Instrument: MSVOA08.i

Sample Info: S,211989-003

Operator: voc

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\051509.b\HEF22TVH.D

Date : 15-MAY-2009 22:49

Client ID: DYNA P&T

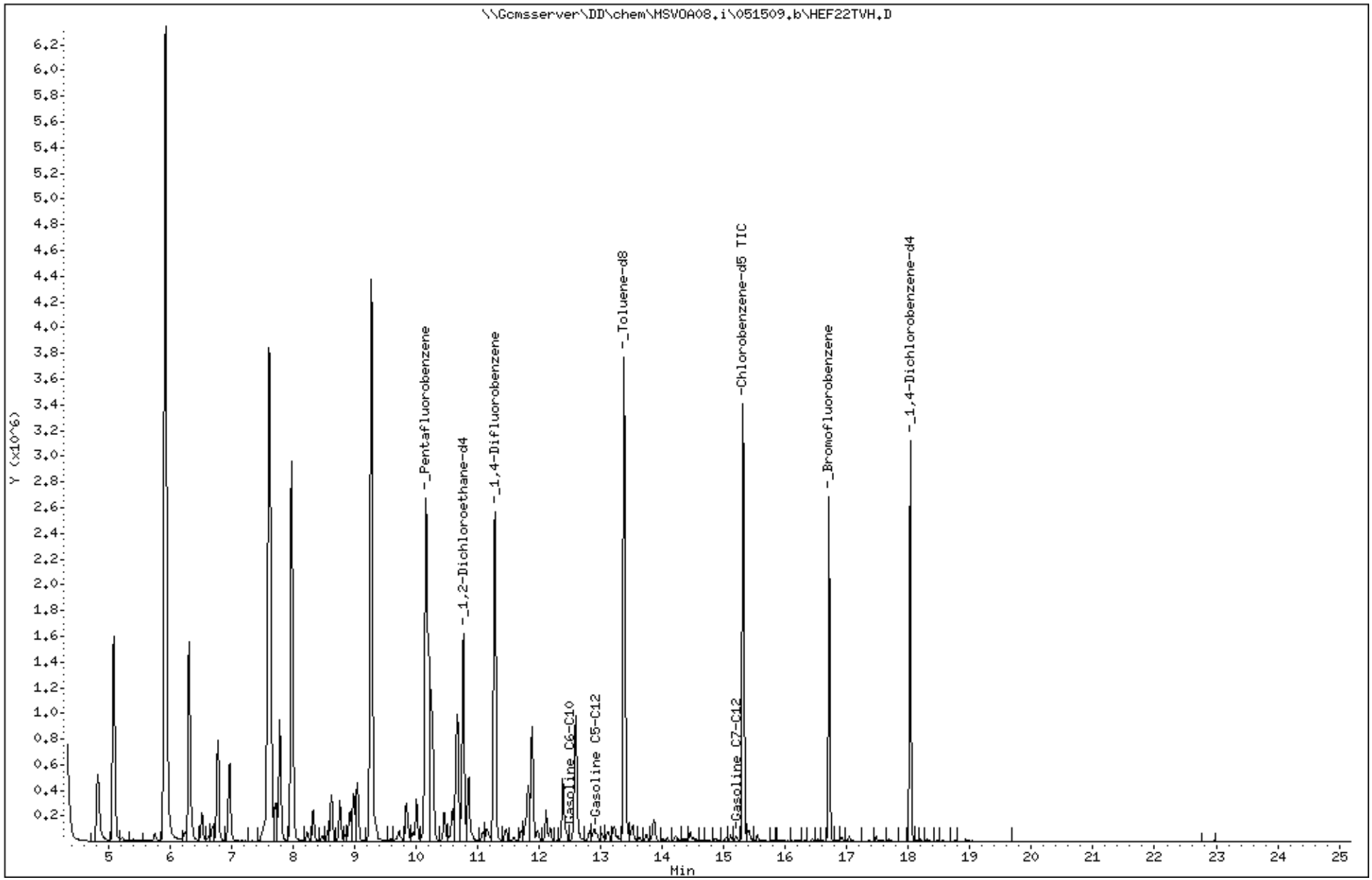
Instrument: MSVOA08.i

Sample Info: S,211989-005

Operator: voc

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\051609.b\HEG22TVH.D

Date : 17-MAY-2009 03:17

Client ID: DYNA P&T

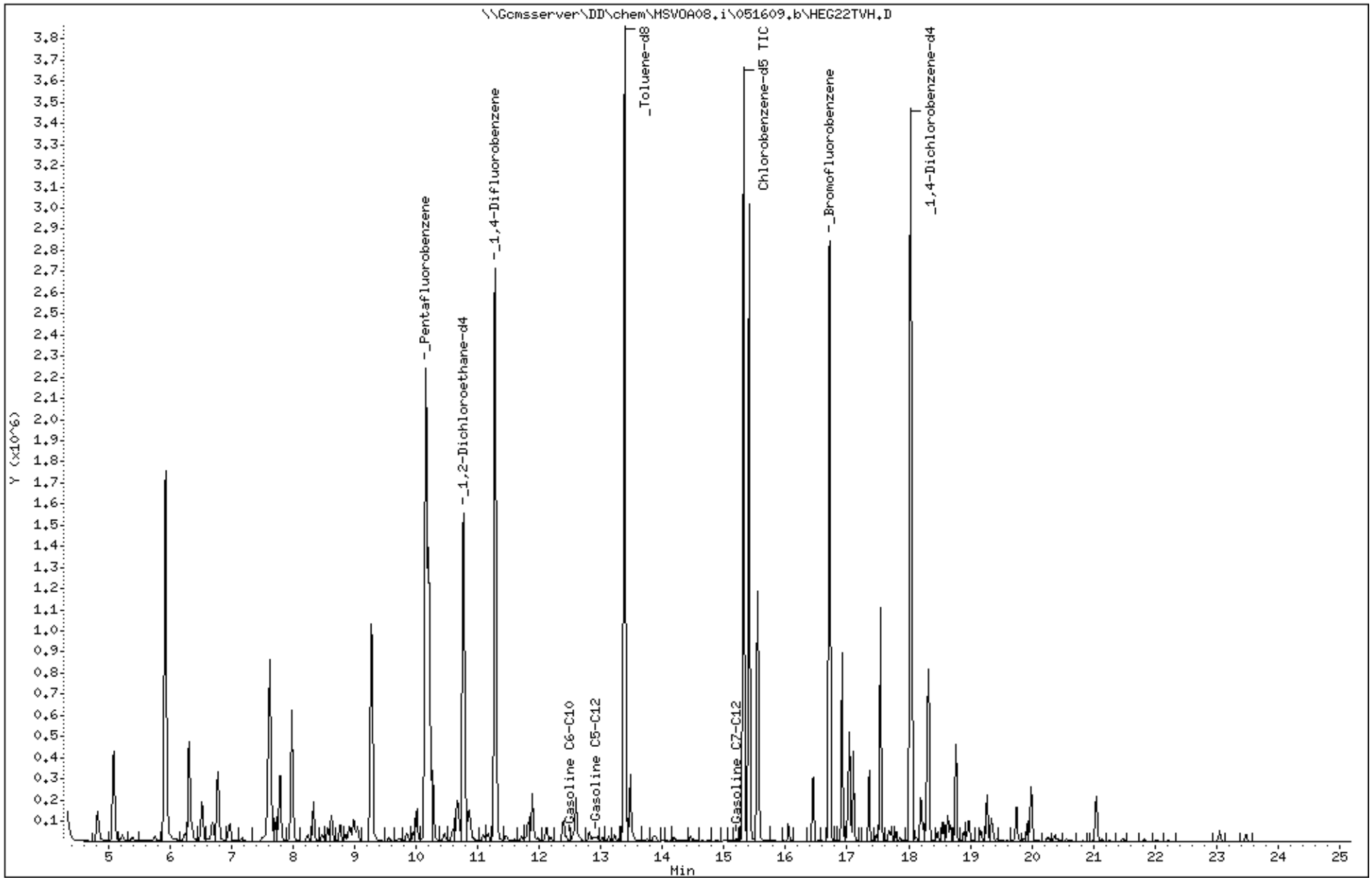
Instrument: MSVOA08.i

Sample Info: S,211989-006

Operator: voc

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\051609.b\HEG16TVH.D

Date : 16-MAY-2009 23:39

Client ID: DYNA P&T

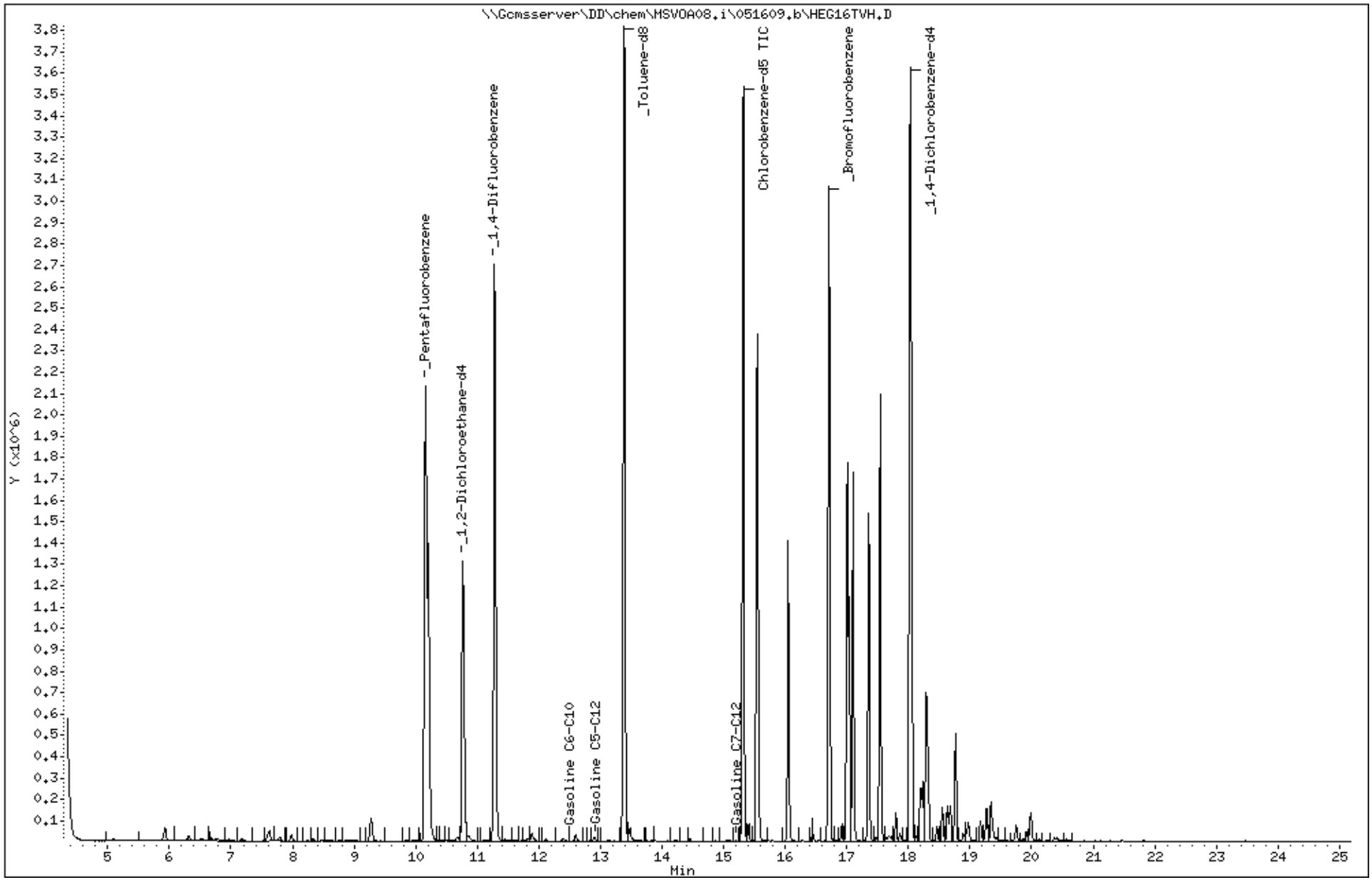
Instrument: MSVOA08.i

Sample Info: S,211989-008

Operator: voc

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\051609.b\HEG21TVH.D

Date : 17-MAY-2009 02:41

Client ID: DYNA P&T

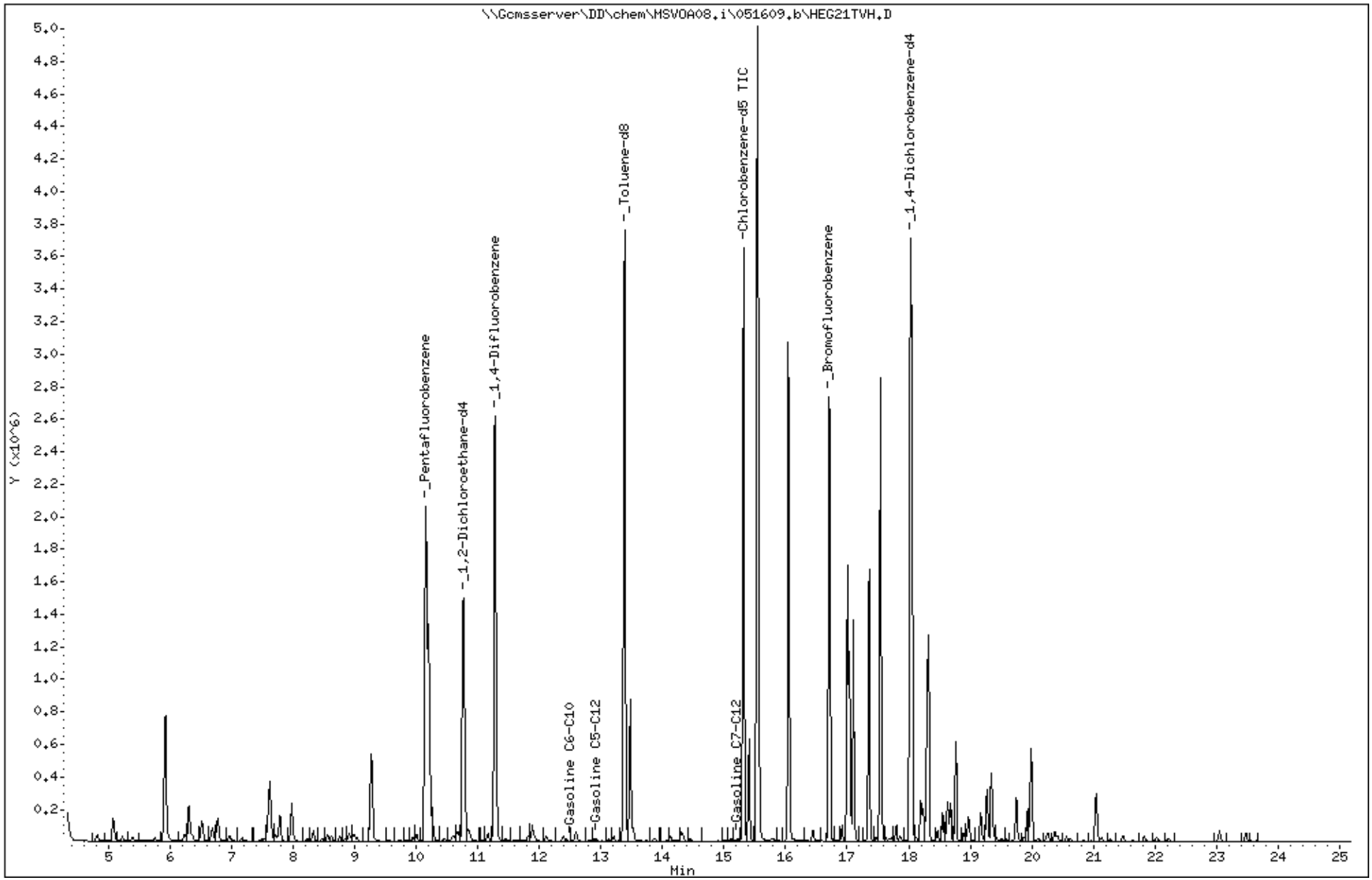
Instrument: MSVOA08.i

Sample Info: S,211989-009

Operator: voc

Column phase:

Column diameter: 2.00



Data File: \\Gcmsserver\DD\chem\MSVOA08.i\051509.b\HEF07TVH.D

Date : 15-MAY-2009 14:02

Client ID: DYNA P&T

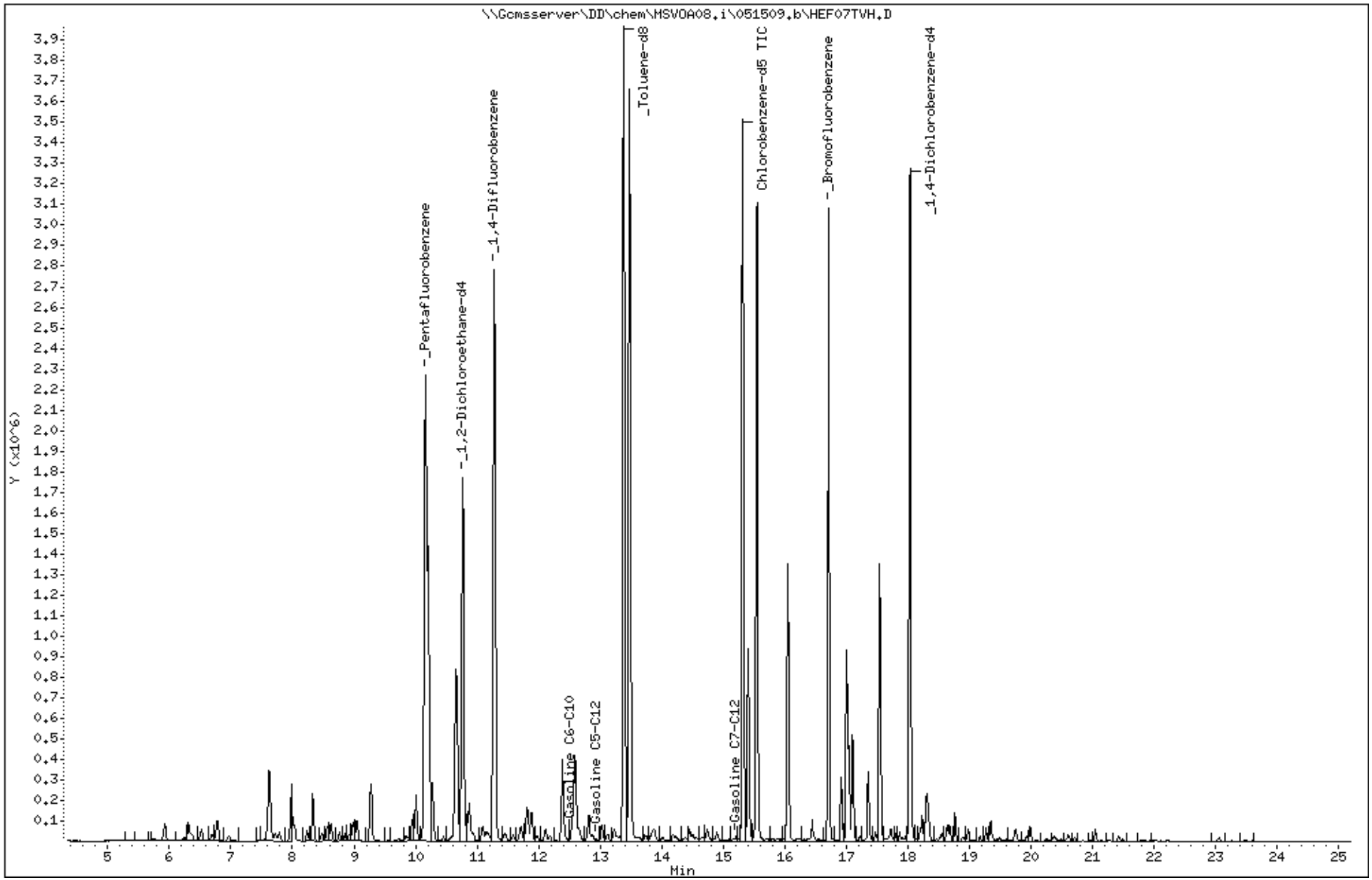
Instrument: MSVOA08.i

Sample Info: CCV/BS,QC496166,151053,S10867,0.01/100

Operator: voc

Column phase:

Column diameter: 2.00



SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

17 June 2009

Paul McCarter
Tait Environmental
701 N. Parkcenter Drive
Santa Ana, CA 92705

RE: Mission Valley Rock

Enclosed are the results of analyses for samples received by the laboratory on 06/11/09 09:31. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John Shepler
Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-9S	T900515-01	Water	06/08/09 13:05	06/11/09 09:31
MW-9LF	T900515-02	Water	06/08/09 15:15	06/11/09 09:31
MW-7S	T900515-03	Water	06/08/09 15:55	06/11/09 09:31
MW-7D	T900515-04	Water	06/08/09 16:20	06/11/09 09:31
MW-8	T900515-05	Water	06/08/09 16:50	06/11/09 09:31
MW-9D	T900515-06	Water	06/08/09 17:17	06/11/09 09:31
MW-1	T900515-07	Water	06/09/09 07:15	06/11/09 09:31
MW-4S	T900515-08	Water	06/09/09 07:55	06/11/09 09:31
MW-4D	T900515-09	Water	06/09/09 08:35	06/11/09 09:31
MW-5D	T900515-10	Water	06/09/09 09:20	06/11/09 09:31
MW-5S	T900515-11	Water	06/09/09 09:55	06/11/09 09:31
MW-3	T900515-12	Water	06/09/09 10:40	06/11/09 09:31
MW-11F	T900515-13	Water	06/09/09 11:20	06/11/09 09:31
MW-11S	T900515-14	Water	06/09/09 11:55	06/11/09 09:31
MW-12S	T900515-15	Water	06/09/09 12:30	06/11/09 09:31
MW-12D	T900515-16	Water	06/09/09 13:15	06/11/09 09:31
MW-12LF	T900515-17	Water	06/09/09 13:55	06/11/09 09:31
MW-10S	T900515-18	Water	06/09/09 14:45	06/11/09 09:31
MW-10D	T900515-19	Water	06/10/09 07:05	06/11/09 09:31
MW-10LF	T900515-20	Water	06/10/09 07:35	06/11/09 09:31
MW-2S	T900515-21	Water	06/10/09 08:15	06/11/09 09:31
MW-2M	T900515-22	Water	06/10/09 08:50	06/11/09 09:31
MW-2D	T900515-23	Water	06/10/09 09:20	06/11/09 09:31
MW-6S	T900515-24	Water	06/10/09 09:55	06/11/09 09:31
MW-6D	T900515-25	Water	06/10/09 10:20	06/11/09 09:31
MW-11D	T900515-26	Water	06/10/09 11:15	06/11/09 09:31

SunStar Laboratories, Inc.

John Shepler, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1T	T900515-27	Water	06/10/09 00:00	06/11/09 09:31

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-9S

T900515-01 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**400**	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*107 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.37**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-08
Surrogate: p-Terphenyl		*75.7 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	**16**	1.0	"	"	"	"	"	"	
o-Xylene	**16**	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*105 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*114 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-9LF

T900515-02 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*98.5 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*78.4 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-7S

T900515-03 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**500**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*96.9 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*78.0 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*107 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*126 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

John Shepler, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-7D

T900515-04 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**12000**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*101 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**2.0**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-08
Surrogate: p-Terphenyl		*91.4 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	**85**	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	**110**	0.50	"	"	"	"	"	"	
Ethylbenzene	**1000**	12	"	25	"	"	06/12/09	"	
m,p-Xylene	**390**	25	"	"	"	"	"	"	
o-Xylene	**23**	0.50	"	1	"	"	06/12/09	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*106 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.4 %*	*83.5-119*		"	"	"	"	*S-GC*
Surrogate: Dibromofluoromethane		*121 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-8

T900515-05 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*105 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*76.5 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*113 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*118 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-9D

T900515-06 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**870**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*106 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.74**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-08
Surrogate: p-Terphenyl		*78.0 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	**3.2**	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	**4.0**	0.50	"	"	"	"	"	"	
Ethylbenzene	**2.9**	0.50	"	"	"	"	"	"	
m,p-Xylene	**57**	1.0	"	"	"	"	"	"	
o-Xylene	**79**	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*117 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-1

T900515-07 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**250**	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*106 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.47**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-08
Surrogate: p-Terphenyl		*90.4 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**2.0**	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*124 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-4S

T900515-08 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*104 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*80.0 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98.0 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-4D

