Summary Report of Additional Phase II ESA Investigation at the Former Asphalt Plant Area
Hanson Radum Facility
3000 Busch Road, Pleasanton,
Alameda County, California

December 5, 2006
001-09567-00

Prepared for
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CERTIFICATIONS

LFR Inc. has prepared this Summary Report of Additional Phase II Environmental Site Assessment Investigation on behalf of Hanson Aggregates Northern California in a manner consistent with the level of care and skill ordinarily exercised by professional geologists and environmental scientists. This investigation was prepared under the technical direction of the undersigned California Professional Geologists.

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EXECUTIVE SUMMARY

This summary report presents the findings of an additional Phase II Environmental Site Assessment (ESA) investigation conducted by LFR Inc. (LFR) at the Hanson Radum facility former hot mix asphalt plant area located at 3000 Bush Road, Pleasanton, California ("the Site"). LFR conducted this investigation for Hanson Aggregates Northern California ("Hanson") to further characterize the extent of petroleum-affected soil and groundwater beneath the Site.

LFR used the results of previous investigations conducted by ENV America Inc. (ENV), a consulting firm contracted by a potential purchasing agent (Legacy Partners), to design an additional investigation. LFR advanced 24 soil borings to depths approximately ranging from 10 to 65 feet below ground surface to collect soil and groundwater samples for laboratory analyses. LFR confirmed that the primary chemicals of potential concern (COPCs) in soil are total petroleum hydrocarbons as diesel (TPHd) and as motor oil (TPHmo), and that groundwater has been affected by TPHd and TPHmo.

1.0 INTRODUCTION

LFR Inc. (LFR) is pleased to present this summary report to Hanson Aggregates Northern California ("Hanson") for the additional Phase II Environmental Site Assessment (ESA) investigation that was conducted at the former hot mix asphalt plant and associated spray rack area at Hanson's Radum Facility located at 3000 Busch Road, Pleasanton, California ("the Site"; Figure 1). Results of Phase II investigations completed by other consultants have indicated that soil and shallow groundwater beneath the Site have been affected by petroleum hydrocarbons.

Our objective for the additional investigation presented in this report was to further characterize the extent and magnitude of affected soil and groundwater beneath the Site. This objective was met through the advancement of 24 soil borings at the Site and chemical analysis of 45 soil and 3 groundwater samples from those borings. Our report presents the methods and results of our Phase II investigation.

1.1 Site Description and Background

The Site is a former asphalt plant located in the southwestern corner of the approximately 1,050-acre property located approximately 1.5 miles northeast of downtown Pleasanton and north of Stanley Boulevard (Figure 1). The Site lies within an approximately 6-square-mile area of aggregate mining in the central portion of the Livermore Valley (see figures included in Appendix A). Land use in this area includes active and inactive aggregate mining and associated aggregate handling activities, and includes numerous former pits.

The Site lies within the Amador Sub-basin of the Livermore-Amador Valley Groundwater Basin. In general, subsurface lithology in the area consists of alluvial materials, including 20 to 40 feet of surficial clays underlain by sandy gravel and sandy clayey gravels to depths of approximately 80 to 150 feet below the ground surface (bgs). Unconfined (shallow) groundwater is encountered in this lithologic zone (referred to as the "Upper Aquifer Zone") at depths of approximately 75 feet bgs. The upper permeable gravels are underlain by a relatively continuous, silty clay aquiclude up to 50 feet thick, which is underlain by the Lower Aquifer Zone (Jones and Stokes 2006).

Mining of sand and gravel in the Livermore-Amador Valley began prior to 1900 (Jones and Stokes 2006). Mining operations for aggregate resources at the Site were begun in 1938 by Kaiser Sand and Gravel. As portions of the property were mined out, the former pits reportedly either were backfilled with debris and mine waste, or were used for storage and/or as disposal ponds for water (from dewatering of new pits) and fine-grained sediments (silt and sand) washed out of the aggregate material.

Hanson purchased the property in 1991 and continued mining operations until 2001. Mining was discontinued at that time due to lack of available aggregate materials. The

Site consists of an area approximately 500 feet by 600 feet containing remnants of the former asphalt plant operations, including portions of a former truck scale and an asphalt tank containment structure, and a concrete pad.

1.2 Previous Investigations and Known Impacts to the Subsurface

A potential purchasing agent (Legacy Partners) contracted ENV America, Inc. (ENV) to conduct a Phase I ESA during September 2006. ENV conducted a Phase II ESA during September and October 2006 to assess areas of affected soil and groundwater at the Site. The Phase II investigation by ENV included collecting soil, grab groundwater, and surface-water samples from several locations at the Site. Soil and water samples were collected from soil borings, test pits, hand-dug shallow pits, and surface-water bodies.

The Phase II ESA completed by ENV concluded that the sediments and groundwater beneath the Site had been affected by elevated concentrations of total petroleum hydrocarbons as diesel (TPHd) and TPH as motor oil (TPHmo), metals, and to a lesser extent with TPH as gasoline (TPHg) and polycyclic aromatic hydrocarbons (PAHs), as a result of past site activities.

1.2.1 Soil Quality

Analytical results of soil samples collected by ENV identified several areas of affected soil, primarily in the western and northern portions of the Site. ENV sample locations are shown on Figure 2 and copies of ENV summary tables presented in the draft Phase II report are included in Appendix C.

TPHd and TPHmo concentrations above laboratory reporting limits were detected in soil samples collected at the Site from depths ranging approximately between 0.5 and 40 feet bgs. TPHd was detected at a maximum concentration of 7,800 mg/kg and TPHmo was detected at a maximum concentration of 16,000 mg/kg. TPHg was detected in a limited number of soil samples and in one sample at an elevated concentration of 530 mg/kg. With few exceptions, volatile organic compounds (VOCs) were not detected and PAHs were detected only in samples where the TPHd and TPHmo concentrations were detected at elevated concentrations. Elevated metals concentrations were detected in a limited number of soil samples collected from the northern portion of the Site, and included arsenic, barium, cobalt, chromium, nickel, lead, and vanadium.

ENV advanced six soil borings to visually characterize the extent of “heavy, black, viscous free phase petroleum product” identified in soil between approximately 30 and 40 feet bgs in the northern portion of the Site. Based on field observations, ENV estimated the extent of the petroleum product to be limited to within the area delineated by the dashed line shown on Figure 3 of the ENV report, a copy of which is included in Appendix C.

1.2.2 Groundwater Quality

Grab groundwater samples were collected from soil borings EB-15, EB-16, EB-22, and EB-29 (Figure 2) at depths ranging from approximately 52 feet bgs at soil boring EB-29 to approximately 60 feet bgs at soil boring EB-22. The groundwater flow direction beneath the Site was not assessed.

Petroleum hydrocarbons were not detected in groundwater, except for relatively low concentrations of TPHmo (850 micrograms per liter [μg/l]) and TPHd (150 μg/l) in the grab groundwater sample collected from soil boring EB-29, located east of the truck scale and asphalt containment area.

1.3 Limitations

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, express 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 percent 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.

2.0 ADDITIONAL INVESTIGATION METHODOLOGY

The investigation activities included drilling 22 soil borings to depths ranging approximately from 10 to 35 feet bgs to collect depth-discrete soil samples for field screening, logging, and laboratory analyses, and three soil borings to depths ranging approximately from 50 to 60 feet bgs to collect grab groundwater samples for laboratory analyses.

To facilitate comparison with historical data, LFR divided the Site into five general areas (Areas I through V) as shown on Figure 2. The roughly oval eastern extension area identified by ENV as a TPH-affected zone at approximately 30 to 40 feet bgs was not specifically targeted by LFR, because the lateral extent of this area appeared adequately defined by ENV through a network of soil borings and visual observations of the soil samples in the field.

This section describes the pre-field and drilling activities conducted by LFR during this investigation, and presents the rationale for the selected sample locations and laboratory analyses.

2.1 Pre-Field Activities

Permitting

LFR acquired the necessary drilling permit from the Alameda County Zone 7 Water Agency ("Zone 7") to advance temporary soil borings at the Site for environmental soil and grab groundwater sampling. A copy of the approved drilling permit is included in Appendix B. It should be noted that one condition of the permit is that "all soil and water laboratory analysis results" be submitted to Zone 7 within 60 days after the completion of permitted work.

Subsurface Utility Clearance

Prior to beginning drilling work, LFR subcontracted Cruz Brothers Locators of Scotts Valley, California, to perform subsurface utility locating at the Site to identify possible subsurface obstructions and utilities. All proposed soil boring locations were properly cleared in the presence of the field geologist overseeing the drilling activities.

Health and Safety Plan

A site-specific Health and Safety Plan (HSP) was prepared to document potential hazards to worker health and safety at the Site during the field activities and to specify the appropriate means to mitigate or control hazards. The HSP addressed the potential for exposure to hazardous constituents and described general safety procedures. A health and safety meeting was conducted before fieldwork began, and applicable

activities were completed according to the HSP. A copy of the HSP was made available to personnel involved in investigation activities.

Zone 7 Groundwater Elevation Data

To help locate appropriate grab groundwater sample locations, LFR requested from Zone 7 groundwater elevation data for any wells located within approximately 1 mile of the Site. Zone 7 provided the depth-to-groundwater and reference point elevation data for three monitoring wells recently monitored by Zone 7. From these data, LFR calculated groundwater elevations for these three wells. From the approximate center of the Site, the three wells are located approximately 3,750 feet northwest (3S/1E16C4), 1,500 feet west (3S1E15M3), and 550 feet northeast (3S1E15F3). The following table provides a summary of September and October 2006 groundwater data obtained from Zone 7.

Well	3S/1E16C4	3S1E15M3	3S1E15F3
Distance and direction from the Site	3,750 feet northwest	1,500 feet west	550 feet northeast
Depth to water below top of casing (feet)	45.1	72.57	75.91
Reference Point Elevation (feet, msl)	341.4	360	360
Groundwater Elevation (feet, msl)	296.3	287.5	284.09

Note: msl = above mean sea level

Groundwater levels measured during September and October 2006 in these three wells indicate a general easterly groundwater flow direction in the vicinity of the Site. However, because no lithologic or well construction information was immediately available for these wells, it could not be determined whether the apparent easterly groundwater flow direction also exists for the first encountered groundwater beneath the Site.

2.2 Collection of Soil and Groundwater Samples

LFR subcontracted HEW Drilling Company Inc. (“HEW”), a California state-licensed drilling contractor located in Palo Alto, California, and V&W Drilling, Inc. (“V&W”), a California state-licensed drilling contractor located in Isleton, California, to drill the soil borings during November 13 through 16, 2006. HEW advanced 20 of the 24 soil borings using a 6-inch-diameter hollow-stem auger drill rig. V&W used direct push drilling methods to advance 4 of the 25 soil borings on November 14, 2006.

Soil boring target depths and locations were determined based on results of previous investigations and modified in the field based on field screening and visual observations. The three deepest soil borings were advanced to depths approximately 5 feet below first encountered groundwater as determined during drilling.

2.2.1 Sample Locations

The Site was divided into five areas, which are described below.

Area I

Area I is located in the southeastern portion of the Site, approximately south of the former scale and asphalt tank containment structures. Soil samples collected by ENV resulted in elevated concentrations of TPHd, TPHmo, TPHg, and PAH in soil samples collected from approximately 10 feet bgs from soil boring EB-13 and/or test pit AP-4 (Appendix C and Table 1a). However, soil samples collected from other depths from these borings, and from other borings within this area, did not contain elevated hydrocarbons (e.g., EB-12, TRANS-C, and at depths of 0.5, 15, and 20 feet bgs from EB-13).

LFR advanced four soil borings located approximately south (B-1), east (B-2), west (B-3), and north (B-4) of previous locations EB-13 and AP-4, to depths of approximately 18 to 20 feet bgs. Soil samples were collected from approximately every 5 feet; from these four soil borings, at least one soil sample from approximately 5, 7, 10, 15, or 18 feet bgs was selected for laboratory analyses.

Area II

Area II is located approximately southeast of the former scale and asphalt tank containment structures. Soil samples collected by ENV resulted in elevated TPHd and TPHmo concentrations detected in soil samples collected from approximately 8, 15, and 18 feet bgs from test pit CS-2 (Appendix C and Table 1b). However, analytical results for soil samples collected at approximately 20 feet bgs from soil boring EB-11, located adjacent to CS-2, and at approximately 2, 5, and 16.5 feet bgs from soil boring EB-16, located approximately 40 feet north of CS-2, did not contain significant or detectable TPHd or TPHmo concentrations.

LFR advanced three soil borings approximately south (B-5), west (B-6), and east (B-7) of test pit CS-2 and soil boring EB-11, to depths of approximately 15 feet bgs. Soil samples were collected from approximately every 5 feet bgs; of these three soil borings, all but one of the 15-foot-bgs samples were selected for laboratory analyses.