T900515-09 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*107 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*81.5 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*116 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-5D

T900515-10 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**110**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*102 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.30**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*79.7 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**2.6**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*114 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*115 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-5S

T900515-11 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*103 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.69**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-09
Surrogate: p-Terphenyl		*75.1 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-3

T900515-12 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**79**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*98.9 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.66**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-09
Surrogate: p-Terphenyl		*90.7 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**87**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*112 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*114 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-11F

T900515-13 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*102 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*96.8 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**160**	5.0	"	5	"	"	06/12/09	"	
Surrogate: Toluene-d8		*103 %*	*84.7-109*		"	"	*06/11/09*	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*124 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-11S

T900515-14 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*100 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.27**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-35
Surrogate: p-Terphenyl		*92.0 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**3.5**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*122 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-12S

T900515-15 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/11/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*108 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*94.5 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/11/09	EPA 8260B	
Toluene	**0.95**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	**1.4**	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*130 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-12D

T900515-16 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**51**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*93.6 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*77.8 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*120 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-12LF

T900515-17 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*103 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*93.6 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*106 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*128 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-10S

T900515-18 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*99.6 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.22**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-35
Surrogate: p-Terphenyl		*97.4 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*125 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-10D

T900515-19 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**560**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*102 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.28**	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	D-35
Surrogate: p-Terphenyl		*93.0 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*119 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-10LF

T900515-20 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**140**	50	ug/l	1	9061108	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*107 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061110	06/11/09	06/12/09	EPA 8015C	
Surrogate: p-Terphenyl		*93.6 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061109	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*99.0 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*122 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-2S

T900515-21 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**140**	50	ug/l	1	9061112	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*94.3 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**9.9**	0.050	mg/l	1	9061111	06/11/09	06/13/09	EPA 8015C	D-02
Surrogate: p-Terphenyl		*95.6 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061114	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**30**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*109 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*116 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-2M

T900515-22 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**210**	50	ug/l	1	9061112	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*95.0 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**2.8**	0.050	mg/l	1	9061111	06/11/09	06/13/09	EPA 8015C	D-02
Surrogate: p-Terphenyl		*98.5 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061114	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**11**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*109 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*112 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-2D

T900515-23 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**99**	50	ug/l	1	9061112	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*101 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**1.8**	0.050	mg/l	1	9061111	06/11/09	06/13/09	EPA 8015C	D-02
Surrogate: p-Terphenyl		*79.8 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061114	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**19**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*118 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-6S

T900515-24 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**260**	50	ug/l	1	9061112	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*94.7 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**1.8**	0.050	mg/l	1	9061111	06/11/09	06/13/09	EPA 8015C	D-02
Surrogate: p-Terphenyl		*98.1 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061114	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**61**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*105 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*114 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*114 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-6D

T900515-25 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	**3700**	50	ug/l	1	9061112	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*104 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**0.67**	0.050	mg/l	1	9061111	06/11/09	06/13/09	EPA 8015C	D-02
Surrogate: p-Terphenyl		*97.3 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061114	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**43**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-11D

T900515-26 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061112	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*104 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	**50**	0.050	mg/l	1	9061111	06/11/09	06/13/09	EPA 8015C	D-02
Surrogate: p-Terphenyl		*101 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	**2.8**	0.50	ug/l	1	9061114	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**4.2**	0.50	"	"	"	"	"	"	
m,p-Xylene	**5.0**	1.0	"	"	"	"	"	"	
o-Xylene	**0.81**	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**10**	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*238 %*	*83.5-119*		"	"	"	"	*S-GC*
Surrogate: Dibromofluoromethane		*112 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

MW-1T

T900515-27 (Water)

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbons by EPA 8015C									
C6-C12 (GRO)	ND	50	ug/l	1	9061112	06/11/09	06/12/09	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		*104 %*	*72.6-146*		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015C									
Diesel Range Hydrocarbons	ND	0.050	mg/l	1	9061111	06/11/09	06/13/09	EPA 8015C	
Surrogate: p-Terphenyl		*84.2 %*	*65-135*		"	"	"	"	
Volatile Organic Compounds by EPA Method 8260B									
Benzene	ND	0.50	ug/l	1	9061114	06/11/09	06/12/09	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	10	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*84.7-109*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*83.5-119*		"	"	"	"	
Surrogate: Dibromofluoromethane		*99.6 %*	*81.1-136*		"	"	"	"	

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

Purgeable Petroleum Hydrocarbons by EPA 8015C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061108 - EPA 5030 GC										
Blank (9061108-BLK1)				Prepared & Analyzed: 06/11/09						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*181*		*"*	*200*		*90.4*	*72.6-146*			
LCS (9061108-BS1)				Prepared & Analyzed: 06/11/09						
C6-C12 (GRO)	5000	50	ug/l	5500		91.0	75-125			
Surrogate: 4-Bromofluorobenzene	*181*		*"*	*200*		*90.5*	*72.6-146*			
LCS Dup (9061108-BSD1)				Prepared & Analyzed: 06/11/09						
C6-C12 (GRO)	5080	50	ug/l	5500		92.4	75-125	1.50	20	
Surrogate: 4-Bromofluorobenzene	*195*		*"*	*200*		*97.3*	*72.6-146*			
Batch 9061112 - EPA 5030 GC										
Blank (9061112-BLK1)				Prepared: 06/11/09 Analyzed: 06/12/09						
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	*210*		*"*	*200*		*105*	*72.6-146*			
LCS (9061112-BS1)				Prepared: 06/11/09 Analyzed: 06/12/09						
C6-C12 (GRO)	5020	50	ug/l	5500		91.2	75-125			
Surrogate: 4-Bromofluorobenzene	*190*		*"*	*200*		*95.0*	*72.6-146*			
LCS Dup (9061112-BSD1)				Prepared: 06/11/09 Analyzed: 06/12/09						
C6-C12 (GRO)	5220	50	ug/l	5500		95.0	75-125	4.10	20	
Surrogate: 4-Bromofluorobenzene	*201*		*"*	*200*		*101*	*72.6-146*			

SunStar Laboratories, Inc.

John Shepler, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

Extractable Petroleum Hydrocarbons by 8015C - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061110 - EPA 3510C GC										
Blank (9061110-BLK1)				Prepared: 06/11/09 Analyzed: 06/12/09						
Diesel Range Hydrocarbons	ND	0.050	mg/l							
Surrogate: p-Terphenyl	*3.15*		*"*	*4.00*		*78.8*	*65-135*			
LCS (9061110-BS1)				Prepared: 06/11/09 Analyzed: 06/12/09						
Diesel Range Hydrocarbons	15.4	0.050	mg/l	20.0		76.9	75-125			
Surrogate: p-Terphenyl	*3.37*		*"*	*4.00*		*84.3*	*65-135*			
LCS Dup (9061110-BSD1)				Prepared: 06/11/09 Analyzed: 06/12/09						
Diesel Range Hydrocarbons	16.3	0.050	mg/l	20.0		81.5	75-125	5.77	20	
Surrogate: p-Terphenyl	*4.04*		*"*	*4.00*		*101*	*65-135*			
Batch 9061111 - EPA 3510C GC										
Blank (9061111-BLK1)				Prepared: 06/11/09 Analyzed: 06/13/09						
Diesel Range Hydrocarbons	ND	0.050	mg/l							
Surrogate: p-Terphenyl	*3.91*		*"*	*4.00*		*97.6*	*65-135*			
LCS (9061111-BS1)				Prepared: 06/11/09 Analyzed: 06/13/09						
Diesel Range Hydrocarbons	16.0	0.050	mg/l	20.0		80.2	75-125			
Surrogate: p-Terphenyl	*3.94*		*"*	*4.00*		*98.4*	*65-135*			
LCS Dup (9061111-BSD1)				Prepared: 06/11/09 Analyzed: 06/13/09						
Diesel Range Hydrocarbons	17.1	0.050	mg/l	20.0		85.4	75-125	6.28	20	
Surrogate: p-Terphenyl	*3.76*		*"*	*4.00*		*93.9*	*65-135*			

SunStar Laboratories, Inc.

John Shepler, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061109 - EPA 5030 GCMS										
Blank (9061109-BLK1)				Prepared & Analyzed: 06/11/09						
Benzene	ND	0.50	ug/l							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	10	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Surrogate: Toluene-d8	*8.01*		*"*	*8.00*		*100*	*84.7-109*			
Surrogate: 4-Bromofluorobenzene	*8.27*		*"*	*8.00*		*103*	*83.5-119*			
Surrogate: Dibromofluoromethane	*8.99*		*"*	*8.00*		*112*	*81.1-136*			
LCS (9061109-BS1)				Prepared & Analyzed: 06/11/09						
Chlorobenzene	21.8	1.0	ug/l	20.0		109	75-125			
1,1-Dichloroethene	23.8	1.0	"	20.0		119	75-125			
Trichloroethene	21.5	1.0	"	20.0		108	75-125			
Benzene	22.4	0.50	"	20.0		112	75-125			
Toluene	21.9	0.50	"	20.0		110	75-125			
Surrogate: Toluene-d8	*7.95*		*"*	*8.00*		*99.4*	*84.7-109*			
Surrogate: 4-Bromofluorobenzene	*8.15*		*"*	*8.00*		*102*	*83.5-119*			
Surrogate: Dibromofluoromethane	*8.58*		*"*	*8.00*		*107*	*81.1-136*			
LCS Dup (9061109-BSD1)				Prepared & Analyzed: 06/11/09						
Chlorobenzene	21.0	1.0	ug/l	20.0		105	75-125	3.27	20	
1,1-Dichloroethene	24.3	1.0	"	20.0		122	75-125	2.04	20	
Trichloroethene	21.0	1.0	"	20.0		105	75-125	2.35	20	
Benzene	21.8	0.50	"	20.0		109	75-125	2.99	20	
Toluene	21.6	0.50	"	20.0		108	75-125	1.29	20	
Surrogate: Toluene-d8	*8.09*		*"*	*8.00*		*101*	*84.7-109*			
Surrogate: 4-Bromofluorobenzene	*7.81*		*"*	*8.00*		*97.6*	*83.5-119*			
Surrogate: Dibromofluoromethane	*9.15*		*"*	*8.00*		*114*	*81.1-136*			

SunStar Laboratories, Inc.

John Shepler, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SunStar Laboratories, Inc.
Providing Quality Analytical Services Nationwide

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061114 - EPA 5030 GCMS										
Blank (9061114-BLK1)				Prepared: 06/11/09 Analyzed: 06/12/09						
Benzene	ND	0.50	ug/l							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	10	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Surrogate: Toluene-d8	*7.97*		*"*	*8.00*		*99.6*	*84.7-109*			
Surrogate: 4-Bromofluorobenzene	*7.84*		*"*	*8.00*		*98.0*	*83.5-119*			
Surrogate: Dibromofluoromethane	*8.28*		*"*	*8.00*		*104*	*81.1-136*			
LCS (9061114-BS1)				Prepared: 06/11/09 Analyzed: 06/12/09						
Chlorobenzene	22.0	1.0	ug/l	20.0		110	75-125			
1,1-Dichloroethene	22.8	1.0	"	20.0		114	75-125			
Trichloroethene	20.6	1.0	"	20.0		103	75-125			
Benzene	21.7	0.50	"	20.0		109	75-125			
Toluene	21.5	0.50	"	20.0		107	75-125			
Surrogate: Toluene-d8	*7.94*		*"*	*8.00*		*99.2*	*84.7-109*			
Surrogate: 4-Bromofluorobenzene	*8.41*		*"*	*8.00*		*105*	*83.5-119*			
Surrogate: Dibromofluoromethane	*8.43*		*"*	*8.00*		*105*	*81.1-136*			
LCS Dup (9061114-BSD1)				Prepared: 06/11/09 Analyzed: 06/12/09						
Chlorobenzene	22.6	1.0	ug/l	20.0		113	75-125	2.60	20	
1,1-Dichloroethene	22.9	1.0	"	20.0		115	75-125	0.437	20	
Trichloroethene	21.5	1.0	"	20.0		107	75-125	3.94	20	
Benzene	22.4	0.50	"	20.0		112	75-125	2.81	20	
Toluene	21.8	0.50	"	20.0		109	75-125	1.43	20	
Surrogate: Toluene-d8	*8.03*		*"*	*8.00*		*100*	*84.7-109*			
Surrogate: 4-Bromofluorobenzene	*8.28*		*"*	*8.00*		*104*	*83.5-119*			
Surrogate: Dibromofluoromethane	*8.26*		*"*	*8.00*		*103*	*81.1-136*			

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

John Shepler, Laboratory Director

SunStar Laboratories, Inc.
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Tait Environmental	Project: Mission Valley Rock	
701 N. Parkcenter Drive	Project Number: EM5009F	**Reported:**
Santa Ana CA, 92705	Project Manager: Paul McCarter	06/17/09 08:56

Notes and Definitions

S-GC	Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
D-35	Sample does not display a fuel pattern. Sample contains several discreet peaks.
D-09	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
D-08	Results in the diesel organics range are primarily due to overlap from a gasoline range product.
D-02	Hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SunStar Laboratories, Inc.

John Shepler, Laboratory Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-21299-1

Job Description: Hanson Sunol

For:
LFR, Inc.
1900 Powell St 12th Floor
Emeryville, CA 94608-1827

Attention: Ms. Katrin Schliewen

Approved for release.
Afsaneh Salimpour
Project Manager I
7/24/2009 4:42 PM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com
07/24/2009

CA ELAP Certification # 2705
NELAC Certification # 01117CA
The Chain(s) of Custody are included and are an integral part of this report.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
Method(s) 8015B: Capric acid surrogate recovery for the following sample(s) was outside control limits: MW-7D (720-21299-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: LFR, Inc. Job Number: 720-21299-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-21299-1	**MW-7D**				
Benzene		60	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		12000	50	ug/L	8260B/CA_LUFTMS
Toluene		78	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		320	10	ug/L	8260B/CA_LUFTMS
Ethylbenzene		830	5.0	ug/L	8260B/CA_LUFTMS
Chemical Oxygen Demand		20	20	mg/L	410.4
Ferrous Iron		2.6	0.050	mg/L	SM 3500 FE D
Orthophosphate as P		0.27	0.020	mg/L	SM 4500 P E
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		1200	50	ug/L	8015B
Dissolved					
Iron		0.21	0.010	mg/L	6010B
720-21299-2	**MW-7S**				
Gasoline Range Organics (GRO)-C5-C12		240	50	ug/L	8260B/CA_LUFTMS
720-21299-3	**MW-9D**				
Benzene		1.0	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		180	50	ug/L	8260B/CA_LUFTMS
Toluene		1.4	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		32	1.0	ug/L	8260B/CA_LUFTMS
Ethylbenzene		2.8	0.50	ug/L	8260B/CA_LUFTMS
Chemical Oxygen Demand		24	20	mg/L	410.4
Ferrous Iron		1.5	0.050	mg/L	SM 3500 FE D
Orthophosphate as P		0.14	0.020	mg/L	SM 4500 P E
Silica Gel Cleanup					
Diesel Range Organics [C10-C28]		170	50	ug/L	8015B
Dissolved					
Iron		0.72	0.010	mg/L	6010B
720-21299-4	**MW-9LF**				
Ferrous Iron		0.89	0.050	mg/L	SM 3500 FE D
Orthophosphate as P		0.25	0.020	mg/L	SM 4500 P E
Dissolved					
Iron		2.7	0.010	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: LFR, Inc. Job Number: 720-21299-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-21299-5	**MW-9S**				
Nitrate as NO3		3.2	1.0	mg/L	300.0
Ferrous Iron		0.15	0.050	mg/L	SM 3500 FE D
Orthophosphate as P		0.12	0.020	mg/L	SM 4500 P E

METHOD SUMMARY

Client: LFR, Inc. Job Number: 720-21299-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C SGC
Metals (ICP)	TAL SF	SW846 6010B	
Sample Filtration	TAL SF		FILTRATION
Preparation, Soluble	TAL SF		Soluble Metals
Anions, Ion Chromatography	TAL SF	MCAWW 300.0	
Nitrogen, Total Kjeldahl	TAL CHI	MCAWW 351.3	
Nitrogen, Total Kjeldahl	TAL CHI		MCAWW 351.3_Prep
COD	TAL SF	MCAWW 410.4	
Iron, Ferrous and Ferric	TAL SF	SM SM 3500 FE D	
Orthophosphate	TAL SF	SM SM 4500 P E	
General Sub Contract Method	SC0040	Subcontract	