Area III

Area III encompasses approximately the areas of the former truck scale and asphalt tank containment areas in the center of the Site. Soil samples collected by ENV resulted in elevated TPHd, TPHmo, and metals concentrations detected in a soil sample collected from approximately 8 feet bgs from test pit PO-1 (Appendix C and Table 1c). Analytical results for soil samples collected at approximately 5, 10, and 25 feet bgs from soil boring EB-10, located adjacent to test pit PO-1, and soil samples collected at approximately 2, 8, 12, and 15 feet bgs from test pits PO-1, PO-2, and/or AP-3 did not contain significant or detectable TPHd and TPHmo concentrations.

LFR advanced three soil borings approximately south (B-8) and north (B-10) of previous location PO-1, and in the northeastern corner of Area III (B-9), to depths of approximately 15 to 18 feet bgs. Soil samples were collected from approximately every 5 feet bgs; all but one of the 15-foot-bgs samples collected were selected for laboratory analyses.

Area IV

Area IV is a relatively large area located north and east of the former truck scale and asphalt tank containment. Soil samples collected by ENV resulted in elevated concentrations of TPHd, TPHmo, and PAHs detected in soil samples collected from approximately 5 and 7 feet bgs from soil boring EB-30 and test pit SR-3, respectively (Appendix C and Table 1d). The soil sample collected approximately 5 feet bgs from test pit SR-2 provides the lateral extent of TPH-affected soil to the north of test pit SR-3. Soil samples collected from approximately 2 feet bgs and various depths between 10 and 40 feet bgs from soil borings EB-30 and EB-33 and from test pits RR-3, SR-2, SR-3, and SR-4 indicate that TPHd and TPHmo are laterally limited in extent.

LFR advanced four soil borings (B-11 through B-14) to depths ranging approximately from 10 to 22.5 feet bgs. Soil samples were collected from approximately every 5 feet; soil samples collected from approximately 5, 7, 10, and 15 feet bgs were submitted for laboratory analyses. Soil boring B-16 was advanced within the eastern extension area to confirm the presence of TPH product between 30 and 40 feet bgs. Preliminary analytical results from the one shallow soil sample collected from soil boring B-16 (at 3 feet bgs) indicated an elevated TPHd concentration. Based on these preliminary results, LFR advanced three additional soil borings (B-15, B-20, and B-24) to depths ranging from approximately 10 to 20 feet bgs in the vicinity of soil boring B-16. Soil samples collected from approximately 4, 7, and 10 feet bgs were selected for laboratory analyses.

Area V

Area V is the northernmost area defined by LFR. This area was defined around soil boring EB-20, in which elevated concentrations of various metals were detected in the

soil samples collected from 6 feet bgs (Appendix C and Table 3). TPH was not detected in any samples collected by ENV in this area (Table 1e).

LFR advanced three soil borings in Area V (B-17 through B-19) and collected soil samples from approximately 6 and 10 feet bgs. All samples were selected for laboratory analyses.

Groundwater

LFR advanced three soil borings (B-21, B-22, and B-23) to collect grab groundwater samples. As described above, water-level data provided by Zone 7 indicated that the groundwater flow direction may be toward the east. LFR located the three deep soil borings based on the assumed groundwater flow direction and on the locations and analytical results of the four grab groundwater samples collected by ENV. Soil boring B-21 was located near the northwestern corner of the Site, approximately upgradient from the eastern extension. Soil boring B-22 was located near the northeastern corner of the Site and approximately downgradient from the eastern extension. Soil boring B-23 was located approximately downgradient from ENV grab groundwater sample location EB-29, the only groundwater sample in which in elevated TPH concentrations were detected (Table 4).

2.2.2 Soil Sampling and Lithologic Logging

Soil samples were collected during drilling at approximately 5-foot intervals for lithologic evaluation, field screening, and laboratory analyses. Soil samples from boreholes advanced using the direct-push drilling method were collected using the continuous-core sampling method. Soil cores were collected inside plastic sample tubes as drilling progressed. Soil samples collected using the hollow-stem auger drilling method were collected using either continuous-core or brass-tube-lined split-spoon sampling methods.

Soils encountered during drilling were logged by an LFR field geologist under the supervision of a State of California Professional Geologist. The soil lithologic changes were classified using the Unified Soil Classification System. Lithologic information is included on soil boring logs provided in Appendix D. Soils encountered during drilling generally consisted of predominantly coarser-grained sediments such as sands and gravels with intervals of finer-grained clays and silts. However, particularly in the southern portion of the Site, soils encountered during drilling included large intervals of finer-grained sediments such as clays and silts. In several boring locations advanced in the northern portion of Site, relatively well-graded, pea-gravel-sized materials were encountered that appeared to be engineered fill. This was particularly evident in soil boring B-20, where pea gravel was encountered to the bottom of the boring at 15 feet bgs, and in soil boring B-22, where pea gravel was encountered approximately from 12 to 45 feet bgs.

Soil cores and samples were reviewed for visible or olfactory indications of the presence of petroleum hydrocarbons, and also were field screened using a portable photoionization detector to assess the presence of hydrocarbons or other VOCs, and results were recorded on the soil boring logs.

Soil samples submitted to the laboratory for analyses were labeled with the boring identification number and depth interval, the time and date of collection, the analysis requested, and the initials of the sampler. All samples were stored in ice-chilled coolers and submitted to the laboratory under strict chain-of-custody protocol.

2.2.3 Grab Groundwater Sampling

LFR collected grab groundwater samples from three soil borings (B-21, B-22, and B-23) that were advanced to depths ranging from 50 to 60 feet bgs. Each soil boring was advanced approximately 5 feet into the first observed saturated sediments. Temporary, 2-inch-diameter, polyvinyl chloride well casings and 5- or 10-foot-long wells screens were placed inside the hollow-stem auger and the hollow-stem auger then was lifted several feet to allow groundwater to enter the temporary casing. The depth to groundwater was measured in feet bgs at each boring after the temporary well casing had been in place at least several hours. The grab groundwater samples were collected using disposable bailers, poured into laboratory-supplied sample containers, and labeled with the boring identification number, the time and date of collection, the analyses requested, and the initials of the sampler. The samples were stored in an ice-chilled cooler and maintained under strict chain-of-custody protocol until they were submitted to the analytical laboratory.

2.2.4 Equipment Decontamination and Borehole Abandonment

All drilling equipment was properly decontaminated prior to use and between soil boring locations. The downhole drilling equipment, such as augers, drill rods, drill bits, and soil sampling equipment, were steam cleaned within a portable containment unit.

After soil and groundwater samples were collected, each borehole was sealed with a mixture of cement and bentonite (“grout”) from the total depth to the ground surface. The grout was either poured into the borehole from ground surface, or through a tremie pipe, depending on the total depth of the soil boring and on whether groundwater was present.

2.2.5 Laboratory Analyses

Laboratory analyses of all soil and grab groundwater samples were conducted by SunStar Analytical, a state-certified laboratory located in Tustin, California. Soil samples selected for laboratory analyses were submitted for analyses under a “rush” 24- to 48-hour-turnaround schedule. Samples not initially selected for analyses were

submitted to the laboratory but were placed on hold. Depending on preliminary analytical results, LFR identified individual samples to be taken off hold for analyses.

Depending on the sample locations and field conditions, soil and grab groundwater samples were submitted for some or all of the following analyses:

- TPHd and TPHmo, using Environmental Protection Agency (EPA) test method 8015 modified. Soil samples underwent a silica gel cleanup prior to analysis to remove naturally occurring fats or oils that can result in false positive results for TPH components
- PAHs using EPA test method 8270. Unless specifically requested because of field observations, LFR requested that soil samples be analyzed for PAHs if preliminary analytical results resulted in TPHd or TPHmo concentrations above 100 mg/kg
- VOCs using EPA test method 8260
- Selected metals (arsenic, barium, cobalt, chromium, copper, nickel, and vanadium) using EPA test method 6010

All laboratory-certified analytical results are included in Appendix E.

2.2.6 Data Validation Summary

LFR performed a level III data validation evaluation of the analytical data collected during the site investigation. The data validation evaluation was conducted in accordance with the United States Environmental Protection Agency (U.S. EPA) Data Validation Functional Guidelines for Evaluating Environmental Analyses, "U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," dated October 1999. The following is a summary of the evaluation of analytical data for soil and groundwater samples collected as part of LFR's November 2006 investigation. The samples were submitted to SunStar Analytical.

The data were evaluated based on the following parameters:

- data completeness
- holding times
- blanks
- system monitoring compound spike recoveries (surrogates)
- matrix spike/matrix spike duplicate recoveries (MS/MSD)
- laboratory control spike/laboratory control spike duplicate recoveries (LCS/LCSDs)

A review of the quality assurance/quality control sample analytical results for the groundwater and soil samples did not identified quality issues which would cause the majority of the data to be qualified. The sample temperatures, MS/MSD recoveries,

field duplicates, field blanks, LCS recoveries, and holding times were all within compliance criteria.

The surrogate recoveries for the TPHd and TPHmo analyses in samples B-15-4, B-24-4, and B-24-10 were outside the laboratory established quality control limits. This is likely due to matrix interference within these soil samples. Per data validation guidelines, the TPHd and TPHmo analytical results are qualified as estimated concentrations in these samples.

Copper was detected at a low concentration in one laboratory soil blank. However, the field data results were more than five times greater than the concentration detected in the laboratory blank sample. Per EPA methodology, the relatively low copper concentration in the laboratory blank does not affect field data quality.

2.2.7 Field Documentation

Field activities were documented using appropriate field forms, including a field log of soil borings, sample labels, chain-of-custody forms, and cooler receipt forms. The standardized field documentation helps maintain integrity of field procedures and sample collection during the field investigation activities. Completed field forms are kept on file at LFR and are available upon request.

3.0 LABORATORY ANALYTICAL RESULTS

Analytical results for soil and grab groundwater samples collected by LFR are summarized in Tables 1a through 4. Also included in these tables is a summary of analytical data from previous investigations as presented in the draft Phase II report by ENV. Analytical results are discussed for each of the five LFR-defined areas (Area I through V; Figure 2).

In the sections below, the primary chemicals of potential concern (COPCs) are highlighted for each area. In general, analytical results for samples collected by LFR confirmed that the primary COPCs in soil are TPHd, TPHmo, and to lesser extent, TPHg, metals, and PAHs. For discussion purposes, only significant concentrations are discussed, for example TPHd and TPHmo detected at concentrations above 100 and 500 mg/kg, respectively.

3.1 Petroleum Hydrocarbons in Soil

3.1.1 Area I

Analytical results for soil samples collected by LFR and ENV in Area I are summarized in Table 1a. A review of analytical results for Area I indicates that the primary COPC for this area is TPHd. TPHd was detected at concentrations ranging

from 320 to 7,300 mg/kg in samples collected approximately from 7.5 to 10.5 feet bgs in four soil borings (B-1, B-3, B-4, and EB-13) and one test pit (AP-4). TPHd was not detected at significant concentrations in samples collected from shallower or deeper depths in these locations, indicating that the TPHd-affected soil is vertically limited to between approximately 7 and 12 feet bgs.

TPHg was detected at a concentration of 530 mg/kg in the 10-foot-bgs sample collected from EB-13 located approximately in the center of ENV's proposed area of concern within Area I. TPHg was not detected at significant concentrations in any other soil sample collected within Area I and therefore appears to be limited in extent both vertically and laterally to approximately 10 feet bgs in the immediate vicinity of EB-13.

3.1.2 Area II

Analytical results for soil samples collected by LFR and ENV in Area II are summarized in Table 1b. A review of analytical results for Area II indicates that the primary COPCs for this area are TPHd and TPHmo. Soil samples collected from approximately 8 to 18 feet bgs from test pit CS-2, from approximately 5 feet bgs from soil boring B-6, and from 15 feet bgs from soil boring B-5, contained TPHd and TPHmo at concentrations up to 4,100 and 19,000 mg/kg, respectively.

The TPH-affected soil appears to be localized around the CS-2 test pit location, with TPHmo-affected soil extending to the B-5 and B-6 locations at distinct depths.

3.1.3 Area III

Analytical results for soil samples collected by LFR and ENV in Area III are summarized in Table 1c. A review of analytical results for Area III indicates that the primary COPCs for this area are TPHd and TPHmo. Only the two samples collected from less than 8 feet bgs from test pit PO-1 contained elevated TPHd and TPHmo concentrations. The soil sample collected from 8 feet bgs contained TPHd at 5,900 and TPHmo at 16,000 mg/kg. No other soil samples collected from locations within Area III at depths ranging from 2 to 20 feet bgs contained elevated TPH concentrations, and in most cases TPH concentrations were below laboratory report limits. Therefore, the TPH-affected soil appears to be localized in the upper 10 feet of soil in the vicinity of test pit PO-1.