Lab References:

SC0040 = Cerco Analytical Inc

TAL CHI = TestAmerica Chicago

TAL SF = TestAmerica San Francisco

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: LFR, Inc. Job Number: 720-21299-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Chen, Amy	AC
SW846 8015B	Hayashi, Derek	DH
SW846 6010B	Vega, Anthony	AV
MCAWW 300.0	Kojiro, Mariko J	MJK
MCAWW 351.3	Brogan, Mary T	MTB
MCAWW 410.4	Nguyen, Nhi	NN
SM SM 3500 FE D	Nguyen, Nhi	NN
SM SM 4500 P E	Hufano, Pedro	PH

SAMPLE SUMMARY

Client: LFR, Inc. Job Number: 720-21299-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-21299-1	MW-7D	Water	07/15/2009 1540	07/15/2009 1830
720-21299-2	MW-7S	Water	07/14/2009 1610	07/15/2009 1830
720-21299-3	MW-9D	Water	07/15/2009 1240	07/15/2009 1830
720-21299-4	MW-9LF	Water	07/15/2009 1130	07/15/2009 1830
720-21299-5	MW-9S	Water	07/15/2009 1425	07/15/2009 1830
720-21299-6	OXY-1LF	Water	07/15/2009 1000	07/15/2009 1830
720-21299-7	OXY-1S	Water	07/14/2009 1755	07/15/2009 1830

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-7D

Lab Sample ID: 720-21299-1 Date Sampled: 07/15/2009 1540
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54230	Instrument ID:	HP8	
Preparation:	5030B		Lab File ID:	07170912.D	
Dilution:	1.0		Initial Weight/Volume:	10	mL
Date Analyzed:	07/17/2009 1531		Final Weight/Volume:	10	mL
Date Prepared:	07/17/2009 1531				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	60		0.50
Toluene	78		0.50
MTBE	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	106		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-7D

Lab Sample ID: 720-21299-1 Date Sampled: 07/15/2009 1540
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54242	Instrument ID:	HP8	
Preparation:	5030B		Lab File ID:	07170912.D	
Dilution:	1.0		Initial Weight/Volume:	10	mL
Date Analyzed:	07/17/2009 1531		Final Weight/Volume:	10	mL
Date Prepared:	07/17/2009 1531				

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	12000		50

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: **MW-7D**

Lab Sample ID: 720-21299-1 Date Sampled: 07/15/2009 1540
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54230		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170915.D
Dilution:	10			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1704			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1704				

Analyte	Result (ug/L)	Qualifier	RL
Xylenes, Total	320		10
Ethylbenzene	830		5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	100		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: **MW-7S**

Lab Sample ID: 720-21299-2 Date Sampled: 07/14/2009 1610
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54284		Instrument ID:	HP # 2
Preparation:	5030B			Lab File ID:	07210914.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/21/2009 1534			Final Weight/Volume:	10 mL
Date Prepared:	07/21/2009 1534				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	240		50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	103		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: **MW-9D**

Lab Sample ID: 720-21299-3 Date Sampled: 07/15/2009 1240
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54230		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170916.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1735			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1735				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	1.0		0.50
Toluene	1.4		0.50
Xylenes, Total	32		1.0
MTBE	ND		0.50
Ethylbenzene	2.8		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9D

Lab Sample ID: 720-21299-3 Date Sampled: 07/15/2009 1240
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54242	Instrument ID:	HP8	
Preparation:	5030B		Lab File ID:	07170916.D	
Dilution:	1.0		Initial Weight/Volume:	10	mL
Date Analyzed:	07/17/2009 1735		Final Weight/Volume:	10	mL
Date Prepared:	07/17/2009 1735				

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	180		50

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: **MW-9LF**

Lab Sample ID: 720-21299-4 Date Sampled: 07/15/2009 1130
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54230		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170917.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1806			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1806				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: **MW-9LF**

Lab Sample ID: 720-21299-4 Date Sampled: 07/15/2009 1130
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54242		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170917.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1806			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1806				

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9S

Lab Sample ID: 720-21299-5 Date Sampled: 07/15/2009 1425
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54230		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170918.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1837			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1837				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9S

Lab Sample ID: 720-21299-5 Date Sampled: 07/15/2009 1425
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54242	Instrument ID:	HP8	
Preparation:	5030B		Lab File ID:	07170918.D	
Dilution:	1.0		Initial Weight/Volume:	10	mL
Date Analyzed:	07/17/2009 1837		Final Weight/Volume:	10	mL
Date Prepared:	07/17/2009 1837				

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: OXY-1LF

Lab Sample ID: 720-21299-6 Date Sampled: 07/15/2009 1000
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54230		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170919.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1908			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1908				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	94		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: **OXY-1LF**

Lab Sample ID: 720-21299-6 Date Sampled: 07/15/2009 1000
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54242		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170919.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1908			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1908				

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: OXY-1S

Lab Sample ID: 720-21299-7 Date Sampled: 07/14/2009 1755
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54230		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170920.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1939			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1939				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	93		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		67 - 130

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: OXY-1S

Lab Sample ID: 720-21299-7 Date Sampled: 07/14/2009 1755
Client Matrix: Water Date Received: 07/15/2009 1830

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54242		Instrument ID:	HP8
Preparation:	5030B			Lab File ID:	07170920.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 1939			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 1939				

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-7D

Lab Sample ID: 720-21299-1 Date Sampled: 07/15/2009 1540
Client Matrix: Water Date Received: 07/15/2009 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54314		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-54020		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/22/2009 1234			Injection Volume:	
Date Prepared:	07/16/2009 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	1200		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	7	X	0 - 5
p-Terphenyl	67		31 - 150

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-7S

Lab Sample ID: 720-21299-2 Date Sampled: 07/14/2009 1610
Client Matrix: Water Date Received: 07/15/2009 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54314		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-54020		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/22/2009 1300			Injection Volume:	
Date Prepared:	07/16/2009 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	1		0 - 5
p-Terphenyl	68		31 - 150

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9D

Lab Sample ID: 720-21299-3 Date Sampled: 07/15/2009 1240
Client Matrix: Water Date Received: 07/15/2009 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54314		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-54020		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/21/2009 1654			Injection Volume:	
Date Prepared:	07/16/2009 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	170		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	4		0 - 5
p-Terphenyl	78		31 - 150

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9LF

Lab Sample ID: 720-21299-4 Date Sampled: 07/15/2009 1130
Client Matrix: Water Date Received: 07/15/2009 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54314		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-54020		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/21/2009 1721			Injection Volume:	
Date Prepared:	07/16/2009 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	75		31 - 150

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9S

Lab Sample ID: 720-21299-5 Date Sampled: 07/15/2009 1425
Client Matrix: Water Date Received: 07/15/2009 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54314	Instrument ID: DRO 5
Preparation:	3510C SGC	Prep Batch: 720-54020	Initial Weight/Volume: 500 mL
Dilution:	1.0		Final Weight/Volume: 2 mL
Date Analyzed:	07/21/2009 1748		Injection Volume:
Date Prepared:	07/16/2009 1615		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	77		31 - 150

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: OXY-1LF

Lab Sample ID: 720-21299-6 Date Sampled: 07/15/2009 1000
Client Matrix: Water Date Received: 07/15/2009 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54314		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-54020		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/21/2009 1815			Injection Volume:	
Date Prepared:	07/16/2009 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	79		31 - 150

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: OXY-1S

Lab Sample ID: 720-21299-7 Date Sampled: 07/14/2009 1755
Client Matrix: Water Date Received: 07/15/2009 1830

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54314		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-54020		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/21/2009 1842			Injection Volume:	
Date Prepared:	07/16/2009 1615			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	77		31 - 150

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-7D

Lab Sample ID: 720-21299-1 Date Sampled: 07/15/2009 1540
Client Matrix: Water Date Received: 07/15/2009 1830

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-54275		Instrument ID:	Thermo ICP
Preparation:	Soluble Metals	Prep Batch: 720-54216		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	07/21/2009 2213			Final Weight/Volume:	1.0 mL
Date Prepared:	07/21/2009 1318				

Analyte	Result (mg/L)	Qualifier	RL
Iron	0.21		0.010

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9D

Lab Sample ID: 720-21299-3 Date Sampled: 07/15/2009 1240
Client Matrix: Water Date Received: 07/15/2009 1830

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-54275		Instrument ID:	Thermo ICP
Preparation:	Soluble Metals	Prep Batch: 720-54216		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	07/21/2009 2219			Final Weight/Volume:	1.0 mL
Date Prepared:	07/21/2009 1318				

Analyte	Result (mg/L)	Qualifier	RL
Iron	0.72		0.010

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9LF

Lab Sample ID: 720-21299-4 Date Sampled: 07/15/2009 1130
Client Matrix: Water Date Received: 07/15/2009 1830

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-54275		Instrument ID:	Thermo ICP
Preparation:	Soluble Metals	Prep Batch: 720-54216		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	07/21/2009 2235			Final Weight/Volume:	1.0 mL
Date Prepared:	07/21/2009 1318				

Analyte	Result (mg/L)	Qualifier	RL
Iron	2.7		0.010

Client: LFR, Inc. Job Number: 720-21299-1

Client Sample ID: MW-9S

Lab Sample ID: 720-21299-5 Date Sampled: 07/15/2009 1425
Client Matrix: Water Date Received: 07/15/2009 1830

6010B Metals (ICP)-Dissolved

Method:	6010B	Analysis Batch: 720-54275		Instrument ID:	Thermo ICP
Preparation:	Soluble Metals	Prep Batch: 720-54216		Lab File ID:	N/A
Dilution:	1.07			Initial Weight/Volume:	
Date Analyzed:	07/21/2009 2240			Final Weight/Volume:	1.0 mL
Date Prepared:	07/21/2009 1318				

Analyte	Result (mg/L)	Qualifier	RL
Iron	ND		0.010

General Chemistry

Client Sample ID: MW-7D

Lab Sample ID: 720-21299-1 Date Sampled: 07/15/2009 1540
Client Matrix: Water Date Received: 07/15/2009 1830

Analyte	Result	Qual	Units	RL	Dil	Method
Nitrate as NO3	ND		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1344					
Orthophosphate as P	0.27		mg/L	0.020	1.0	SM 4500 P E
Analysis Batch: 720-54017	Date Analyzed: 07/16/2009 1500					
Chemical Oxygen Demand	20		mg/L	20	1.0	410.4
Analysis Batch: 720-54327	Date Analyzed: 07/21/2009 1503					
Ferrous Iron	2.6		mg/L	0.050	1.0	SM 3500 FE D
Analysis Batch: 720-54324	Date Analyzed: 07/15/2009 2050					
Nitrogen, Kjeldahl	ND		mg/L	0.40	1.0	351.3
Analysis Batch: 500-68083	Date Analyzed (Start): 07/22/2009 1557 (End) 07/22/2009 1558					
Prep Batch: 500-68027	Date Prepared: 07/22/2009 1240					
Nitrite as NO2	ND		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1344					

General Chemistry

Client Sample ID: MW-9D

Lab Sample ID: 720-21299-3 Date Sampled: 07/15/2009 1240
Client Matrix: Water Date Received: 07/15/2009 1830

Analyte	Result	Qual	Units	RL	Dil	Method
Nitrate as NO3	ND		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1418					
Orthophosphate as P	0.14		mg/L	0.020	1.0	SM 4500 P E
Analysis Batch: 720-54017	Date Analyzed: 07/16/2009 1500					
Chemical Oxygen Demand	24		mg/L	20	1.0	410.4
Analysis Batch: 720-54327	Date Analyzed: 07/21/2009 1503					
Ferrous Iron	1.5		mg/L	0.050	1.0	SM 3500 FE D
Analysis Batch: 720-54324	Date Analyzed: 07/15/2009 2050					
Nitrogen, Kjeldahl	ND		mg/L	0.40	1.0	351.3
Analysis Batch: 500-68083	Date Analyzed (Start): 07/22/2009 1558 (End) 07/22/2009 1558					
Prep Batch: 500-68027	Date Prepared: 07/22/2009 1240					
Nitrite as NO2	ND		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1418					

General Chemistry

Client Sample ID: MW-9LF

Lab Sample ID: 720-21299-4 Date Sampled: 07/15/2009 1130
Client Matrix: Water Date Received: 07/15/2009 1830

Analyte	Result	Qual	Units	RL	Dil	Method
Nitrate as NO3	ND		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1453					
Orthophosphate as P	0.25		mg/L	0.020	1.0	SM 4500 P E
Analysis Batch: 720-54017	Date Analyzed: 07/16/2009 1500					
Chemical Oxygen Demand	ND		mg/L	20	1.0	410.4
Analysis Batch: 720-54327	Date Analyzed: 07/21/2009 1503					
Ferrous Iron	0.89		mg/L	0.050	1.0	SM 3500 FE D
Analysis Batch: 720-54324	Date Analyzed: 07/15/2009 2050					
Nitrogen, Kjeldahl	ND		mg/L	0.40	1.0	351.3
Analysis Batch: 500-68083	Date Analyzed (Start): 07/22/2009 1558 (End) 07/22/2009 1558					
Prep Batch: 500-68027	Date Prepared: 07/22/2009 1240					
Nitrite as NO2	ND		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1453					

General Chemistry

Client Sample ID: **MW-9S**

Lab Sample ID: 720-21299-5 Date Sampled: 07/15/2009 1425
Client Matrix: Water Date Received: 07/15/2009 1830

Analyte	Result	Qual	Units	RL	Dil	Method
Nitrate as NO3	3.2		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1527					
Orthophosphate as P	0.12		mg/L	0.020	1.0	SM 4500 P E
Analysis Batch: 720-54017	Date Analyzed: 07/16/2009 1500					
Chemical Oxygen Demand	ND		mg/L	20	1.0	410.4
Analysis Batch: 720-54327	Date Analyzed: 07/21/2009 1503					
Ferrous Iron	0.15		mg/L	0.050	1.0	SM 3500 FE D
Analysis Batch: 720-54324	Date Analyzed: 07/15/2009 2050					
Nitrogen, Kjeldahl	ND		mg/L	0.40	1.0	351.3
Analysis Batch: 500-68083	Date Analyzed (Start): 07/22/2009 1558 (End) 07/22/2009 1559					
Prep Batch: 500-68027	Date Prepared: 07/22/2009 1240					
Nitrite as NO2	ND		mg/L	1.0	1.0	300.0
Analysis Batch: 720-54080	Date Analyzed: 07/16/2009 1527					

DATA REPORTING QUALIFIERS

Client: LFR, Inc. Job Number: 720-21299-1

Lab Section	Qualifier	Description
GC Semi VOA		
	X	Surrogate exceeds the control limits

Client: LFR, Inc. Job Number: 720-21299-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-54230					
LCS 720-54230/3	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54230/4	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54230/5	Method Blank	T	Water	8260B/CA_LUFT	
720-21299-1	MW-7D	T	Water	8260B/CA_LUFT	
720-21299-A-2 MSMS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-21299-A-2 MSDMSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
720-21299-3	MW-9D	T	Water	8260B/CA_LUFT	
720-21299-4	MW-9LF	T	Water	8260B/CA_LUFT	
720-21299-5	MW-9S	T	Water	8260B/CA_LUFT	
720-21299-6	OXY-1LF	T	Water	8260B/CA_LUFT	
720-21299-7	OXY-1S	T	Water	8260B/CA_LUFT	
Analysis Batch:720-54242					
LCS 720-54242/2	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54242/3	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54242/10	Method Blank	T	Water	8260B/CA_LUFT	
720-21299-1	MW-7D	T	Water	8260B/CA_LUFT	
720-21299-3	MW-9D	T	Water	8260B/CA_LUFT	
720-21299-4	MW-9LF	T	Water	8260B/CA_LUFT	
720-21299-5	MW-9S	T	Water	8260B/CA_LUFT	
720-21299-6	OXY-1LF	T	Water	8260B/CA_LUFT	
720-21299-7	OXY-1S	T	Water	8260B/CA_LUFT	
Analysis Batch:720-54273					
LCS 720-54273/3	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54273/4	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54273/5	Method Blank	T	Water	8260B/CA_LUFT	
Analysis Batch:720-54284					
LCS 720-54284/2	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54284/3	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54284/4	Method Blank	T	Water	8260B/CA_LUFT	
720-21299-2	MW-7S	T	Water	8260B/CA_LUFT	

Report Basis
T = Total

Client: LFR, Inc. Job Number: 720-21299-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-54020					
LCS 720-54020/2-A	Lab Control Sample	A	Water	3510C SGC	
LCSD 720-54020/3-A	Lab Control Sample Duplicate	A	Water	3510C SGC	
MB 720-54020/1-A	Method Blank	A	Water	3510C SGC	
720-21299-1	MW-7D	A	Water	3510C SGC	
720-21299-2	MW-7S	A	Water	3510C SGC	
720-21299-3	MW-9D	A	Water	3510C SGC	
720-21299-4	MW-9LF	A	Water	3510C SGC	
720-21299-5	MW-9S	A	Water	3510C SGC	
720-21299-6	OXY-1LF	A	Water	3510C SGC	
720-21299-7	OXY-1S	A	Water	3510C SGC	
Analysis Batch:720-54314					
LCS 720-54020/2-A	Lab Control Sample	A	Water	8015B	720-54020
LCSD 720-54020/3-A	Lab Control Sample Duplicate	A	Water	8015B	720-54020
MB 720-54020/1-A	Method Blank	A	Water	8015B	720-54020
720-21299-1	MW-7D	A	Water	8015B	720-54020
720-21299-2	MW-7S	A	Water	8015B	720-54020
720-21299-3	MW-9D	A	Water	8015B	720-54020
720-21299-4	MW-9LF	A	Water	8015B	720-54020
720-21299-5	MW-9S	A	Water	8015B	720-54020
720-21299-6	OXY-1LF	A	Water	8015B	720-54020
720-21299-7	OXY-1S	A	Water	8015B	720-54020

Report Basis
A = Silica Gel Cleanup

Client: LFR, Inc. Job Number: 720-21299-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 720-54216					
LCS 720-54216/2-A	Lab Control Sample	S	Water	Soluble Metals	
LCSD 720-54216/3-A	Lab Control Sample Duplicate	S	Water	Soluble Metals	
MB 720-54029/1-B	Method Blank	D	Water	Soluble Metals	
720-21299-1	MW-7D	D	Water	Soluble Metals	
720-21299-1MS	Matrix Spike	D	Water	Soluble Metals	
720-21299-1MSD	Matrix Spike Duplicate	D	Water	Soluble Metals	
720-21299-3	MW-9D	D	Water	Soluble Metals	
720-21299-4	MW-9LF	D	Water	Soluble Metals	
720-21299-5	MW-9S	D	Water	Soluble Metals	
Analysis Batch:720-54275					
LCS 720-54216/2-A	Lab Control Sample	S	Water	6010B	720-54216
LCSD 720-54216/3-A	Lab Control Sample Duplicate	S	Water	6010B	720-54216
MB 720-54029/1-B	Method Blank	D	Water	6010B	720-54216
720-21299-1	MW-7D	D	Water	6010B	720-54216
720-21299-1MS	Matrix Spike	D	Water	6010B	720-54216
720-21299-1MSD	Matrix Spike Duplicate	D	Water	6010B	720-54216
720-21299-3	MW-9D	D	Water	6010B	720-54216
720-21299-4	MW-9LF	D	Water	6010B	720-54216
720-21299-5	MW-9S	D	Water	6010B	720-54216

Report Basis
D = Dissolved
S = Soluble

Client: LFR, Inc. Job Number: 720-21299-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:720-54017					
LCS 720-54017/4	Lab Control Sample	T	Water	SM 4500 P E	
LCSD 720-54017/5	Lab Control Sample Duplicate	T	Water	SM 4500 P E	
MB 720-54017/3	Method Blank	T	Water	SM 4500 P E	
720-21299-1	MW-7D	T	Water	SM 4500 P E	
720-21299-3	MW-9D	T	Water	SM 4500 P E	
720-21299-4	MW-9LF	T	Water	SM 4500 P E	
720-21299-5	MW-9S	T	Water	SM 4500 P E	
720-21299-5MS	Matrix Spike	T	Water	SM 4500 P E	
720-21299-5MSD	Matrix Spike Duplicate	T	Water	SM 4500 P E	
Analysis Batch:720-54080					
LCS 720-54080/2	Lab Control Sample	T	Water	300.0	
LCSD 720-54080/29	Lab Control Sample Duplicate	T	Water	300.0	
MB 720-54080/3	Method Blank	T	Water	300.0	
720-21299-1	MW-7D	T	Water	300.0	
720-21299-3	MW-9D	T	Water	300.0	
720-21299-4	MW-9LF	T	Water	300.0	
720-21299-5	MW-9S	T	Water	300.0	
Analysis Batch:720-54324					
LCS 720-54324/3	Lab Control Sample	T	Water	SM 3500 FE D	
LCSD 720-54324/4	Lab Control Sample Duplicate	T	Water	SM 3500 FE D	
MB 720-54324/2	Method Blank	T	Water	SM 3500 FE D	
720-21299-1	MW-7D	T	Water	SM 3500 FE D	
720-21299-3	MW-9D	T	Water	SM 3500 FE D	
720-21299-4	MW-9LF	T	Water	SM 3500 FE D	
720-21299-5	MW-9S	T	Water	SM 3500 FE D	
Analysis Batch:720-54327					
LCS 720-54327/3	Lab Control Sample	T	Water	410.4	
LCSD 720-54327/4	Lab Control Sample Duplicate	T	Water	410.4	
MB 720-54327/2	Method Blank	T	Water	410.4	
720-21299-1	MW-7D	T	Water	410.4	
720-21299-1MS	Matrix Spike	T	Water	410.4	
720-21299-1MSD	Matrix Spike Duplicate	T	Water	410.4	
720-21299-3	MW-9D	T	Water	410.4	
720-21299-4	MW-9LF	T	Water	410.4	
720-21299-5	MW-9S	T	Water	410.4	

Client: LFR, Inc. Job Number: 720-21299-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 500-68027					
LCS 500-68027/2-A	Lab Control Sample	T	Water	351.3_Prep	
MB 500-68027/1-A	Method Blank	T	Water	351.3_Prep	
720-21299-1	MW-7D	T	Water	351.3_Prep	
720-21299-3	MW-9D	T	Water	351.3_Prep	
720-21299-4	MW-9LF	T	Water	351.3_Prep	
720-21299-5	MW-9S	T	Water	351.3_Prep	
Analysis Batch:500-68083					
LCS 500-68027/2-A	Lab Control Sample	T	Water	351.3	500-68027
MB 500-68027/1-A	Method Blank	T	Water	351.3	500-68027
720-21299-1	MW-7D	T	Water	351.3	500-68027
720-21299-3	MW-9D	T	Water	351.3	500-68027
720-21299-4	MW-9LF	T	Water	351.3	500-68027
720-21299-5	MW-9S	T	Water	351.3	500-68027

Report Basis
T = Total

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54230

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54230/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 1500
Date Prepared: 07/17/2009 1500

Analysis Batch: 720-54230
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0
Lab File ID: 07170911.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	93	70 - 130
1,2-Dichloroethane-d4 (Surr)	99	67 - 130

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54230

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54230/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 1117
Date Prepared: 07/17/2009 1117

Analysis Batch: 720-54230
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0
Lab File ID: 07170904.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54230/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 1148
Date Prepared: 07/17/2009 1148

Analysis Batch: 720-54230
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0
Lab File ID: 07170905.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	102	102	72 - 120	0	20		
Toluene	103	102	59 - 120	0	20		
MTBE	98	96	64 - 130	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	98	98	70 - 130
1,2-Dichloroethane-d4 (Surr)	105	103	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-54230

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-21299-A-2 MS	Analysis Batch: 720-54230	Instrument ID: Chemstation 3.0
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: 07170913.D
Dilution:	1.0		Initial Weight/Volume: 10 mL
Date Analyzed:	07/17/2009 1602		Final Weight/Volume: 10 mL
Date Prepared:	07/17/2009 1602		

MSD Lab Sample ID:	720-21299-A-2 MSD	Analysis Batch: 720-54230	Instrument ID: Chemstation 3.0
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: 07170914.D
Dilution:	1.0		Initial Weight/Volume: 10 mL
Date Analyzed:	07/17/2009 1633		Final Weight/Volume: 10 mL
Date Prepared:	07/17/2009 1633		

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	109	108	58 - 134	1	20		
Toluene	107	106	72 - 130	1	20		
MTBE	104	101	22 - 185	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	100	101	70 - 130
1,2-Dichloroethane-d4 (Surr)	101	102	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc.

Job Number: 720-21299-1

Method Blank - Batch: 720-54242

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54242/10
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 1352
Date Prepared: 07/17/2009 1352

Analysis Batch: 720-54242
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0
Lab File ID: 07170909.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54242

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54242/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 1219
Date Prepared: 07/17/2009 1219

Analysis Batch: 720-54242
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0
Lab File ID: 07170906.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54242/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 1250
Date Prepared: 07/17/2009 1250

Analysis Batch: 720-54242
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0
Lab File ID: 07170907.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	88	92	36 - 130	4	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54273

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54273/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1222
Date Prepared: 07/21/2009 1222

Analysis Batch: 720-54273
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07210908.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	101	70 - 130
1,2-Dichloroethane-d4 (Surr)	116	67 - 130

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54273

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54273/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1014
Date Prepared: 07/21/2009 1014

Analysis Batch: 720-54273
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07210904.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54273/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1046
Date Prepared: 07/21/2009 1046

Analysis Batch: 720-54273
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07210905.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	100	99	72 - 120	0	20		
Toluene	107	107	59 - 120	0	20		
MTBE	119	117	64 - 130	2	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	102	103	70 - 130
1,2-Dichloroethane-d4 (Surr)	107	107	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc.

Job Number: 720-21299-1

Method Blank - Batch: 720-54284

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54284/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1254
Date Prepared: 07/21/2009 1254

Analysis Batch: 720-54284
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07210909.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54284

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54284/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1118
Date Prepared: 07/21/2009 1118

Analysis Batch: 720-54284
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07210906.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54284/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1150
Date Prepared: 07/21/2009 1150

Analysis Batch: 720-54284
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07210907.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	82	84	36 - 130	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54020

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

Lab Sample ID: MB 720-54020/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1047
Date Prepared: 07/16/2009 1615

Analysis Batch: 720-54314
Prep Batch: 720-54020
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	78	31 - 150

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54020

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-54020/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 0928
Date Prepared: 07/16/2009 1615

Analysis Batch: 720-54314
Prep Batch: 720-54020
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-54020/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 0955
Date Prepared: 07/16/2009 1615

Analysis Batch: 720-54314
Prep Batch: 720-54020
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	80	79	32 - 119	0	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	86	89	31 - 150

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54216

Method: 6010B
Preparation: Soluble Metals Dissolved

Lab Sample ID: MB 720-54029/1-B
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 07/21/2009 2148
Date Prepared: 07/21/2009 1318

Analysis Batch: 720-54275
Prep Batch: 720-54216
Units: mg/L

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Iron	ND		0.010

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54216

Method: 6010B
Preparation: Soluble Metals Soluble

LCS Lab Sample ID: LCS 720-54216/2-A
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 07/21/2009 2153
Date Prepared: 07/21/2009 1318

Analysis Batch: 720-54275
Prep Batch: 720-54216
Units: mg/L

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

LCSD Lab Sample ID: LCSD 720-54216/3-A
Client Matrix: Water
Dilution: 1.07
Date Analyzed: 07/21/2009 2158
Date Prepared: 07/21/2009 1318

Analysis Batch: 720-54275
Prep Batch: 720-54216
Units: mg/L

Instrument ID: Thermo 6500 ICP
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 1.0 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Iron	99	97	80 - 120	1	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc.