3.1.4 Area IV

Analytical results for soil samples collected by LFR and ENV in Area IV are summarized in Table 1d. A review of analytical results for Area IV indicates that the primary COPCs for this area are TPHd and TPHmo. TPHd and TPHmo were detected at elevated concentrations in several soil borings (EB-14, EB-30, B-16, and B-24) and test pits (SR-2 and SR-3), and with one exception discussed below, only at depths of less than 10 feet bgs. Concentrations up to 1,000 mg/kg for TPHd and up to 3,500 mg/kg for TPHmo were detected.

Based on these data, the TPH-affected soil appears localized in the following areas:

- in the upper 5 feet of soil near test pit SR-2
- between 5 and 10 feet bgs near test pit SR-3
- between ground surface and 7 feet bgs in the vicinity of soil boring EB-30
- in the upper 10 feet of soil in the vicinity of soil boring B-24

Visual observations made during site investigation activities conducted by ENV in the eastern extension area of the Site (partially coinciding with Area IV) identified a "heavy, black, viscous free phase petroleum product" present at depths approximately between 30 and 40 feet bgs (ENV soil borings EB14, EB-23 through EB-26, and EB-33). Analytical results of the soil sample collected from approximately 33.5 feet bgs in soil boring EB-14 resulted in TPHd and TPHmo concentrations at 7,800 mg/kg and 8,700 mg/kg, respectively. However, the soil sample collected from 43.5 feet bgs in soil boring EB-14 contained only low to non-detected concentrations of TPHd and TPHmo, respectively. LFR visually identified what is presumed to be this same free-phase petroleum product in soil boring B-16 at depths between approximately 25 and 32 feet bgs.

3.2 Metals in Soil

Analytical results for soil samples collected by LFR and ENV in Area V are summarized in Tables 1e (TPH) and 3 (metals). This area appears primarily affected by metals in localized areas. A review of analytical results for Area V indicates that the primary COPCs for this area are arsenic, chromium, cobalt, copper, nickel, and vanadium. Elevated concentrations of these six metals were detected in the 6-foot-bgs sample collected from soil boring EB-20. Elevated cobalt concentrations also were detected in the 35- and 40-foot-bgs samples collected from soil boring EB-34. The area of potential metals-affected soil appears to be localized approximately between 5 and 7 feet bgs in the vicinity of soil boring EB-20.

3.3 PAHs and VOCs in Soil

Of the samples collected by ENV and LFR, 11 were analyzed for PAHs and/or VOCs; analytical data are summarized in Tables 2a and 2b, respectively. VOCs were not detected at significant concentrations in any of the soil samples. Three PAHs were detected at slightly elevated concentrations, namely anthracene, benzo(a)anthracene, and phenanthrene, which were detected at concentrations of 3.3, 2.1, and 12 mg/kg, respectively, in the sample collected from 33.5 feet bgs in soil boring EB-14. Because of the depth of the sample, these detections are not considered significant.

3.4 Petroleum Hydrocarbons in Groundwater

Analytical results for groundwater samples collected by LFR and ENV at the Site are summarized in Table 4. A review of analytical results for groundwater samples indicates that groundwater has been affected by TPHd and TPHmo. The grab groundwater samples collected from soil borings B-22 and EB-29 contained TPHd at concentrations of 1,700 and 150 μg/l, respectively. The grab groundwater sample collected from soil boring EB-29 also contained TPHmo at a concentration of 850 μg/l. None of the other grab groundwater samples contained TPHd or TPHmo above the laboratory reporting limits.

Assuming a generally easterly groundwater flow direction beneath the Site, as indicated by Zone 7 water-level data and as discussed in Section 2.1, soil borings B-22 and EB-29 are located approximately downgradient from areas where TPH-affected soil has been identified. In particular, soil borings B-22 and EB-29 may be located approximately downgradient from the eastern extension area, where free-phase hydrocarbons were identified at depths approximately between 30 and 40 feet bgs.

4.0 REGULATORY APPROACH

The analytical results of the soil and groundwater samples collected by LFR and ENV at the Site indicate that soil and groundwater have been affected by TPHd and TPHmo, likely as a result of historical operations conducted at the Site. Based on our experience working with regulatory agencies, the Site would be considered a “low-risk hydrocarbon” site, and, as such, would not require active remediation. The “low-risk hydrocarbon site” designation is supported by the following considerations:

- TPHd and TPHmo are considered “longer-chain” hydrocarbons that are relatively immobile, have limited solubility, and represent a relatively minor threat to groundwater. The minor threat to groundwater associated with petroleum-affected soil beneath the Site is confirmed by groundwater data collected during the LFR and ENV investigations. Of the seven borings from which groundwater data were collected, hydrocarbons were detected in only two borings, at a maximum concentration of 1.7 milligrams per liter TPHd. It is important to note that this groundwater sample was collected within approximately 50 feet of the estimated extent of hydrocarbon-affected soil.
- The future or the current land use plans do not include residential occupation; in this case, the current land use is industrial and the proposed future land uses are light industrial and commercial.
- There is no direct pathway for humans to be exposed to the affected soil and or groundwater; in this case, there is no complete pathway for humans to be exposed to the affected soil or groundwater. TPHd and TPHmo do not readily off-gas from the soil or groundwater through the soil column to near the ground surface to affect human health through the inhalation of affected outdoor or indoor air.

- The source(s) that have affected soil and/or groundwater (such as underground storage tanks or free-phase hydrocarbons) have been or are planned to be removed; in this case, there appear to be no significant sources to soil.
    - The apparent source of hydrocarbons to groundwater may be the "heavy, black, viscous free phase petroleum product" identified by ENV in the eastern extension area at depths approximately between 30 and 40 feet bgs. Given the depth of this potential source, removal is not a viable option. The nature of this potential source indicates that it is not highly mobile.
    - Site surface features such as the former truck scale and asphalt containment area, which are potential TPH sources to shallow affected soil, are proposed for demolition. It is our understanding that the demolition activities will include overexcavation of affected soil in the areas beneath and adjacent to these surface features.
- The distribution of affected soil has been adequately assessed though the collection and analysis of soil samples by ENV and LFR. It appears that affected soil is localized, generally at depths greater than 5 feet bgs, and therefore is not a significant concern to human health.

Based on regulatory criteria described above and the analytical results of the soil and groundwater samples collected at the Site to date, it is LFR's opinion that the Site would qualify as a low-risk hydrocarbon site.

5.0 CONCLUSIONS

At the request of Hanson, LFR completed an additional Phase II investigation to further assess the extent and magnitude of petroleum-affected soil and groundwater beneath the Site, previously identified by ENV during an initial Phase II investigation.

LFR used the results of the investigations conducted by ENV to design an additional investigation. LFR advanced 24 soil borings to depths approximately ranging from 10 to 65 feet bgs to collect soil and groundwater samples for laboratory analyses. LFR confirmed that the primary COPCs in soil are TPHd and TPHmo, and that groundwater has been affected by TPHd and TPHmo.

Based on the results of the LFR and ENV Phase II investigations, the site setting, and our experience with similar sites, LFR finds that soil and groundwater conditions at the Site meet the criteria of a "low-risk hydrocarbon site," as defined by the San Francisco Bay Regional Water Quality Control Board. As such, if the site usage is to remain commercial/industrial, it is not likely that active remediation of the soil or groundwater beneath the Site will be required by the regulatory agencies.

Findings that support this conclusion include:

- **The primary COPCs at the Site are TPHd and TPHmo. These are longer-chain hydrocarbons that are relatively immobile, have limited solubility, and represent a relatively minor threat to groundwater.** The minor threat to groundwater associated with petroleum-affected soil beneath the Site is confirmed by groundwater data collected during the LFR and ENV investigations. Of the seven borings from which groundwater samples were collected and analyzed, petroleum hydrocarbons were detected in only two borings, at a maximum concentration of 1.7 mg/l TPHd. It is important to note that this groundwater sample was collected within approximately 50 feet of the estimated extent of hydrocarbon-affected soil detected at the Site. Although this limited groundwater impact will likely need to be confirmed and further assessed with data from groundwater monitoring wells, the existing set of data from "grab" groundwater samples from the LFR and ENV investigations provides an adequate level of certainty to support this conclusion.
- **The Site lies within a large industrial land use area, and is zoned for commercial and industrial use.** It is our understanding that the future and current land use plans do not include residential occupation.
- **The primary source(s) for COPCs that have affected soil and/or groundwater (such as underground storage tanks or free-phase hydrocarbons) have been or will be removed.** For example, site surface features such as the former truck scale and asphalt containment area, which are potential TPH sources to shallow affected soil, are proposed for demolition. It is our understanding that the demolition activities will include overexcavation of affected soil in the areas beneath and adjacent to these surface features.

6.0 REFERENCES

ENV America Inc. (ENV). 2006. Draft Phase II Environmental Site Assessment, 3000 Busch Road, Pleasanton, California. November.

Jones and Stokes. 2006. Annual Report for the Groundwater Management Plan, 2005 Water Year. Prepared for the Zone 7 Water Agency. September.

LFR Inc. (LFR). 2006. Proposal to Conduct an Additional Phase II Environmental Site Assessment Investigation and Evaluate Remediation Options and Costs for the Former Asphalt Plant Area, Hanson Radum Facility, 3000 Busch Road, Pleasanton, California. November 10.

Table 1a
Area I - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds
AREA I										
Soil Samples Collected by LFR										
B-1-4.5	4.5	11/14/2006	<10	<10	<0.5	NA	NA	NA	NA	NA
B-1-7.5	7.5	11/14/2006	**320**	<10	**5.9**	<0.002	<0.002	<0.002	<0.004	see Tables 2a/2b
B-1-10	10	11/14/2006	<10	<10	<0.5	NA	NA	NA	NA	NA
B-1-14.5	14.5	11/14/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-1-18	18	11/14/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-2-5	5	11/13/2006	<10	<10	<0.5	NA	NA	NA	NA	NA
B-2-10	10	11/13/2006	<10	<10	<0.5	NA	NA	NA	NA	NA
B-2-14	14	11/13/2006	<10	<10	<0.5	NA	NA	NA	NA	NA
B-2-19.5	19.5	11/13/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-3-5	5	11/14/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-3-7	7	11/14/2006	**27**	<10	**0.5**	NA	NA	NA	NA	NA
B-3-10	10	11/14/2006	**7,300**	**330**	**38**	NA	NA	NA	NA	see Table 2a
B-3-14	14	11/14/2006	**2,100**	<10	NA	NA	NA	NA	NA	NA
B-3-18	18	11/14/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-4-5	5	11/14/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-4-10.5	10.5	11/14/2006	**6,400**	**460**	33	NA	NA	NA	NA	see Table 2a
B-4-15	15	11/14/2006	**7,100**	<10	NA	NA	NA	NA	NA	NA
B-4-18	18	11/14/2006	hold	hold	hold	hold	hold	hold	hold	hold
Soil Samples Collected by ENV										
CS1-2	2	9/27/2006	**91**	**260**	NA	NA	NA	NA	NA	NA
CS1-8	8	9/27/2006	**52**	**170**	NA	NA	NA	NA	NA	NA
CS1-12	12	9/27/2006	**59**	**190**	NA	NA	NA	NA	NA	NA
CS1-13	13	9/27/2006	**59**	**190**	NA	NA	NA	NA	NA	NA

Table 1a
Area I - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds
AP4-9-10	9-10	9/26/2006	**5,600**	<50	NA	NA	NA	NA	NA	see Tables 2a/2b
AP-5 - 2	2	9/27/2006	<0.99	<49	NA	NA	NA	NA	NA	NA
AP-5 - 8	8	9/27/2006	**2.6**	<50	NA	NA	NA	NA	NA	NA
AP-5-15	15	9/27/2006	<1.0	<50	NA	NA	NA	NA	NA	NA
EB12-20	20	10/9/2006	<1.0	<50	<0.25	<0.005	<0.005	<0.005	<0.010	NA
EB13-10	10	10/9/2006	**400**	**240**	**530**	<2.0	<2.0	<2.0	<4.0	NA
EB13-15	15	10/9/2006	<0.99	<50	**0.33**	<0.005	<0.005	<0.005	<0.0099	NA
EB13 -20	20	10/9/2006	**16**	<50	**0.31**	<0.005	<0.005	<0.005	<0.0099	NA
EB17-6	6	10/20/2006	<0.96	<48	<0.22	<0.0044	<0.0044	<0.0044	<0.0098	NA
EB17-15	15	10/20/2006	<0.97	<48	<0.24	<0.0047	<0.0047	<0.0047	<0.0095	NA
EB-18-15	15	10/20/2006	<1.0	<50	<0.22	<0.0045	<0.0045	<0.0045	<0.009	NA
EB-18-20	20	10/20/2006	<0.95	<48	<0.22	<0.0045	<0.0045	<0.0045	<0.009	NA
Trans-C	0.5	9/29/2006	**6.7**	<50	NA	NA	NA	NA	NA	NA

Notes:
Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.
Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.
NA = parameter not analyzed
ND = parameter not present above laboratory reporting limits
TPHd = total petroleum hydrocarbons as diesel
TPHmo = total petroleum hydrocarbons as motor oil
TPHg = total petroleum hydrocarbons as gasoline
Bold Text indicates parameter detected above laboratory reporting limit.