Job Number: 720-21299-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-54216

Method: 6010B
Preparation: Soluble Metals Dissolved

MS Lab Sample ID:	720-21299-1	Analysis Batch: 720-54275	Instrument ID: Thermo 6500 ICP
Client Matrix:	Water	Prep Batch: 720-54216	Lab File ID: N/A
Dilution:	1.07		Initial Weight/Volume:
Date Analyzed:	07/21/2009 2203		Final Weight/Volume: 1.0 mL
Date Prepared:	07/21/2009 1318		

MSD Lab Sample ID:	720-21299-1	Analysis Batch: 720-54275	Instrument ID: Thermo 6500 ICP
Client Matrix:	Water	Prep Batch: 720-54216	Lab File ID: N/A
Dilution:	1.07		Initial Weight/Volume:
Date Analyzed:	07/21/2009 2208		Final Weight/Volume: 1.0 mL
Date Prepared:	07/21/2009 1318		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Iron	93	94	75 - 125	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54080

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 720-54080/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2009 0926
Date Prepared: N/A

Analysis Batch: 720-54080
Prep Batch: N/A
Units: mg/L

Instrument ID: DionexIC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Nitrate as NO3	ND		1.0
Nitrite as NO2	ND		1.0

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54080

Method: 300.0
Preparation: N/A

LCS Lab Sample ID: LCS 720-54080/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2009 0944
Date Prepared: N/A

Analysis Batch: 720-54080
Prep Batch: N/A
Units: mg/L

Instrument ID: DionexIC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

LCSD Lab Sample ID: LCSD 720-54080/29
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2009 1001
Date Prepared: N/A

Analysis Batch: 720-54080
Prep Batch: N/A
Units: mg/L

Instrument ID: DionexIC
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Nitrate as NO3	101	102	90 - 110	1	20		
Nitrite as NO2	97	97	90 - 110	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc.

Job Number: 720-21299-1

Method Blank - Batch: 500-68027

Method: 351.3
Preparation: 351.3_Prep

Lab Sample ID: MB 500-68027/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2009 1556
Date Prepared: 07/22/2009 1240

Analysis Batch: 500-68083
Prep Batch: 500-68027
Units: mg/L

Instrument ID: Shimadzu UV-Mini 1240V
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	RL
Nitrogen, Kjeldahl	ND		0.40

Lab Control Sample - Batch: 500-68027

Method: 351.3
Preparation: 351.3_Prep

Lab Sample ID: LCS 500-68027/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/22/2009 1557
Date Prepared: 07/22/2009 1240

Analysis Batch: 500-68083
Prep Batch: 500-68027
Units: mg/L

Instrument ID: Shimadzu UV-Mini 1240V
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrogen, Kjeldahl	2.50	2.23	89	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54327

Method: 410.4
Preparation: N/A

Lab Sample ID: MB 720-54327/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1503
Date Prepared: N/A

Analysis Batch: 720-54327
Prep Batch: N/A
Units: mg/L

Instrument ID: UV-VIS
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Chemical Oxygen Demand	ND		20

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54327

Method: 410.4
Preparation: N/A

LCS Lab Sample ID: LCS 720-54327/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1503
Date Prepared: N/A

Analysis Batch: 720-54327
Prep Batch: N/A
Units: mg/L

Instrument ID: UV-VIS
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

LCSD Lab Sample ID: LCSD 720-54327/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/21/2009 1503
Date Prepared: N/A

Analysis Batch: 720-54327
Prep Batch: N/A
Units: mg/L

Instrument ID: UV-VIS
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chemical Oxygen Demand	109	106	80 - 120	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-54327

Method: 410.4
Preparation: N/A

MS Lab Sample ID:	720-21299-1	Analysis Batch:	720-54327	Instrument ID:	UV-VIS
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	07/21/2009 1503			Final Weight/Volume:	5 mL
Date Prepared:	N/A				

MSD Lab Sample ID:	720-21299-1	Analysis Batch:	720-54327	Instrument ID:	UV-VIS
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	5 mL
Date Analyzed:	07/21/2009 1503			Final Weight/Volume:	5 mL
Date Prepared:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chemical Oxygen Demand	104	105	80 - 120	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54324

Method: SM 3500 FE D
Preparation: N/A

Lab Sample ID: MB 720-54324/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 2050
Date Prepared: N/A

Analysis Batch: 720-54324
Prep Batch: N/A
Units: mg/L

Instrument ID: 7196 Analyzer
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Ferrous Iron	ND		0.050

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54324

Method: SM 3500 FE D
Preparation: N/A

LCS Lab Sample ID: LCS 720-54324/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 2050
Date Prepared: N/A

Analysis Batch: 720-54324
Prep Batch: N/A
Units: mg/L

Instrument ID: 7196 Analyzer
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

LCSD Lab Sample ID: LCSD 720-54324/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 2050
Date Prepared: N/A

Analysis Batch: 720-54324
Prep Batch: N/A
Units: mg/L

Instrument ID: 7196 Analyzer
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Ferrous Iron	100	102	80 - 120	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Method Blank - Batch: 720-54017

Method: SM 4500 P E
Preparation: N/A

Lab Sample ID: MB 720-54017/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2009 1500
Date Prepared: N/A

Analysis Batch: 720-54017
Prep Batch: N/A
Units: mg/L

Instrument ID: UV-VIS
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Orthophosphate as P	ND		0.020

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54017

Method: SM 4500 P E
Preparation: N/A

LCS Lab Sample ID: LCS 720-54017/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2009 1500
Date Prepared: N/A

Analysis Batch: 720-54017
Prep Batch: N/A
Units: mg/L

Instrument ID: UV-VIS
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

LCSD Lab Sample ID: LCSD 720-54017/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/16/2009 1500
Date Prepared: N/A

Analysis Batch: 720-54017
Prep Batch: N/A
Units: mg/L

Instrument ID: UV-VIS
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Orthophosphate as P	98	100	90 - 110	1	15		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21299-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-54017

Method: SM 4500 P E
Preparation: N/A

MS Lab Sample ID:	720-21299-5	Analysis Batch: 720-54017	Instrument ID: UV-VIS
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 50 mL
Date Analyzed:	07/16/2009 1500		Final Weight/Volume: 50 mL
Date Prepared:	N/A		

MSD Lab Sample ID:	720-21299-5	Analysis Batch: 720-54017	Instrument ID: UV-VIS
Client Matrix:	Water	Prep Batch: N/A	Lab File ID: N/A
Dilution:	1.0		Initial Weight/Volume: 50 mL
Date Analyzed:	07/16/2009 1500		Final Weight/Volume: 50 mL
Date Prepared:	N/A		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Orthophosphate as P	98	98	90 - 110	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax: 925 462 2775
www.cercoanalytical.com

Ms. Afsaneh Salimpour
TestAmerica San Francisco
1220 Quarry Lane, #C
Pleasanton, CA 94566-4756

Sample Source:
Project No.: 720-21299
Project Name: Hanson Sunol
Date Sampled: 07/15/09
Date Received: 07/16/09
Matrix: Water

24 July 2009
Job No.0907151
Sample No.001-004
Cust. No.10176

Analyte	Results	Reporting Limit	Method	Date/Time Analyzed
Lab No.001				
Sample I.D.: MW-7D (720-21299-1)				
Biochemical Oxygen Demand	<20	20 mg/L	SM 5210B	07/17-22/09 (0900)
Lab No.002				
Sample I.D.: MW-9D (720-21299-3)				
Biochemical Oxygen Demand	<6	6 mg/L	SM 5210B	07/17-22/09 (0900)
Lab No.003				
Sample I.D.: MW-9LF (720-21299-4)				
Biochemical Oxygen Demand	<6	6 mg/L	SM 5210B	07/17-22/09 (0900)
Lab No.004				
Sample I.D.: MW-9S (720-21299-5)				
Biochemical Oxygen Demand	<6	6 mg/L	SM 5210B	07/17-22/09 (0900)

Cheryl McMillen
Laboratory Director

QUALITY CONTROL DATA - Biochemical Oxygen Demand (BOD)
Standard Method No.5210B
Date Analyzed: July 17-22, 2009

Laboratory Control Sample Summary

	Blank Result	True Value	Recovery (mg/L) LCS	LCSD	Relative Percent Difference
BOD (mg/L):	N.D.	198	191.25	189.0	1.2
Reporting Limit (mg/L):	6				
QC Limits:			166-230		20

0907151

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUB TO: CERCO

TESTAMERICA San Francisco Chain of Custody
1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 720-21299

Date 7/16/09 Page 1 of 1

Report To

Attn: AFSANEH SALIMPOUR
Company: TA-SF
Address:
Phone: Email:
Bill To: Sampled By:
Attn: Phone:

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH EPA - ☐ 8015/8021 ☐ 8260B ☐ Gas w/ ☐ BTEX ☐ MTBE	Purgeable Aromatics BTEX EPA - ☐ 8021 ☐ 8260B	TEPH EPA 8015M* ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other ___	Fuel Tests EPA 8260B: ☐ Gas ☐ BTEX ☐ Five Oxyenates ☐ DCA, EDB ☐ Ethanol	Purgeable Halocarbons (HVOCs) EPA 8021 by 8260B	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B ☐ 624	Semivolatiles GC/MS ☐ EPA 8270 ☐ 625	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides ☐ EPA 8081 ☐ 608 PCBs ☐ EPA 8082 ☐ 608	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Low Level Metals by EPA 200.8/6020 (ICP-MS):	☐ W.E.T (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24h hold time for H_2O)	☐ Spec Cond. ☐ Alkalinity ☐ TSS ☐ TDS ☐	Anions : ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	BOD			Number of Containers
1 MW-7D	7/15/09	1540	W	N			720-21299			#1												X			1
2 MW-9D	↓	1240	↓	↓			↓		↓	#3												X			↓
3 MW-9LF		1130								#4												X			
4 MW-9S	↓	1405	↓	↓			↓		↓	#5												X			
																	Unknown								

Page 60 of 63

Project Info.

Project Name: HANSON SUNOL
Project#:
PO#: 509957 ~~720-21299~~
Credit Card#:

Sample Receipt

of Containers: 4 - 1L
Head Space:
Temp: 3.1
Conforms to record:

TAT: 5 Day | 72h | 48h | 24h
Other:

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ State Tank
Fund EDF
Special Instructions / Comments: ☐ Global ID ___

See Terms and Conditions on reverse
*TestAmerica SF reports 8015M from C_9-C_{24} (industry norm). Default for 8015B is C_{10}-C_{25}

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 1115	Signature: [signature] Time: 1225	Signature: Time:
Printed Name: I. Levis Date: 7/16/09	Printed Name: Michael McKellar Date: 7/16/09	Printed Name: Date:
Company: TASP	Company: CERCO	Company:
1) Received by:	**2) Received by:**	**3) Received by:**
Signature: [signature] Time: 1115	Signature: [signature] Time: 1225	Signature: Time:
Printed Name: Michael McKellar Date: 7/16/09	Printed Name: Michael McKellar Date: 7/16/09	Printed Name: Date:
Company: CERCO	Company: CERCO	Company:

Rev 02/09

07/22/2009

San Francisco
1220 Quarry Lane

Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

TO-21299

Chain of Custody Record

117777 *

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

07/24/2009

Client Contact	Project Manager: KATRIN. SCHLIENEN	Site Contact: MORGAN JONES	Date: 7/15/09	COC No:
LFR Inc.	Tel/Fax: —	Lab Contact: AFSANEH S.	Carrier:	1 of 1 COCs
Address 1900 POWELL ST, 12TH FLOOR	Analysis Turnaround Time			Job No. 001-09840-09
City/State/Zip EMERYVILLE, CA	Calendar (C) or Work Days (W)			SDG No.
(xxx) xxx-xxxx Phone (510) 652-4500	TAT if different from Below STANDARD			
(xxx) xxx-xxxx FAX —	☐ 2 weeks			
Project Name: HANSON SUNOL	☐ 1 week			
Site: FMR ATHENEUM MART, SUNOL, CA	☐ 2 days			
PO# —	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	TPH-D (ESEL w/SG-CU) (8015)	TPHGAS, BTEX, MTBE (8260)	NITRATE/NITRITE (353.3)	ORTHO-PHOSPHATE (SM4500P-E)	TKN (351.3)	DISSOLVED IRON (6010) *	FERROUS IRON Fe++ (SM3500-FE)	BOD (5210 B)	COD (410.4)	Sample Specific Notes:
1.	MW-7D	7/15/09	1540	1,2,3	W	10	N	X	X	X	X	X	X	X	X	X	
2.	MW-7S	7/14/09	1610	1,2	W	4		X	X								
3.	MW-9D	7/15/09	1240	1,2,3	W	10		X	X	X	X	X	X	X	X	X	
4.	MW-9LF	7/15/09	1130	1,2,3	W	10		X	X	X	X	X	X	X	X	X	
5.	MW-9S	7/15/09	1425	1,2,3	W	10		X	X	X	X	X	X	X	X	X	
6.	OXY-1LF	7/15/09	1000	1,2	W	4		X	X								
7	OXY-1S	7/14/09	1755	1,2	W	4		X	X								
8	TB-2	—	—	1,2	W	2											HOLD

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ Non-Hazard ☒ Flammable ☒ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
*PLEASE FIX AND FILTER DISSOLVED IRON UPON ARRIVAL TO LAB.
SAMPLES MW-7D, MW-9D, MW-9LF, MW-9S HAVE SHORT HOLD TIMES. REPORT TO KATRIN.SCHLIENEN@LFR.COM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
MORGAN JONES	LFR INC.	7/15/09 1830	JULIE H.	TASF	7/15/09 - 1830
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

4.9°C, 5.2°C

Login Sample Receipt Check List

Client: LFR, Inc.

Job Number: 720-21299-1

Login Number: 21299
List Source: TestAmerica San Francisco
Creator: Bullock, Tracy
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	False	split off 250ml for COD
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

Login Sample Receipt Check List

Client: LFR, Inc.

Job Number: 720-21299-1

Login Number: 21299
Creator: Lunt, Jeff T
List Number: 1

List Source: TestAmerica Chicago
List Creation: 07/17/09 12:51 PM

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-21262-1

Job Description: Hansin Sonol

For:
LFR, Inc.
1900 Powell St 12th Floor
Emeryville, CA 94608-1827

Attention: Ms. Katrin Schliewen

Approved for release.
Afsaneh Salimpour
Project Manager I
7/22/2009 1:05 PM

Afsaneh Salimpour
Project Manager I
afsaneh.salimpour@testamericainc.com
07/22/2009

CA ELAP Certification # 2705
NELAC Certification # 01117CA
The Chain(s) of Custody are included and are an integral part of this report.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

TestAmerica Laboratories, Inc.
TestAmerica San Francisco 1220 Quarry Lane, Pleasanton, CA 94566
Tel (925) 484-1919 Fax (925) 600-3002 www.testamericainc.com

EXECUTIVE SUMMARY - Detections

Client: LFR, Inc. Job Number: 720-21262-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-21262-1	**MW-1**				
Benzene		0.51	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C5-C12		97	50	ug/L	8260B/CA_LUFTMS

METHOD SUMMARY

Client: LFR, Inc. Job Number: 720-21262-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL SF	SW846 8015B	
Liquid-Liquid Extraction (Separatory Funnel)	TAL SF		SW846 3510C SGC

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: LFR, Inc. Job Number: 720-21262-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Chen, Amy	AC
SW846 8015B	Hayashi, Derek	DH

SAMPLE SUMMARY

Client: LFR, Inc. Job Number: 720-21262-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-21262-1	MW-1	Water	07/14/2009 1155	07/14/2009 1522
720-21262-2	MW-8	Water	07/14/2009 1330	07/14/2009 1522
720-21262-3	OXY-1D	Water	07/14/2009 1440	07/14/2009 1522
720-21262-4	DUP-1	Water	07/14/2009 0000	07/14/2009 1522

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: MW-1

Lab Sample ID: 720-21262-1 Date Sampled: 07/14/2009 1155
Client Matrix: Water Date Received: 07/14/2009 1522

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54001		Instrument ID:	HP9
Preparation:	5030B			Lab File ID:	07150917.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/15/2009 1814			Final Weight/Volume:	10 mL
Date Prepared:	07/15/2009 1814				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	0.51		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	102		70 - 130
1,2-Dichloroethane-d4 (Surr)	115		67 - 130

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: MW-1

Lab Sample ID: 720-21262-1 Date Sampled: 07/14/2009 1155
Client Matrix: Water Date Received: 07/14/2009 1522

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54011		Instrument ID:	HP9
Preparation:	5030B			Lab File ID:	07150917.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/15/2009 1814			Final Weight/Volume:	10 mL
Date Prepared:	07/15/2009 1814				

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	97		50

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: MW-8

Lab Sample ID: 720-21262-2 Date Sampled: 07/14/2009 1330
Client Matrix: Water Date Received: 07/14/2009 1522

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54001		Instrument ID:	HP9
Preparation:	5030B			Lab File ID:	07150918.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/15/2009 1911			Final Weight/Volume:	10 mL
Date Prepared:	07/15/2009 1911				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	118		67 - 130

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: MW-8

Lab Sample ID: 720-21262-2 Date Sampled: 07/14/2009 1330
Client Matrix: Water Date Received: 07/14/2009 1522

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54011	Instrument ID: HP9
Preparation:	5030B		Lab File ID: 07150918.D
Dilution:	1.0		Initial Weight/Volume: 10 mL
Date Analyzed:	07/15/2009 1911		Final Weight/Volume: 10 mL
Date Prepared:	07/15/2009 1911		

Analyte	Result (ug/L)	Qualifier	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: OXY-1D

Lab Sample ID: 720-21262-3 Date Sampled: 07/14/2009 1440
Client Matrix: Water Date Received: 07/14/2009 1522

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54209		Instrument ID:	HP # 2
Preparation:	5030B			Lab File ID:	07170933.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/17/2009 2353			Final Weight/Volume:	10 mL
Date Prepared:	07/17/2009 2353				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	104		67 - 130

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: **DUP-1**

Lab Sample ID: 720-21262-4 Date Sampled: 07/14/2009 0000
Client Matrix: Water Date Received: 07/14/2009 1522

8260B/CA_LUFTMS Volatile Organic Compounds by GC/MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-54209	Instrument ID:	HP # 2	
Preparation:	5030B		Lab File ID:	07170934.D	
Dilution:	1.0		Initial Weight/Volume:	10	mL
Date Analyzed:	07/18/2009 0025		Final Weight/Volume:	10	mL
Date Prepared:	07/18/2009 0025				

Analyte	Result (ug/L)	Qualifier	RL
Benzene	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		67 - 130

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: MW-1

Lab Sample ID: 720-21262-1 Date Sampled: 07/14/2009 1155
Client Matrix: Water Date Received: 07/14/2009 1522

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54221	Instrument ID: DRO 5
Preparation:	3510C SGC	Prep Batch: 720-53958	Initial Weight/Volume: 500 mL
Dilution:	1.0		Final Weight/Volume: 2 mL
Date Analyzed:	07/17/2009 0604		Injection Volume:
Date Prepared:	07/15/2009 1740		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	1		0 - 5
p-Terphenyl	89		31 - 150

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: MW-8

Lab Sample ID: 720-21262-2 Date Sampled: 07/14/2009 1330
Client Matrix: Water Date Received: 07/14/2009 1522

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54221	Instrument ID: DRO 5
Preparation:	3510C SGC	Prep Batch: 720-53958	Initial Weight/Volume: 500 mL
Dilution:	1.0		Final Weight/Volume: 2 mL
Date Analyzed:	07/17/2009 0511		Injection Volume:
Date Prepared:	07/15/2009 1740		Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	1		0 - 5
p-Terphenyl	81		31 - 150

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: OXY-1D

Lab Sample ID: 720-21262-3 Date Sampled: 07/14/2009 1440
Client Matrix: Water Date Received: 07/14/2009 1522

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54221		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-53958		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/17/2009 0537			Injection Volume:	
Date Prepared:	07/15/2009 1740			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	1		0 - 5
p-Terphenyl	77		31 - 150

Client: LFR, Inc. Job Number: 720-21262-1

Client Sample ID: DUP-1

Lab Sample ID: 720-21262-4 Date Sampled: 07/14/2009 0000
Client Matrix: Water Date Received: 07/14/2009 1522

8015B Diesel Range Organics (DRO) (GC)-Silica Gel Cleanup

Method:	8015B	Analysis Batch: 720-54221		Instrument ID:	DRO 5
Preparation:	3510C SGC	Prep Batch: 720-53958		Initial Weight/Volume:	500 mL
Dilution:	1.0			Final Weight/Volume:	2 mL
Date Analyzed:	07/17/2009 0604			Injection Volume:	
Date Prepared:	07/15/2009 1740			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
Capric Acid (Surr)	0		0 - 5
p-Terphenyl	81		31 - 150

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: LFR, Inc. Job Number: 720-21262-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-54001					
LCS 720-54001/3	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54001/4	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54001/5	Method Blank	T	Water	8260B/CA_LUFT	
720-21262-1	MW-1	T	Water	8260B/CA_LUFT	
720-21262-2	MW-8	T	Water	8260B/CA_LUFT	
Analysis Batch:720-54011					
LCS 720-54011/2	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54011/3	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54011/4	Method Blank	T	Water	8260B/CA_LUFT	
720-21262-1	MW-1	T	Water	8260B/CA_LUFT	
720-21262-2	MW-8	T	Water	8260B/CA_LUFT	
Analysis Batch:720-54184					
LCS 720-54184/3	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54184/4	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54184/5	Method Blank	T	Water	8260B/CA_LUFT	
Analysis Batch:720-54209					
LCS 720-54209/2	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-54209/3	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-54209/4	Method Blank	T	Water	8260B/CA_LUFT	
720-21262-3	OXY-1D	T	Water	8260B/CA_LUFT	
720-21262-4	DUP-1	T	Water	8260B/CA_LUFT	
720-21262-4MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-21262-4MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	

Report Basis
T = Total

Client: LFR, Inc. Job Number: 720-21262-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-53958					
LCS 720-53958/2-A	Lab Control Sample	A	Water	3510C SGC	
LCSD 720-53958/3-A	Lab Control Sample Duplicate	A	Water	3510C SGC	
MB 720-53958/1-A	Method Blank	A	Water	3510C SGC	
720-21262-1	MW-1	A	Water	3510C SGC	
720-21262-2	MW-8	A	Water	3510C SGC	
720-21262-3	OXY-1D	A	Water	3510C SGC	
720-21262-4	DUP-1	A	Water	3510C SGC	
Analysis Batch:720-54221					
LCS 720-53958/2-A	Lab Control Sample	A	Water	8015B	720-53958
LCSD 720-53958/3-A	Lab Control Sample Duplicate	A	Water	8015B	720-53958
MB 720-53958/1-A	Method Blank	A	Water	8015B	720-53958
720-21262-1	MW-1	A	Water	8015B	720-53958
720-21262-2	MW-8	A	Water	8015B	720-53958
720-21262-3	OXY-1D	A	Water	8015B	720-53958
720-21262-4	DUP-1	A	Water	8015B	720-53958

Report Basis
A = Silica Gel Cleanup

Client: LFR, Inc.

Job Number: 720-21262-1

Method Blank - Batch: 720-54001

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54001/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 1233
Date Prepared: 07/15/2009 1233

Analysis Batch: 720-54001
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemtation 3
Lab File ID: 07150910.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	99	70 - 130
1,2-Dichloroethane-d4 (Surr)	103	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21262-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54001

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54001/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 0935
Date Prepared: 07/15/2009 0935

Analysis Batch: 720-54001
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemtation 3
Lab File ID: 07150905.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54001/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 1006
Date Prepared: 07/15/2009 1006

Analysis Batch: 720-54001
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemtation 3
Lab File ID: 07150906.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	100	101	72 - 120	1	20		
Toluene	103	105	59 - 120	2	20		
MTBE	109	107	64 - 130	2	20		
Ethylbenzene	108	109		1			

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	101	101	70 - 130
1,2-Dichloroethane-d4 (Surr)	104	102	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21262-1

Method Blank - Batch: 720-54011

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54011/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 1304
Date Prepared: 07/15/2009 1304

Analysis Batch: 720-54011
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemtation 3
Lab File ID: 07150911.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54011

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54011/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 1109
Date Prepared: 07/15/2009 1109

Analysis Batch: 720-54011
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemtation 3
Lab File ID: 07150908.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54011/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/15/2009 1202
Date Prepared: 07/15/2009 1202

Analysis Batch: 720-54011
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemtation 3
Lab File ID: 07150909.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	86	85	36 - 130	1	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc.

Job Number: 720-21262-1

Method Blank - Batch: 720-54184

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54184/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 2217
Date Prepared: 07/17/2009 2217

Analysis Batch: 720-54184
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07170930.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Benzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
MTBE	ND		0.50
Ethylbenzene	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	102	70 - 130
1,2-Dichloroethane-d4 (Surr)	125	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21262-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54184

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54184/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 2009
Date Prepared: 07/17/2009 2009

Analysis Batch: 720-54184
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07170926.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54184/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 2041
Date Prepared: 07/17/2009 2041

Analysis Batch: 720-54184
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07170927.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	105	106	72 - 120	1	20		
Toluene	105	105	59 - 120	0	20		
MTBE	114	115	64 - 130	0	20		
Ethylbenzene	109	109		0.489			

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	100	101	70 - 130
1,2-Dichloroethane-d4 (Surr)	99	102	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc.