Table 1b
Area II - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds
AREA II										
Soil Samples Collected by LFR										
B-5-5	5	11/15/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-5-10	10	11/15/2006	<10	**160**	NA	NA	NA	NA	NA	see Table 2a
B-5-15	15	11/15/2006	<10	**7,800**	NA	NA	NA	NA	NA	see Table 2a
B-6-5	5	11/15/2006	<10	**19,000**	NA	NA	NA	NA	NA	see Table 2a
B-6-10	10	11/15/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-6-15	15	11/15/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-7-5	5	11/15/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-7-11	11	11/15/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-7-15	15	11/15/2006	hold	hold	hold	hold	hold	hold	hold	hold
Soil Samples Collected by ENV										
EB-11-20	5	10/9/2006	<1.0	<50	<0.24	<0.0049	<0.0049	<0.0049	<0.0097	NA
EB-16@2'	2	10/20/2006	**20**	**60**	<0.23	<0.0045	<0.0045	<0.0045	<0.009	NA
EB-16@5'	5	10/20/2006	**5.4**	<50	<0.22	<0.0044	<0.0044	<0.0044	<0.0088	NA
EB-16@16.5	16.5	10/20/2006	**4.6**	<50	<0.21	<0.0043	<0.0043	<0.0043	<0.0085	NA
CS2-8	8	9/27/2006	**1,800**	**3,600**	NA	NA	NA	NA	NA	NA
CS2-15	15	9/27/2006	**4,100**	**9,300**	NA	NA	NA	NA	NA	see Table 2a
CS2-18	18	9/27/2006	**3,000**	**6,000**	NA	NA	NA	NA	NA	NA

Notes:
Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.
Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.
NA = parameter not analyzed
ND = parameter not present above laboratory reporting limits
TPHd = total petroleum hydrocarbons as diesel
TPHg = total petroleum hydrocarbons as gasoline
TPHmo = total petroleum hydrocarbons as motor oil
Bold Text indicates parameter detected above laboratory reporting limit.

Table 1c
Area III - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds
AREA III										
Soil Samples Collected by LFR										
B-8-13	13	11/14/2006	< 10	< 10	< 0.5	NA	NA	NA	NA	see Table 2b
B-8-18	18	11/14/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-9-5	5	11/15/2006	< 10	< 10	< 0.5	NA	NA	NA	NA	NA
B-9-10	10	11/15/2006	< 10	< 10	< 0.5	NA	NA	NA	NA	NA
B-9-15	15	11/15/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-10-5	5	11/15/2006	< 10	< 10	< 0.5	NA	NA	NA	NA	NA
B-10-10	10	11/15/2006	< 10	< 10	< 0.5	NA	NA	NA	NA	NA
B-10-15	15	11/15/2006	hold	hold	hold	hold	hold	hold	hold	hold
Soil Samples Collected by ENV										
PO1-2	2	9/27/2006	**170**	**280**	NA	NA	NA	NA	NA	NA
PO1-8	8	9/27/2006	**5,900**	**16,000**	NA	NA	NA	NA	NA	NA
PO1-12	12	9/27/2006	**4.7**	< 49	NA	NA	NA	NA	NA	NA
PO2-2	2	9/27/2006	**43**	**280**	NA	NA	NA	NA	NA	NA
PO2-8	8	9/27/2006	**2.2**	< 50	NA	NA	NA	NA	NA	NA
PO2-15	15	9/27/2006	< 0.99	< 50	NA	NA	NA	NA	NA	NA
AP2-2	2	9/26/2006	**3.1**	< 50	NA	NA	NA	NA	NA	NA
AP2-8	8	9/26/2006	**1.5**	< 50	NA	NA	NA	NA	NA	NA
AP2-13	13	9/26/2006	**1.6**	< 50	NA	NA	NA	NA	NA	NA
AP3-2	2	9/26/2006	**3.7**	< 50	NA	NA	NA	NA	NA	NA
AP3-8	8	9/26/2006	**1.1**	< 50	NA	NA	NA	NA	NA	NA
AP3-15	15	9/26/2006	**1.6**	< 50	NA	NA	NA	NA	NA	NA
EB9-5	5	10/9/2006	**3.5**	< 49	NA	NA	NA	NA	NA	NA
EB9-10	10	10/9/2006	**1.1**	< 50	NA	NA	NA	NA	NA	NA
EB9-20	20	10/9/2006	**1.9**	< 50	NA	NA	NA	NA	NA	NA
EB10-5	5	10/9/2006	**1.7**	< 50	NA	NA	NA	NA	NA	NA
EB10-10	10	10/9/2006	< 1.0	< 50	NA	NA	NA	NA	NA	NA
EB10-25	25	10/9/2006	**1.3**	< 50	NA	NA	NA	NA	NA	NA

Table 1c
Area III - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds

Notes:

Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.

Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.

NA = parameter not analyzed

ND = parameter not present above laboratory reporting limits

TPHd = total petroleum hydrocarbons as diesel

TPHmo = total petroleum hydrocarbons as motor oil

TPHg = total petroleum hydrocarbons as gasoline

Bold Text indicates parameter detected above laboratory reporting limit.

Table 1d
Area IV - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds
AREA IV										
Soil Samples Collected by LFR										
B-11-5	5	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	see Table 2a
B-11-10	10	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	see Table 2a
B-11-15	15	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-11-22.5	22.5	11/15/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-12-4.5	4.5	11/13/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-12-9.5	9.5	11/13/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-12-14.5	14.5	11/13/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-13-5	5	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-13-7.5	7.5	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-13-10	10	11/15/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-14-5	5	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-14-10	10	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-14-15	15	11/15/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-15-4	4	11/15/2006	< 10 J	**220** J	NA	NA	NA	NA	NA	NA
B-15-7	7	11/15/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-15-10	10	11/15/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-16-3	3	11/13/2006	**890**	180	NA	NA	NA	NA	NA	see Table 2a
B-16-25.5	25.5	11/13/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-16-30.5	30.5	11/13/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-16-31.5	31.5	11/13/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-20-4	4	11/16/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-20-7	7	11/16/2006	< 10	< 10	NA	NA	NA	NA	NA	NA
B-20-10	10	11/16/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-20-15	15	11/16/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-24-4	4	11/16/2006	< 10 J	**1,300** J	NA	NA	NA	NA	NA	see Table 2a
B-24-7	7	11/16/2006	< 10	**650**	NA	NA	NA	NA	NA	see Table 2a
B-24-10	10	11/16/2006	< 10 J	**3,500** J	NA	NA	NA	NA	NA	see Table 2a
B-24-15	15	11/16/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-24-20	20	11/16/2006	hold	hold	hold	hold	hold	hold	hold	hold
Soil Samples Collected by ENV										
SR1-1	1	9/26/2006	**19**	**110**	NA	NA	NA	NA	NA	NA
SR1-8	8	9/26/2006	< 1.0	< 50	NA	NA	NA	NA	NA	NA
SR1-15	15	9/26/2006	< 1.0	< 50	NA	NA	NA	NA	NA	NA
SR2-5	5	9/26/2006	**130**	**450**	NA	NA	NA	NA	NA	NA
SR2-8	8	9/26/2006	**55**	**220**	NA	NA	NA	NA	NA	NA
SR2-15	15	9/26/2006	**4.0**	< 50	NA	NA	NA	NA	NA	NA
SR3-7	7	9/26/2006	**1,000**	**1,700**	NA	NA	NA	NA	NA	see Table 2a
SR3-12	12	9/26/2006	**28**	**130**	NA	NA	NA	NA	NA	NA
SR4-2	2	9/26/2006	**5.6**	< 50	NA	NA	NA	NA	NA	NA
SR4-8	8	9/26/2006	**4.9**	< 50	NA	NA	NA	NA	NA	NA
SR4-13	13	9/26/2006	< 50	< 50	NA	NA	NA	NA	NA	NA

Table 1d
Area IV - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds
AP1-1	1	9/26/2006	**4.4**	ND	NA	NA	NA	NA	NA	NA
AP1-8	8	9/26/2006	<0.99	<50	NA	NA	NA	NA	NA	NA
AP1a-11	11	9/26/2006	**9.0**	<50	NA	NA	NA	NA	NA	NA
RR3-2.5	2.5	10/9/2006	NA	NA	NA	NA	NA	NA	NA	NA
EB-14@2'	2	10/19/2006	**140**	<490	<0.25	<0.005	<0.005	<0.005	<0.010	ND
EB-14@6'	6	10/19/2006	<0.99	<50	<0.25	<0.005	<0.005	<0.005	<0.010	ND
EB-14@15'	15	10/19/2006	<0.99	<50	<0.25	<0.005	<0.005	<0.005	<0.010	ND
EB-14@33.5'	33.5	10/19/2006	**7,800**	**8,700**	**32**	<0.025	<0.025	<0.025	<0.0099	see Table 2a/2b
EB-14@43.5'	43.5	10/19/2006	**2.2**	<50	<0.25	<0.0049	<0.0049	<0.0049	<0.0098	ND
EB-30-5	5	10/26/2006	**200**	**1,300**	<0.25	<5.0	<5.0	<5.0	<0.010	ND
EB-30-10	10	10/26/2006	**1.6**	<49	<0.25	<0.0049	<0.0049	<0.0049	<0.0098	ND
EB-30-15	15	10/26/2006	**7.6**	**50**	<0.25	<0.0048	<0.0048	<0.0048	<0.0097	ND
EB-30-35	35	10/26/2006	<1.0	<50	<0.25	<0.005	<0.005	<0.005	<0.010	ND
EB-30-40	40	10/26/2006	<0.99	<49	<0.24	<0.0049	<0.0049	<0.0049	<0.0098	ND
EB-33-40	40	10/26/2006	**13.0**	<50	**0.29**	<0.0049	<0.0049	<0.0049	<0.0098	ND

Notes:
Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.
Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.
NA = parameter not analyzed
ND = parameter not present above laboratory reporting limits
TPHd = total petroleum hydrocarbons as diesel
TPHmo = total petroleum hydrocarbons as motor oil
TPHg = total petroleum hydrocarbons as gasoline
J = estimated concentration because the surrogate percent recovery is out of laboratory quality control limits
Bold Text indicates parameter detected above laboratory reporting limit.

Table 1e
Area V - Analytical Results of Petroleum Hydrocarbons in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	Other Organic Compounds
AREA V										
Soil Samples Collected by LFR										
B-17-5.5	5.5	11/13/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-17-9	9	11/13/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-18-6	6	11/16/2006	<10	<10	NA	NA	NA	NA	NA	NA
B-18-10	10	11/16/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-19-6	6	11/16/2006	hold	hold	hold	hold	hold	hold	hold	hold
B-19-10	10	11/16/2006	hold	hold	hold	hold	hold	hold	hold	hold
Soil Samples Collected by ENV										
EB-15	2	10/19/2006	<0.97	<49	<0.24	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098
EB-15	6	10/19/2006	<0.95	<48	<0.24	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096
EB-15	10	10/19/2006	<0.99	<49	<0.25	<0.0050	<0.0050	<0.0050	<0.0050	<0.0099
EB-15	15	10/19/2006	<0.95	<47	<0.25	<0.0050	<0.0050	<0.0050	<0.0050	<0.0099
EB-20	2	10/20/2006	<0.98	<49	<0.25	<0.0050	<0.0050	<0.0050	<0.0050	<0.010
EB-20	6	10/20/2006	<0.96	<48	<0.25	<0.0046	<0.0046	<0.0046	<0.0046	<0.0092
EB-34	35	10/26/2006	<0.98	<49	<0.24	<0.0047	<0.0047	<0.0047	<0.0047	<0.0095
EB-34	40	10/26/2006	<0.98	<49	<0.23	<0.0047	<0.0047	<0.0047	<0.0047	<0.0093

Notes:
Samples collected by LFR were analyzed by SunStar Laboratories, Inc., located in Tustin, CA.
Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.
NA = parameter not analyzed
ND = parameter not present above laboratory reporting limits
TPHd = total petroleum hydrocarbons as diesel
TPHmo = total petroleum hydrocarbons as motor oil
TPHg = total petroleum hydrocarbons as gasoline
Bold Text indicates parameter detected above laboratory reporting limit.

Table 2a
Analytical Results of Organic Compounds in Soil Samples
Polycyclic Aromatic Hydrocarbons
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	Ace-naphthene	Anthra-cene	Benzo(a) anthra-cene	Benzo (g,h,i) perylene	Chrysene	Fluor-anthene	Fluorene	Naphtha-lene	Phenan-threne	Pyrene
Soil Samples Collected by LFR												
AREA I												
B-1-7.5	7.5	11/14/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	**0.44**	<0.3
B-3-10	10	11/14/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
B-4-10.5	10.5	11/14/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
AREA II												
B-5-10	10	11/15/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
B-5-15	15	11/15/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
B-6-5	5	11/15/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
AREA IV												
B-11-5	5	11/15/2006	<0.3	<0.3	<0.3	<1	<0.3	**0.46**	<0.3	<0.3	**0.80**	<0.3
B-11-10	10	11/15/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	**0.36**	<0.3
B-15-4	4	11/16/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	**0.36**	<0.3
B-16-3	3	11/13/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
B-24-4	4	11/16/2006	<0.3	<0.3	<0.3	<1	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
B-24-7	7	11/16/2006	<3.0	<3.0	<3.0	<10	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
B-24-10	10	11/16/2006	<3.0	<3.0	<3.0	<10	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Soil Samples Collected by ENV												
AP4-9-10	9-10	9/26/2006	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**3.2**	**2.4**	**5**	<0.25
CS2-15	15	9/27/2006	<0.005	<0.005	<0.005	<0.005	<0.005	**0.044**	**0.017**	<0.005	<0.005	<0.005
SR3-7	7	9/26/2006	<0.25	<0.25	0.36	<0.25	**0.63**	<0.25	**0.98**	**1.3**	**1.4**	<0.25
EB-14@33.5'	33.5	10/19/2006	**3.1**	**3.3**	**2.1**	**1.0**	**3.5**	<0.25	**4.5**	<0.25	**12**	**4.7**

Table 2a
Analytical Results of Organic Compounds in Soil Samples
Polycyclic Aromatic Hydrocarbons
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	Ace-naphthene	Anthra-cene	Benzo(a) anthra-cene	Benzo (g,h,i) perylene	Chrysene	Fluor-anthene	Fluorene	Naphtha-lene	Phenan-threne	Pyrene

Notes:

Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.

Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.

NA = parameter not analyzed

Bold Text indicates parameter detected above laboratory reporting limit.

Table 2b
Analytical Results of Organic Compounds in Soil Samples
Volatile Organic Compounds
Hanson Radum Former Hot Mix Asphalt Plant Area
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	n-Butyl-benzene	sec-Butyl-benzene	tert-Butyl-benzene	n-Propyl-benzene	1,2,3-Trichloro-benzene	1,2,4 Trichloro-benzene	1,3,5 Trimethyl-benzene	1,2,4 Trimethyl-benzene
Soil Samples Collected by LFR										
AREA I										
B-1-7.5	7.5	11/14/2006	**0.013**	**0.012**	**0.0074**	**0.0077**	**0.011**	**0.0072**	**0.018**	**0.023**
AREA III										
B-8-13	13	11/14/2006	**0.0033**	< 0.002	< 0.002	< 0.002	**0.0021**	**0.0021**	< 0.002	< 0.002
Soil Samples Collected by ENV										
AP4-9-10	9-10	9/26/2006	**1.5**	**0.99**	NA	NA	NA	NA	NA	NA
EB-14@33.5'	33.5	10/19/2006	**0.12**	**0.041**	ND	**0.063**	ND	ND	ND	ND

Notes:
Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.
Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.
NA = parameter not analyzed
ND = parameter not present above laboratory reporting limits
NE = ESL value not established
Bold Text indicates parameter detected above laboratory reporting limit.

Table 3
Analytical Results for Metals in Soil Samples
Hanson Radum Former Hot Mix Asphalt Plant
3000 Busch Road, Pleasanton, California
concentrations in milligrams per kilogram (mg/kg)

Sample ID	Sample Depth (feet below grade)	Date Sample Collected	Arsenic	Barium	Chromium	Cobalt	Copper	Nickel	Vanadium
Soil Samples Collected by LFR									
Area III									
B-9-5	5	11/15/2006	< 5	**43**	**15**	**4.5**	**14**	**29**	**8.8**
B-9-10	10	11/15/2006	< 5	**49**	**23**	**5.3**	**14**	**39**	**12**
B-10-5	5	11/15/2006	< 5	**50**	**12**	**3.8**	**28**	**18**	**7.2**
B-10-10	10	11/15/2006	< 5	**32**	**13**	**4.3**	**22**	**26**	**7.2**
Area IV									
B-16-3	3	11/13/2006	< 5	**77**	**27**	**6.3**	**21**	**44**	**17**
Area V									
B-17-5.5	5.5	11/13/2006	< 5	**45**	**16**	**4.1**	**9.6**	**29**	**11**
B-17-9	9	11/13/2006	< 5	**74**	**28**	**6.4**	**21**	**54**	**16**
B-18-6	6	11/16/2006	< 5	**48**	**14**	**3.9**	**37**	**33**	**7.4**
B-18-10	10	11/16/2006	< 5	**70**	**20**	**6.3**	**22**	**36**	**12**
B-19-6	6	11/16/2006	< 5	**58**	**28**	**6.0**	**19**	**45**	**13**
B-19-10	10	11/16/2006	< 5	**110**	**11**	**3.4**	**19**	**20**	**7.5**
Soil Samples Collected by ENV									
EB20-2	2	10/20/2006	**2.8**	**90**	**30**	**7.3**	**40**	**46**	**22**
EB20-6	6	10/20/2006	**60**	**940**	**220**	**89**	**330**	**310**	**220**
EB34-35	35	10/26/2006	**5.1**	**130**	**53**	**12**	**25**	**6.0**	**26**
EB34-40	40	10/26/2006	**4.4**	**120**	**11**	**63**	**24**	**73**	**26**

Notes:
Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.
Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.
Bold Text indicates parameter detected above laboratory reporting limit.

Table 4
Analytical Results for Groundwater Samples
Hanson Radum Former Hot Mix Asphalt Plant
3000 Busch Road, Pleasanton, California
concentrations in micrograms per liter (µg/l)

Sample ID	Approximate Sample Depth (feet below grade)	Date Sample Collected	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Organic Compounds
Grab Groundwater Samples Collected by LFR										
GGW-21	60	11/15/2006	< 50	< 50	NA	NA	NA	NA	NA	NA
GGW-22	50	11/15/2006	**1,700**	< 50	NA	< 0.5	< 0.5	**0.59**	**1.2**	*
GGW-23	55	11/16/2006	< 50	< 50	NA	NA	NA	NA	NA	NA
Grab Groundwater Samples Collected by ENV										
EB-15W@55'	55	10/19/2006	< 50	< 500	< 50	< 0.5	< 0.5	< 0.5	< 1	NA
EB-16W@55'	55	10/20/2006	< 50	< 500	< 50	< 0.5	< 0.5	< 0.5	< 1	NA
EB-22W@60'	60	10/20/2006	< 50	< 500	< 50	< 0.5	< 0.5	< 0.5	< 1	ND
EB-29W@52'	52	10/25/2006	**150**	**850**	< 50	< 0.5	< 0.5	< 0.5	< 1	ND

Notes:

Samples collected by LFR were analyzed by SunStar Analytical, located in Tustin, CA.

Samples collected by ENV were analyzed by Severn Trent Laboratories, located in Pleasanton, CA.

NA = parameter not analyzed

ND = parameter not present above laboratory reporting limits

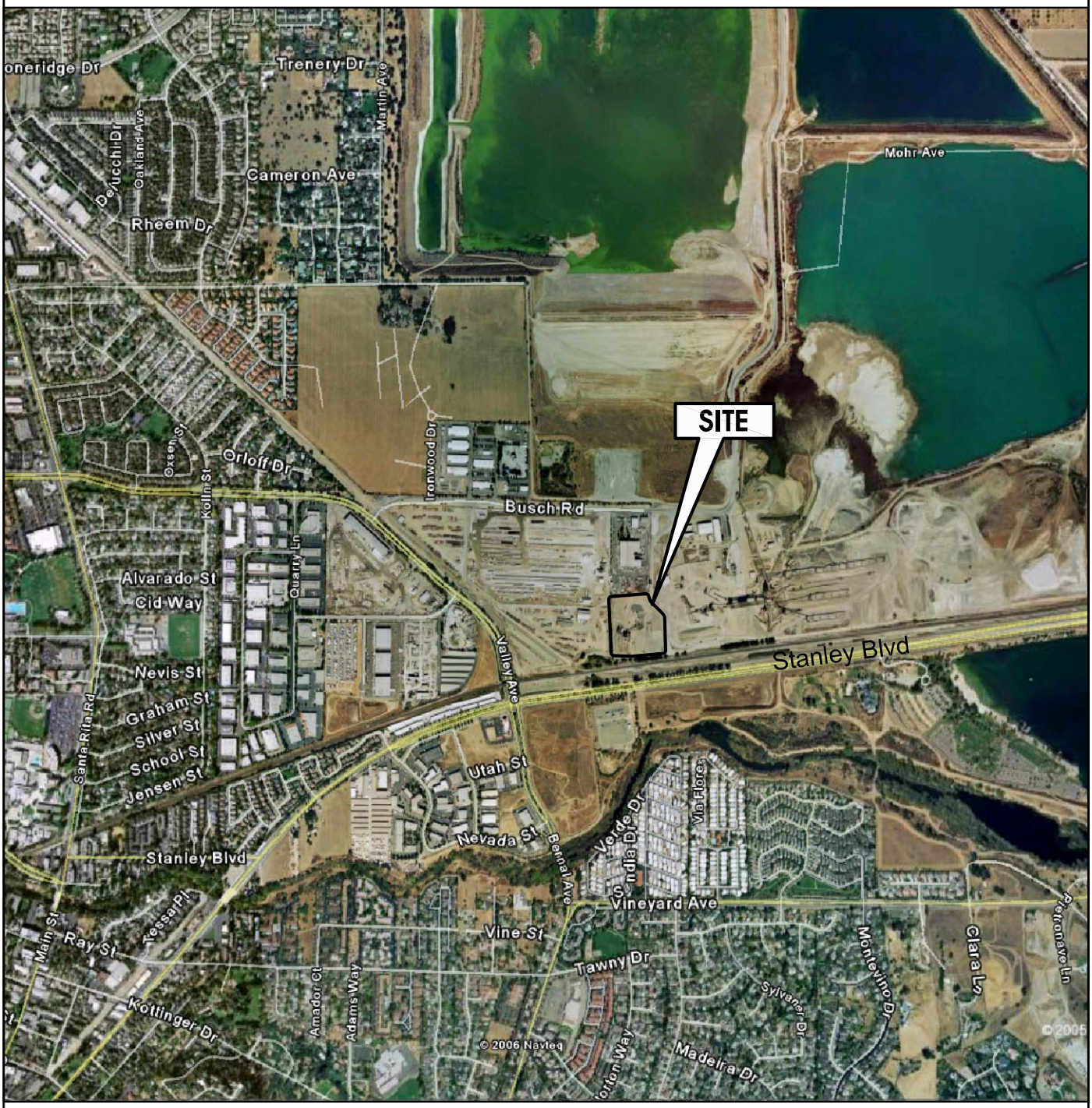
TPHd = total petroleum hydrocarbons as diesel

TPHmo = total petroleum hydrocarbons as motor oil

TPHg = total petroleum hydrocarbons as gasoline

Bold Text indicates parameter detected above laboratory reporting limit.