Job Number: 720-21262-1

Method Blank - Batch: 720-54209

Method: 8260B/CA_LUFTMS
Preparation: 5030B

Lab Sample ID: MB 720-54209/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 2249
Date Prepared: 07/17/2009 2249

Analysis Batch: 720-54209
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07170931.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Gasoline Range Organics (GRO)-C5-C12	ND		50

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-54209

Method: 8260B/CA_LUFTMS
Preparation: 5030B

LCS Lab Sample ID: LCS 720-54209/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 2113
Date Prepared: 07/17/2009 2113

Analysis Batch: 720-54209
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07170928.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-54209/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 2145
Date Prepared: 07/17/2009 2145

Analysis Batch: 720-54209
Prep Batch: N/A
Units: ug/L

Instrument ID: Chemstation 3.0 on 95PC
Lab File ID: 07170929.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline Range Organics (GRO)-C5-C12	87	87	36 - 130	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21262-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-54209

Method: 8260B/CA_LUFTMS
Preparation: 5030B

MS Lab Sample ID:	720-21262-4	Analysis Batch:	720-54209	Instrument ID:	Chemstation 3.0 on 95PC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	07170935.D
Dilution:	1.0			Initial Weight/Volume:	10.0 mL
Date Analyzed:	07/18/2009 0056			Final Weight/Volume:	10 mL
Date Prepared:	07/18/2009 0056				

MSD Lab Sample ID:	720-21262-4	Analysis Batch:	720-54209	Instrument ID:	Chemstation 3.0 on 95PC
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	07170936.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Date Analyzed:	07/18/2009 0128			Final Weight/Volume:	10 mL
Date Prepared:	07/18/2009 0128				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	100	99	58 - 134	1	20		
Toluene	96	97	72 - 130	1	20		
MTBE	104	104	22 - 185	0	20		
Ethylbenzene	99	100		0.494			

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	100	101	70 - 130
1,2-Dichloroethane-d4 (Surr)	95	95	67 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: LFR, Inc. Job Number: 720-21262-1

Method Blank - Batch: 720-53958

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

Lab Sample ID: MB 720-53958/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 1032
Date Prepared: 07/15/2009 1740

Analysis Batch: 720-54221
Prep Batch: 720-53958
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	% Rec	Acceptance Limits
Capric Acid (Surr)	0	0 - 5
p-Terphenyl	93	31 - 150

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-53958

Method: 8015B
Preparation: 3510C SGC
Silica Gel Cleanup

LCS Lab Sample ID: LCS 720-53958/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 0511
Date Prepared: 07/15/2009 1740

Analysis Batch: 720-54221
Prep Batch: 720-53958
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-53958/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 07/17/2009 0537
Date Prepared: 07/15/2009 1740

Analysis Batch: 720-54221
Prep Batch: 720-53958
Units: ug/L

Instrument ID: HP DRO5
Lab File ID: N/A
Initial Weight/Volume: 500 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	103	110	32 - 119	6	35		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	103	109	31 - 150

Calculations are performed before rounding to avoid round-off errors in calculated results.

720-21262

117724

San Francisco
1220 Quarry Lane

Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: KATRIN SCHLIEMEN	Site Contact: M. JONES	Date: 7/14/09	COC No:
LFR Inc.	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
Address 1900 POWELL ST, 12TH FLOOR	Analysis Turnaround Time			Job No. 001-09840-09
City/State/Zip EMERYVILLE, CA	Calendar (C) or Work Days (W) W			
(xxx) xxx-xxxx Phone (510) 652-4500	TAT if different from Below STANDARD			SDG No.
(xxx) xxx-xxxx FAX —	☐ 2 weeks			
Project Name: HANSON SLAG 001-09840-09	☐ 1 week			
Site:	☐ 2 days			
PO# —	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample: TPH-DIESEL W/ SGC (Y/N)	TPH-GAS BTEX MTBE 8260	Sample Specific Notes:
01	MW-1	7/14/09	1155	GRAB	W	4	X	X	
02	MW-8		1330			4	X	X	
03	OXY-1D		1440			4	X	X	
04	DUP-1		—			4	X	X	
05	TB-1	—	—			2			HOLD

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:
REPORT TO KATRIN.SCHLIEMEN@LFR.COM

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	LFR	7/14/09 1500		TASF	7/14/09 1500
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TASF	7/14/09 1522		TASF	7/14/09 - 1522
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

2.4°C

07/22/2009

Login Sample Receipt Check List

Client: LFR, Inc.

Job Number: 720-21262-1

Login Number: 21262
List Source: TestAmerica San Francisco
Creator: Hoang, Julie
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

Client: LFR, Inc. - Katrin Schliewen
Project: LFR-2165
Report Date: July 23, 2009
Run Date: July 16, 2009
Total Pages in Report: 3

Prepared for LFR, Inc.
1900 Powell Street
12th Floor
Emeryville, CA 94608
510-596-9637

Prepared by RespirTek, Inc.
12450 Shortcut Rd.
Bldg F
Biloxi, MS 39532
228-392-7977

The enclosed data relates only to those samples received by the laboratory.

Client: LFR, Inc. - Katrin Schliewen
Project: LFR-2165
Report Date: July 23, 2009
Run Date: July 16, 2009

Final Report

Heterotrophic Plate Count Results

Aerobic

Sample ID	HPC/SD	48 Hours Results (cfu/mL)	96+ Hours Results (cfu/mL)	Comments
MW-7D	HPC	2000-2200	2500-2900	5 colonies of mold present
MW-7D	SD	700-1000	2500-2800	
MW-9S	HPC	13900-15000	4100-9000	2 mold colonies, 1 spreader
MW-9S	SD	4700-6400	4000-4300	
MW-9D	HPC	5800-5900	13000-14900	
MW-9D	SD	5500-5900	12200-15800	73 colonies of mold present
MW-9LF	HPC	1600-1800	3300-4400	
MW-9LF	SD	1600-1700	3500-3600	

Control	Result
Air	2
Dilution H20 (aerobic)	1
Stock Solution - Gasoline	0
Agar Control 1	0
Agar Control 2	1
Agar Control 3	0
Agar Control 4	0
Positive Control (aerobic)	TNTC

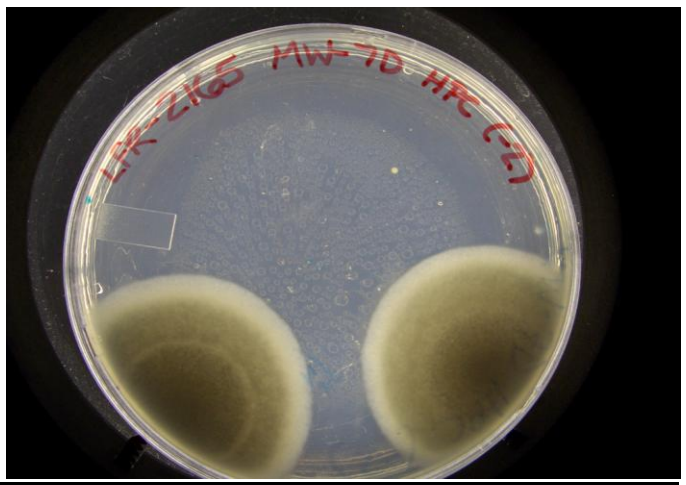
Specific Degrader
20 mg/L Gasoline

TNTC: Too numerous to count
cfu/mL: Colony forming units per mL
HPC: Heterotrophic Plate Count
SD: Specific Degrader

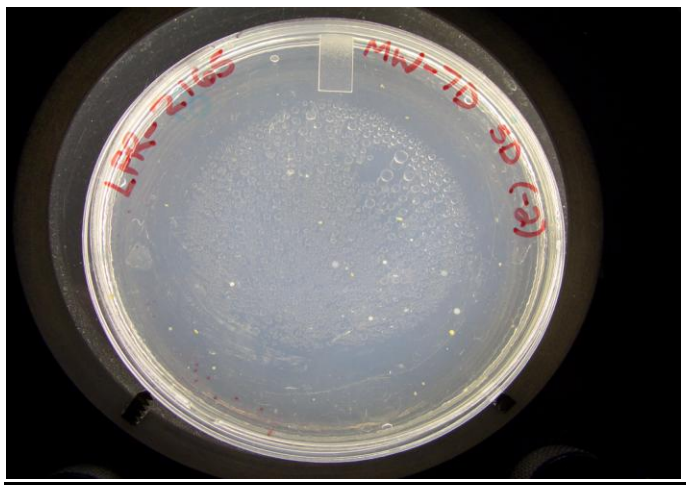
Date of Sample Collection: July 15, 2009

*** Sample did not meet limits for countable based on method specifications.**

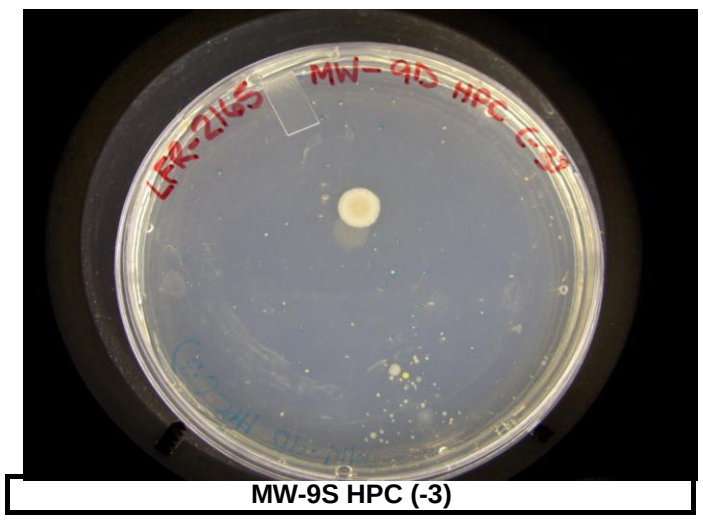
Client: LFR, Inc. - Katrin Schliewen
Project: LFR-2165
Report Date: July 23, 2009
Run Date: July 16, 2009



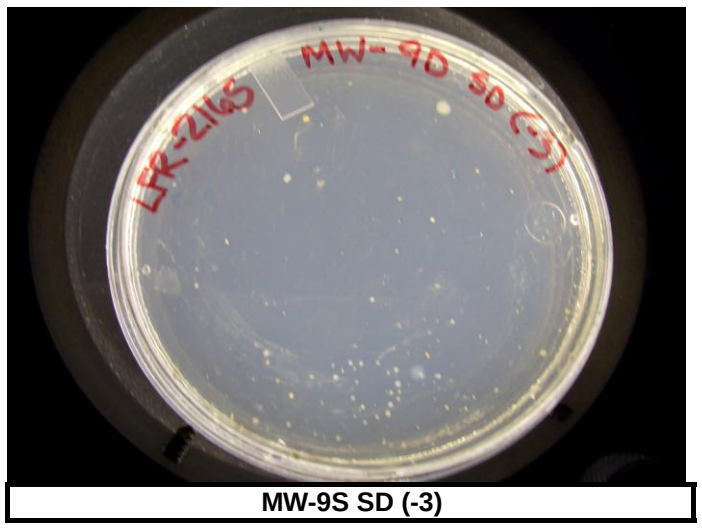
MW-7D HPC (-2)

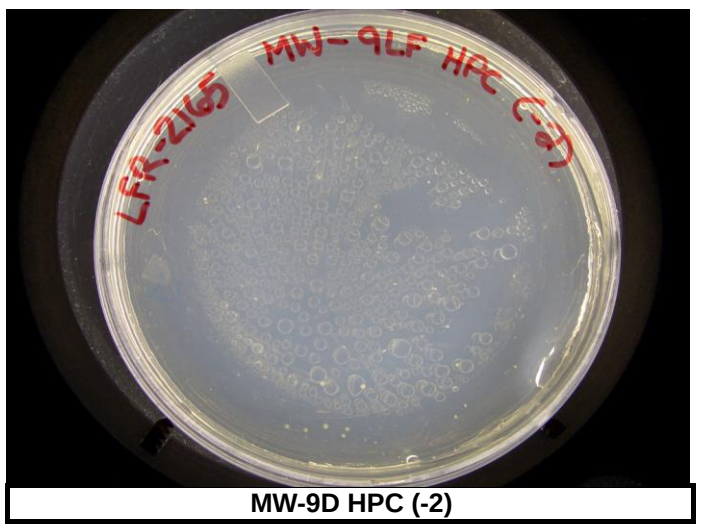


MW-7D SD (-2)

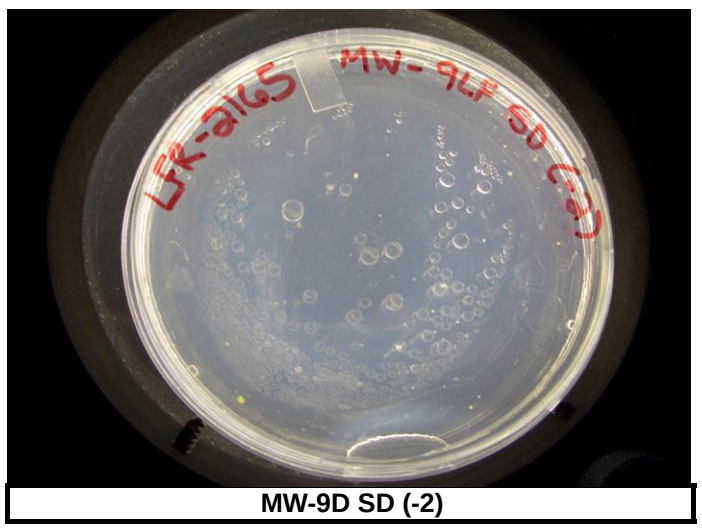


MW-9S HPC (-3)

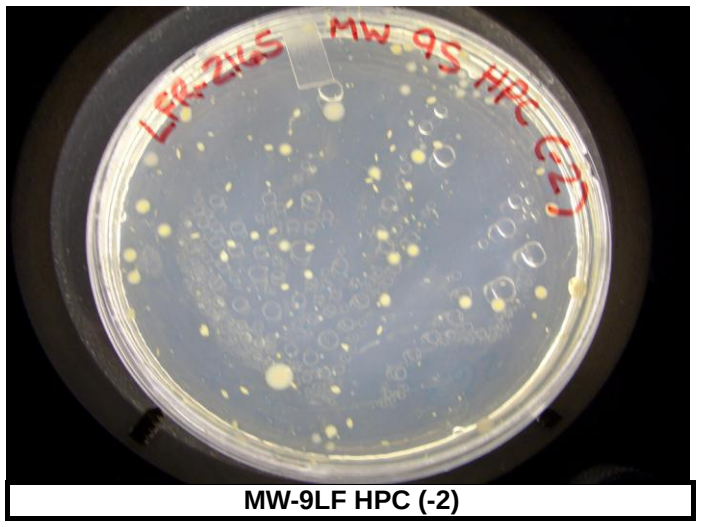




MW-9D HPC (-2)



MW-9D SD (-2)



MW-9LF HPC (-2)

MW-9LF SD (-2)