* Isopropylbenzene (2.5 µg/l)



N

0 1500 FEET

APPROXIMATE SCALE

Source: Google Earth

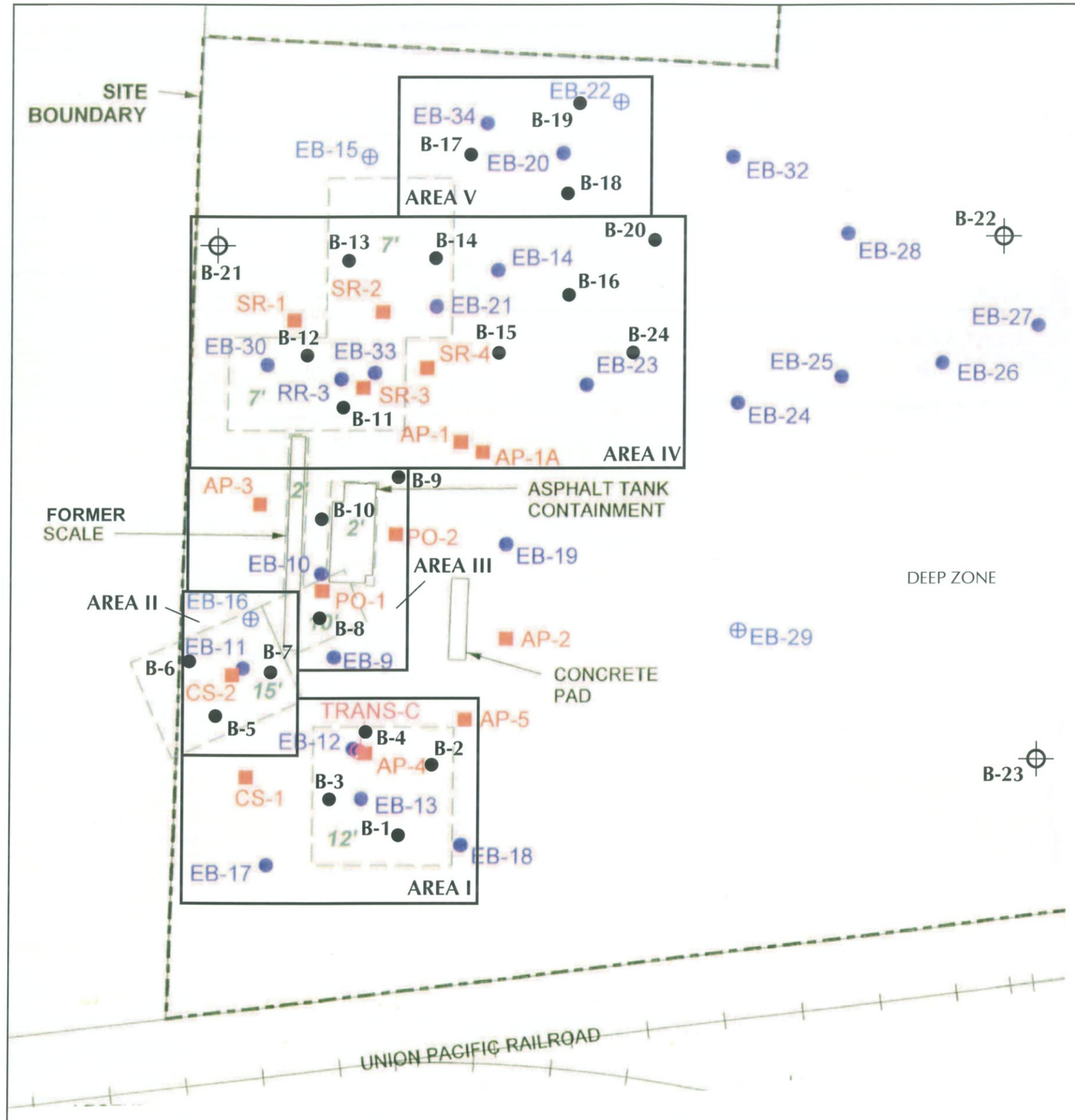
Site Vicinity Map

3000 Busch Road, Pleasanton, California

LFR

Figure 1

I:\Design\001\09567\00\dwg\Pleasanton Drilling Locations.dwg Nov 22,2006-1:08pm



LEGEND

- LFR soil boring location
- LFR grab groundwater location
- ENV test pit sampling location
- ENV borehole sampling location
- ENV soil sample location
- ENV borehole and grab groundwater sample location
- 7' ENV proposed excavation, depth below ground surface in feet [1]

[1] Based on ESL Criteria established by RWQCB for Shallow Soil in Residential Zoning

TPH = total petroleum hydrocarbons

RWQCB = California Regional Water Quality Control Board, San Francisco Bay Region

Source: ENV America - Figure 3 Hanson Radum Site

Approximate Soil and Groundwater Sample Locations by LFR and ENV September through November 2006

3000 Busch Road, Pleasanton, California

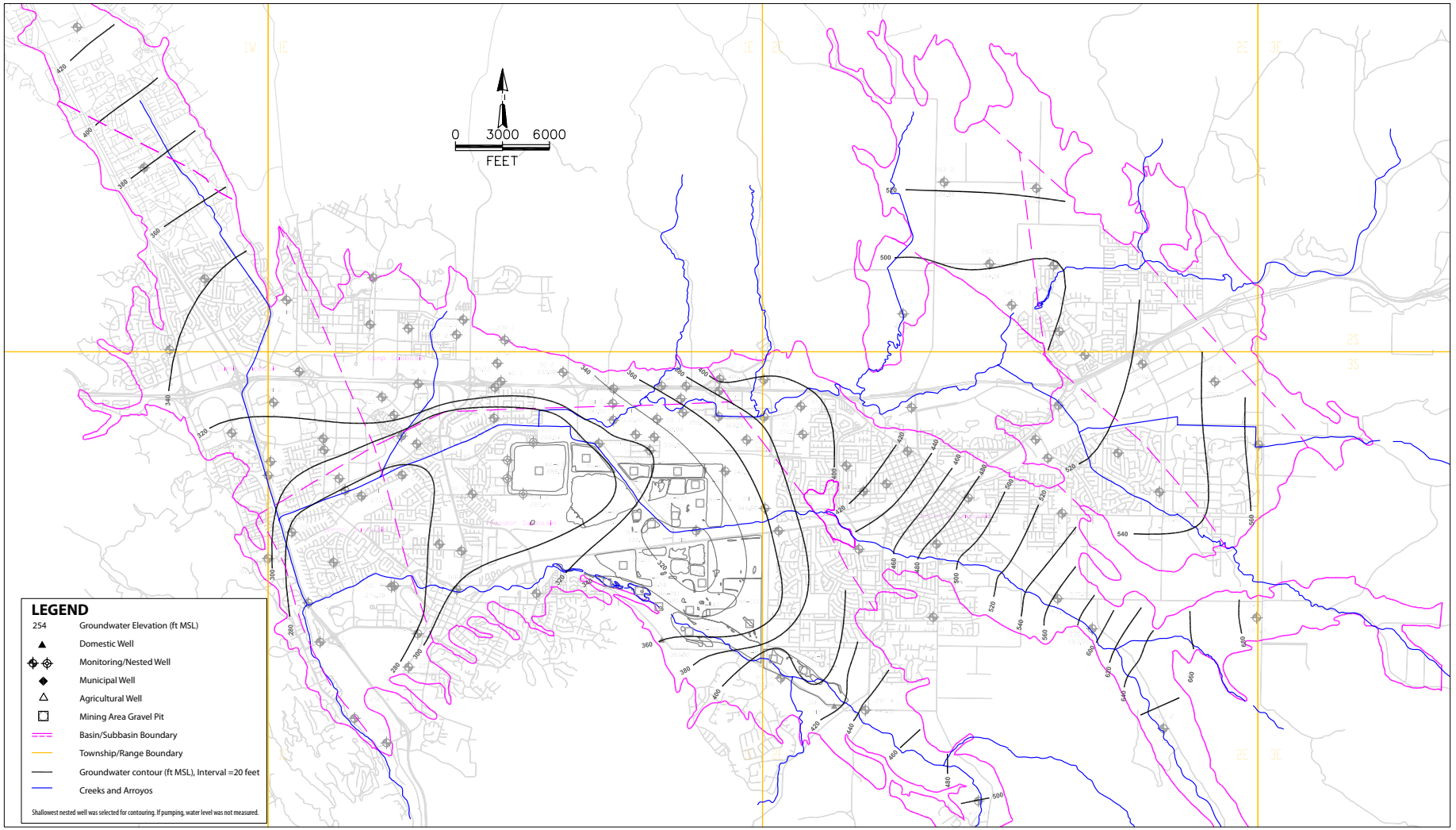
LFR

Figure 2

I:\Design\001\09567\00\dwg\Pleasanton Drilling Locations.dwg Dec 06,2006-2:54pm

APPENDIX A

Selected Figures from the Alameda County Zone 7 Water Agency Livermore Annual Report (Jones and Stokes 2006)



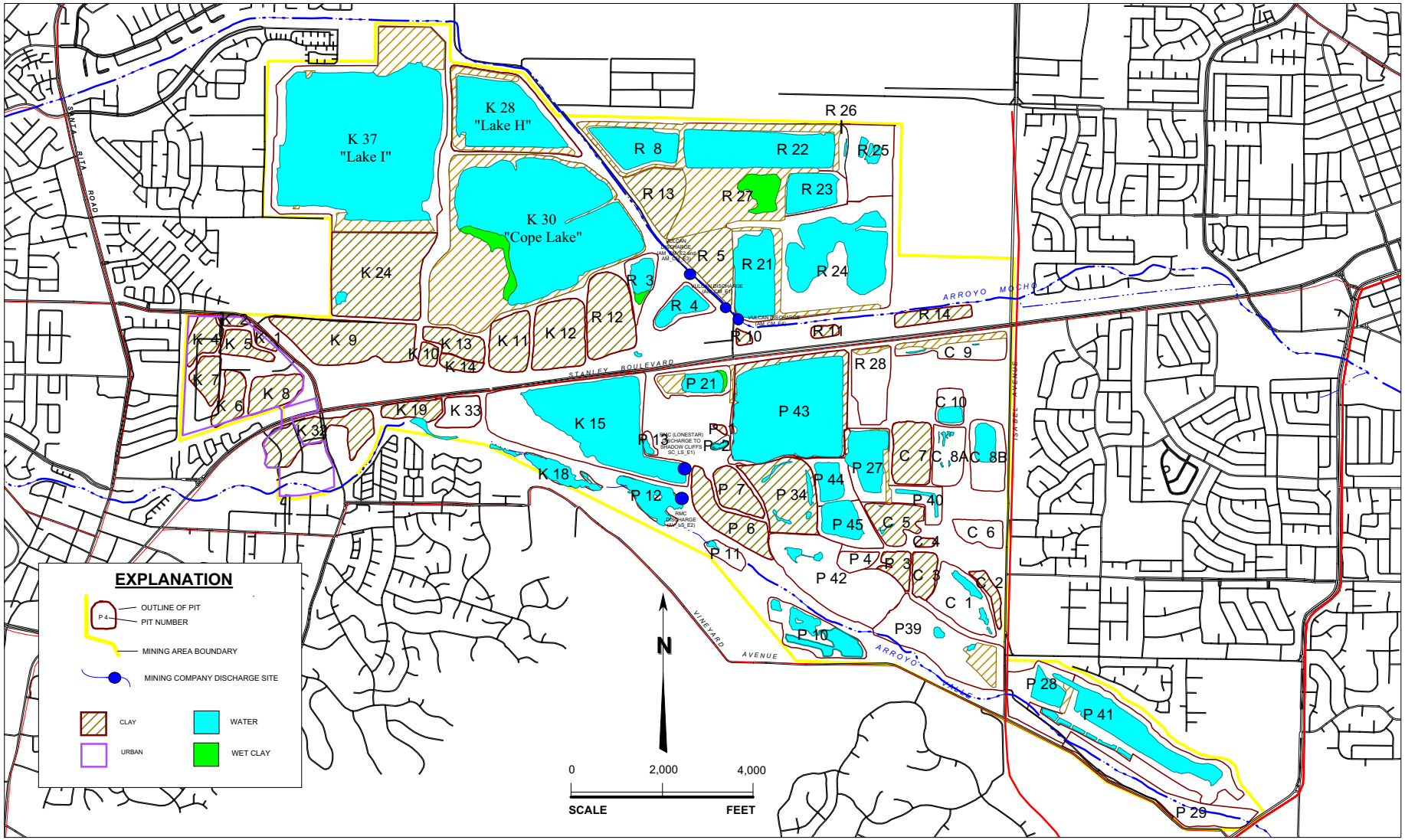
ZONE 7 WATER AGENCY
100 NORTH CANYONS PKWY
LIVERMORE, CA 94551

DWN: TR
DES.:
CHK:
APPD:

SCALE: 1" = 6000'
DATE: May 24, 2006
FILE: E:\Monitor\GM\2004WY\Annual\Figures\Fig06-SAF05Upper.dwg

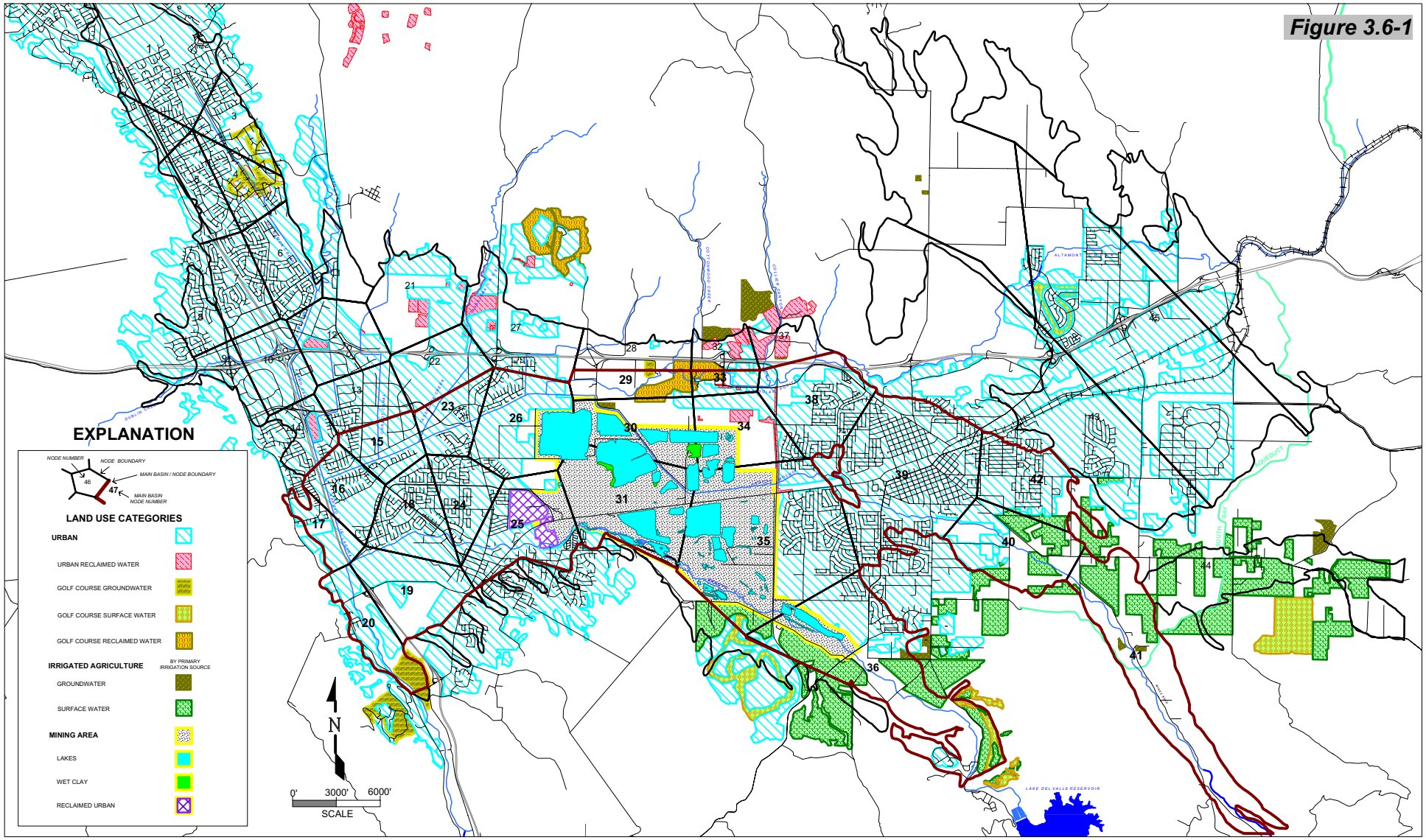
Figure 3.2-2
Groundwater Elevation Program
Gradient in Upper Aquifer – September 2005

FALL 2005 **FIGURE 3.5-1**



ZONE 7 WATER AGENCY 100 N CANYONS PKWY, LIVERMORE, CA 94551	DRAWN TODD WENDLER DESIGNED T.WENDLER CHECKED APPROVED	WATER RESOURCES MINING AREA MONITORING PROGRAM **LOCATION OF GRAVEL MINING PITS**	SCALE 1" = 2,000' DATE 30 December 2005 FILE NO. h:\ma\2005\maF05.mapinfo

Figure 3.6-1



ZONE 7 WATER AGENCY 100 North Canyons Pkwy, Livermore, CA 94551	DRAWN: TODD WENDLER DESIGNED: TODD WENDLER CHECKED: SAL SEGURA APPROVED:	WATER RESOURCES ***LIVERMORE VALLEY LANDUSE*** ***2005 WATER YEAR***	SCALE: 1" = 6000' DATE: 1 May 2006 FILE NO.: B-142 | LU_05.WOR

APPENDIX B

Approved Drilling Permit

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551 PHONE (925) 454-5000

November 14, 2006

Ms. Katrin Schliewen
LFR, Inc.
1900 Powell Street, 12th floor
Emeryville, CA 94608-1827

Dear Ms. Schliewen:

Enclosed is drilling permit 26194 for a contamination investigation at 3000 Busch Road Avenue in Pleasanton for Hanson Aggregates. Also enclosed is a current drilling permit application for your files. Drilling permit applications for future projects can also be downloaded from our web site at www.zone7water.com.

Please note that permit conditions A-2 and G requires that a report be submitted after completion of the work. The report should include drilling and completion logs, location sketch, permit number and any analysis of the soil and water samples. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact me at extension 5056 or Matt Katen at extension 5071.

Sincerely,

Wyman Hong

Wyman Hong
Water Resources Specialist

Enc.

ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 454-5728

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT Former hot mix asphalt plant
Hanson - Radum
3000 Busch Rd. Pleasanton, CA

California Coordinates Source _____ ft. Accuracy _____ ft.
CCN _____ ft. CCE _____ ft.
APN _____

CLIENT
Name Hanson Aggregates Northern California
Address 3000 Busch Rd Phone 925-426-4170
City Pleasanton Zip 94566

APPLICANT
Name Katrin Schliewen
LFR Inc Fax 510-652-4906
Address 1900 Powell St Phone 510-596-9637
City Emeryville Zip 94608

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	••	General	••
Water Supply	••	Contamination	✓
Monitoring	••	Well Destruction	••

PROPOSED WELL USE

New Domestic	••	Irrigation	••
Municipal	••	Remediation	••
Industrial	••	Groundwater Monitoring	••
Dewatering	••	Other _____	••••

DRILLING METHOD:

Mud Rotary	••	Air Rotary	••	Hollow Stem Auger	✓
Cable Tool	••	Direct Push	••	Other _____	••••

DRILLING COMPANY HEW Drilling
DRILLER'S LICENSE NO. 609987 - C-57

WELL PROJECTS
Drill Hole Diameter _____ in. Maximum
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Number _____

SOIL BORINGS
Number of Borings 23 Maximum 3 to ~ 10', 17 to ~ 20', 3 to ~ 60'
Hole Diameter 6 in. Depth 60 ft.

ESTIMATED STARTING DATE 11-13-06
ESTIMATED COMPLETION DATE 11-17-06

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.
APPLICANT'S SIGNATURE K Schliewen Date 11-13-06
Katrin Schliewen

ATTACH SITE PLAN OR SKETCH

PERMIT NUMBER 26203
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

(Circled Permit Requirements Apply)

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
4. A sample port is required on the discharge pipe near the wellhead.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION. See attached.

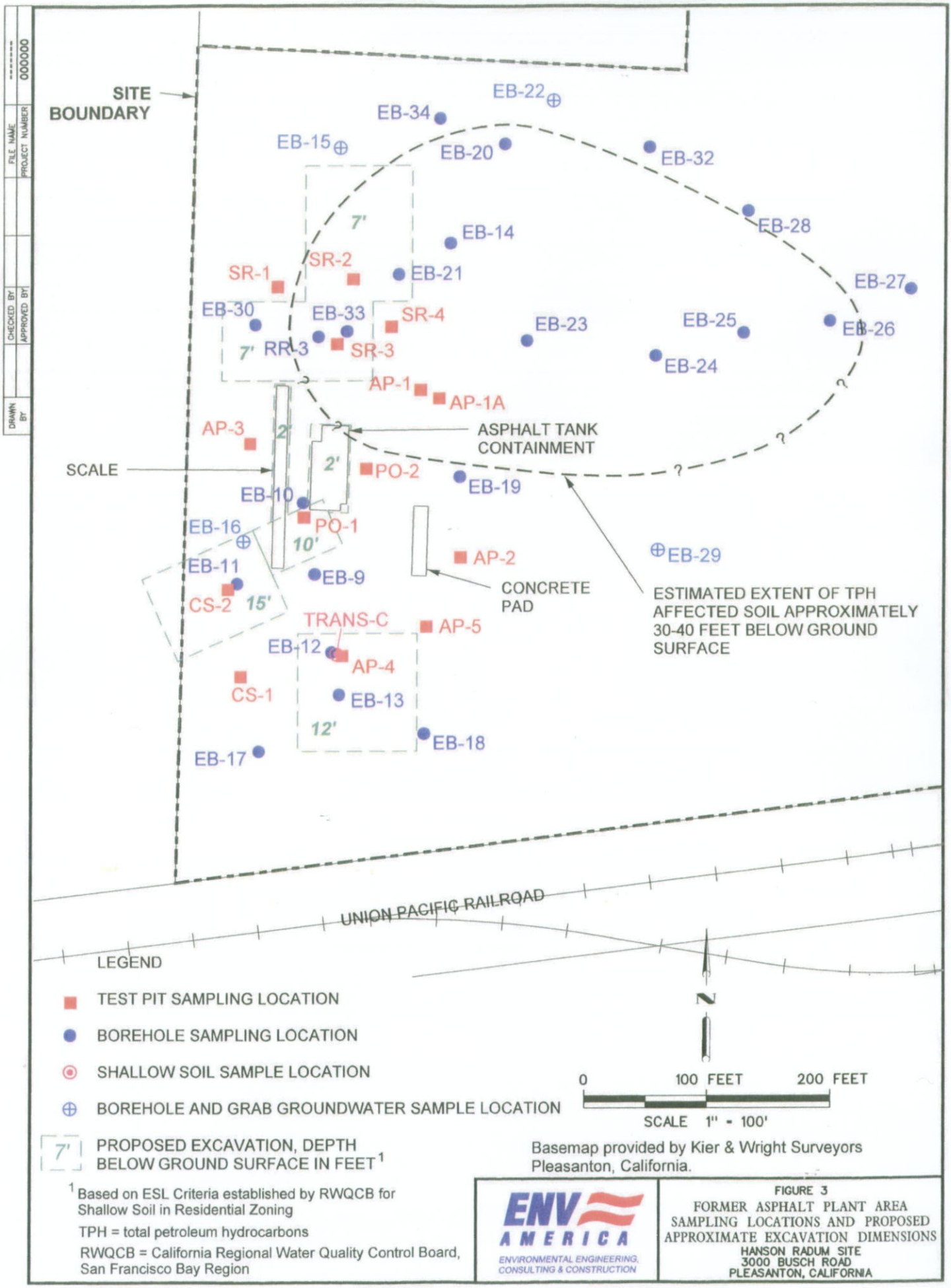
(G.) SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after the completion of permitted work the well installation report including all soil and water laboratory analysis results.

Approved Wyman Hong Date 11/13/2006
Wyman Hong

Revised: April 27, 2005

APPENDIX C

Selected Tables and Figure from the Draft Phase II Environmental Site Assessment Report by ENV (ENV 2006)


SITE BOUNDARY
EB-22
EB-34
EB-15
EB-20
EB-32
EB-28
EB-14
7'
SR-1
SR-2
EB-21
EB-27
EB-30
EB-33
SR-4
EB-23
EB-25
EB-26
7'
RR-3
SR-3
EB-24
AP-1
AP-1A
AP-3
2'
ASPHALT TANK CONTAINMENT
SCALE
2'
PO-2
EB-19
EB-10
PO-1
EB-16
10'
AP-2
EB-29
EB-11
EB-9
CONCRETE PAD
CS-2
15'
ESTIMATED EXTENT OF TPH AFFECTED SOIL APPROXIMATELY 30-40 FEET BELOW GROUND SURFACE
TRANS-C
AP-5
EB-12
AP-4
CS-1
EB-13
12'
EB-18
EB-17
UNION PACIFIC RAILROAD
LEGEND
TEST PIT SAMPLING LOCATION
BOREHOLE SAMPLING LOCATION
SHALLOW SOIL SAMPLE LOCATION
BOREHOLE AND GRAB GROUNDWATER SAMPLE LOCATION
7'
PROPOSED EXCAVATION, DEPTH BELOW GROUND SURFACE IN FEET[1]
N
0
100 FEET
200 FEET
SCALE 1" = 100'
Basemap provided by Kier & Wright Surveyors Pleasanton, California.
[1] Based on ESL Criteria established by RWQCB for Shallow Soil in Residential Zoning
TPH = total petroleum hydrocarbons
RWQCB = California Regional Water Quality Control Board, San Francisco Bay Region
ENV AMERICA
ENVIRONMENTAL ENGINEERING, CONSULTING & CONSTRUCTION
FIGURE 3
FORMER ASPHALT PLANT AREA
SAMPLING LOCATIONS AND PROPOSED
APPROXIMATE EXCAVATION DIMENSIONS
HANSON RADUM SITE
3000 BUSCH ROAD
PLEASANTON, CALIFORNIA
DRAWN BY
CHECKED BY
APPROVED BY
FILE NAME
PROJECT NUMBER
000000

DRAFT

TABLE 1
SUMMARY OF PRELIMINARY ANALYTICAL RESULTS - SOIL

Hanson Aggregates Site

3000 Busch Road
Pleasanton, California

Sample ID	Sample Date	Sample Depth (ft)	Concentration (mg/kg) TPH-d (C_{10}-C_{28})	TPH-mo (C_{24}-C_{36})	TPH-g (C_7-C_{12})	Concentration (µg/kg) PCBs: Individual Analytes Listed on Analytical Report prepared by laboratory	Organo-chlorine Pesticides: Individual Analytes Listed on Analytical Report prepared by laboratory	Chlorinated Herbicides: Individual Analytes Listed on Analytical Report prepared by laboratory	VOCs: BTEX (mg/kg): Benzene	Toluene	Ethylbenzene	Xylenes (total)	VOCs: Other: n-Butylbenzene	sec-Butylbenzene	Isopropylbenzene	Naphthalene	N-Propylbenzene	Other (in U.S. EPA 8260 list by GC/MS)
AP1-1	9/26/06	1	4.4	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP1-8	9/26/06	8	<0.99	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP1a-11	9/26/06	11	9.0	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-2	9/26/06	2	3.1	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-8	9/26/06	8	1.5	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-13	9/26/06	13	1.6	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-2	9/26/06	2	3.7	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-8	9/26/06	8	1.1	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-15	9/26/06	15	1.6	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP4-9-10	9/26/06	9-10	5600	<50	na	na	na	na	na	na	na	na	1500	990	na	2400	na	na
AP5-2	9/27/06	2	<0.99	<49	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP5-8	9/27/06	8	2.6	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP5-15	9/27/06	15	<1.0	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CB-0.5	9/29/06	0.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CB-8	9/27/06	8	<0.99	<49	na	na	na	na	na	na	na	na	na	na	na	na	na	na
COMPSP-1	9/1/06	0.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
COMPSPA-1	9/1/06	0.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CONCRETE	10/18/06		na	na	na	ND	na	na	na	na	na	na	na	na	na	na	na	na
CR-8	9/27/06	8	<0.99	<49	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CPI	10/11/06	3	93	360	<0.24	na	na	na	<0.0048	<0.0048	<0.0048	<0.0097	na	na	na	na	na	na
CS1-2	9/27/06	2	91	260	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-8	9/27/06	8	52	170	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-12	9/27/06	12	59	190	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-13	9/27/06	12	59	190	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-8	9/27/06	8	1800	3600	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-15	9/27/06	15	4100	9300	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-18	9/27/06	18	3000	6000	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DR-0.5	10/11/06	0.5	1.7	<50	<0.25	na	na	na	<0.0050	<0.0050	<0.0050	<0.010	na	na	na	na	na	na
EB1-2	9/28/06	2	<0.99	<50	<0.25	ND	na	na	<0.0050	<0.0050	<0.0050	<0.010	na	na	na	na	na	na
EB1-9	9/28/06	9	<1.0	<50	<0.25	ND	na	na	<0.0050	<0.0050	<0.0050	<0.0099	na	na	na	na	na	na
EB1-14	9/28/06	14	<0.99	<50	<0.25	ND	na	na	<0.0050	<0.0050	<0.0050	<0.010	na	na	na	na	na	na
EB1-19	9/28/06	19	<0.99	<49	<0.25	ND	na	na	<0.0050	<0.0050	<0.0050	<0.010	na	na	na	na	na	na
EB2-5.5	9/29/06	5.5	<0.99	<50	<0.25	ND	na	na	<0.0050	<0.0050	<0.0050	<0.0099	na	na	na	na	na	na
EB2-9	9/29/06	9	<0.98	<49	<0.25	ND	na	na	<0.0049	<0.0049	<0.0049	<0.0098	na	na	na	na	na	na
EB2-14	9/29/06	14	<0.99	<50	<0.25	ND	na	na	<0.0050	<0.0050	<0.0050	<0.0099	na	na	na	na	na	na
EB2-19	9/29/06	19	<1.0	<50	<0.24	ND	na	na	<0.0048	<0.0048	<0.0048	<0.0096	na	na	na	na	na	na
EB2-24	9/29/06	24	<0.99	<49	<0.24	ND	na	na	<0.0048	<0.0048	<0.0048	<0.0095	na	na	na	na	na	na
EB2-29	9/29/06	29	<0.99	<50	<0.25	ND	na	na	<0.0049	<0.0049	<0.0049	<0.0098	na	na	na	na	na	na
EB3-2	10/2/06	2	6.4	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB3-6	10/2/06	6	<0.99	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB3-15	10/2/06	15	<1.0	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB4-2	10/2/06	2	1.8	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB4-6	10/2/06	6	<1.0	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB4-15	10/2/06	15	<0.99	<49	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB5-2	10/2/06	2	170	<49	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB5-6	10/2/06	6	<0.99	<49	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB5-15	10/2/06	15	37	77	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB6-20	10/2/06	20	<0.99	<49	<0.22	na	na	na	<0.0043	<0.0043	<0.0043	<0.0087	na	na	na	na	na	na
EB7-2	10/2/06	2	<0.99	<49	<0.25	na	na	na	<0.0049	<0.0049	<0.0049	<0.0098	na	na	na	na	na	na
EB7-6	10/2/06	6	<0.99	<50	<0.22	na	na	na	<0.0043	<0.0043	<0.0043	<0.0087	na	na	na	na	na	na
EB7-15	10/2/06	15	<1.0	<50	<0.25	na	na	na	<0.0049	<0.0049	<0.0049	<0.0098	na	na	na	na	na	na
EB8-2	10/2/06	2	2.5	<50	<0.24	na	na	na	<0.0048	<0.0048	<0.0048	<0.0096	na	na	na	na	na	na
EB8-6	10/2/06	6	<0.99	<49	<0.25	na	na	na	<0.0050	<0.0050	<0.0050	<0.0099	na	na	na	na	na	na
EB8-15	10/2/06	15	<0.99	<49	<0.24	na	na	na	<0.0049	<0.0049	<0.0049	<0.0097	na	na	na	na	na	na
EB9-5	10/9/06	5	3.5	<49	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-10	10/9/06	10	1.1	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-20	10/9/06	20	1.9	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-5	10/9/06	5	1.7	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-10	10/9/06	10	<1.0	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-25	10/9/06	25	1.3	<50	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB11-20	10/9/06	5	<1.0	<50	<0.24	na	na	na	<0.0049	<0.0049	<0.0049	<0.0097	na	na	na	na	na	na
EB12-20	10/9/06	20	<1.0	<50	<0.25	na	na	na	<0.0050	<0.0050	<0.0050	<0.010	na	na	na	na	na	na
EB13-10	10/9/06	10	400	240	530	na	na	na	<2.0	<2.0	<2.0	<4.0	na	na	na	na	na	na

Sample ID	Concentration (µg/kg) SVOCs: Polycyclic Aromatic Hydrocarbons (PAHs): Naphthalene	Acenaphthene	Acenaphthylene	Fluorene	Phenanthrene	Anthracene	Benzo (a) anthracene	Chrysene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (g,h,i) perylene	Indeno (1,2,3-cd) pyrene	Flouranthene	Pyrene	Dibenz (a,h) anthracene	Other SVOCs: Phenol	Other SVOCs (in U.S. EPA 8270C List by GC/MS)
AP1-1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP1-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP1a-11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-13	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP4-9-10	1800	<250	<250	3200	5000	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	na	na
AP5-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP5-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP5-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CB-0.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CB-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
COMPSP-1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
COMPSPA-1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CONCRETE	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CR-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CPI	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-13	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-15	<5.0	<5.0	<5.0	17	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	44	<5.0	<5.0	na	na
CS2-18	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
DR-0.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-14	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-19	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-5.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-14	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-19	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-24	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-29	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB3-2	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	na	na
EB3-6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	na	na
EB3-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	na	na
EB4-2	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	na	na
EB4-6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	na	na
EB4-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	na	na
EB5-2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	na	na
EB5-6	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	<4.9	na	na
EB5-15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	na	na
EB6-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB7-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB7-6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB7-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB8-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB8-6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB8-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-25	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB11-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB12-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB13-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Sample ID	Concentration (mg/kg) Metals (mg/kg): Silver	Arsenic	Barium	Beryllium	Cadmium	Cobalt	Chromium	Hexavalent Chromium	Copper	Magnesium	Molybdenum	Nickel	Lead	Antimony	Selenium	Thallium	Vanadium	Zinc	Mercury (mg/kg)	STLC Citrate (mg/L): Arsenic	Copper	Nickel	pH (pH units)
AP1-1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP1-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP1a-11	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP2-13	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP3-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP4-9-10	<0.99	4.0	130	<0.50	<0.50	12	52	na	26	na	<0.99	72	6.2	<2.0	<2.0	<0.99	25	43	<0.050	na	na	na	na
AP5-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP5-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
AP5-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CB-0.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CB-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	8.11
COMPSP-1	<1.0	3.8	620	<2.0	<1.0	<5.0	17	na	<5.0	na	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	24	<5.0	<0.10	na	na	na	na
COMPSPA-1	<1.0	2.2	620	<2.0	<1.0	<5.0	18	na	<5.0	na	<5.0	<5.0	<1.0	<5.0	<5.0	<5.0	25	<5.0	<0.10	na	na	na	na
CONCRETE	<0.95	3.9	67	<0.48	<0.48	4.2	21	1.6	31	na	<0.95	31	2.9	<1.9	<1.9	<0.95	19	45	<0.051	na	na	na	na
CR-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CPI	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-12	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS1-13	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CS2-18	<0.96	6.5	200	<0.48	<0.48	13	48	na	32	na	<0.96	81	22	<1.9	<1.9	<0.96	29	72	<0.049	na	na	na	na
DR-0.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-14	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB1-19	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-5.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-14	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-19	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-24	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB2-29	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB3-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB3-6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB3-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB4-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB4-6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB4-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB5-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB5-6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB5-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB6-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB7-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB7-6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB7-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB8-2	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB8-6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB8-15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB9-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB10-25	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB11-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB12-20	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
EB13-10	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

DRAFT

TABLE 1
SUMMARY OF PRELIMINARY ANALYTICAL RESULTS - SOIL

Hanson Aggregates Site

3000 Busch Road
Pleasanton, California

| | | | Concentration (mg/kg) | | | Concentration (µg/kg) | | |

TABLE 1
SUMMARY OF PRELIMINARY ANALYTICAL RESULTS - SOIL

Hanson Aggregates Site

3000 Busch Road
Pleasanton, California

| | | | Concentration (mg/kg) | | | Concentration (µg/kg) | | |

DRAFT

| | | | Concentration (µg/L) | | | Concentration (µg/L) | | |

APPENDIX D

Lithologic Soil Boring Logs

Lithology and Sample Data

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Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADIUM **Date:** 11/14/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
			GRAVELLY SILT (ML) light yellowish brown (2.5Y 6/4) DRY, poorly sorted angular gravel up to 1¾" dia.				
				B-1-4.5		NR	
5	2-INCH DIAMETER Borehole		SILTY CLAY (CL) olive brown (2.5Y 4/4), DAMP, medium plasticity, soft				
			organic odor @ 6½-7½'	B-1-7.5		NR	
			color change to very dark gray (2.5Y 3/1), moist, below 8 Feet	B-1-10			
10	CEMENT GROUT					NR	
			color change to dark yellowish brown (10YR 4/4) below 12½ Feet	B-1-14.5			
15			SANDY SILT (ML) dark yellowish brown (10YR 4/4), moist very fine grained sand	B-1-18		NR	
			GRAVELLY SAND (SW) olive (5Y 4/3) dry, fine grained sand, poorly sorted angular gravel up to 1¼" dia.				
20			BOTTOM of BORING @ 20 Feet				

Boring/Well No.: B-1	Drilling method: Direct Push
Date drilled: 11/14/06	Sampling Method: —
Drilling company: V&W	Hammer weight and size: —
LFR Staff: LPL	NR = No Recovery

Boring/Well Location Schematic

PID broken

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-095-00 **Page** 1 **of** 1

Project Name: HANSON PLEASANTON **Date:** 11/13/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			GRAVELLY SILT (ML) Light yellowish brown (2.5Y 6/4) DRY, well sorted ROUNDED gravel 1/4" DIA minor gravel @ 1"				0.1
	B-INCH DIAMETER Borehole		silty clay (CL) DARK yellowish brown (10YR 3/4) MOIST, medium plasticity, SOFT	B-2-5		6 6 6	0.2
5							
	CEMENT GROUT						0.3
			Color change to DARK brown (10YR 3/3) below 7 FOOT				0.3
			GRAVELLY SAND (SW) DARK brown (10YR 3/3) LOOSE MOIST FINE TO COARSE GRAINED SAND, SUBROUNDED GRAVEL up to 1" DIA	B-2-10		4 3 3	0.1
10			silty clay (CL) VERY DARK gray (2.5Y N3/) MOIST medium plasticity, SOFT				0.3
							0.2
			AS ABOVE	B-2-14		3 4 6	0.1
15							
							0.2
							0.2
			SAND (SW) DARK brown (10YR 3/3) MOIST, LOOSE medium to COARSE GRAINED SAND, moderate subrounded gravel up to 1" DIA	B-2-19.5		7 8 12	0.3
20			Bottom of Boring @ 20'				

Boring/Well Location Schematic

AP-4 ☐ o B-2

OEB-13

N indicate

Boring/Well No.: B-2	Drilling method: Hollow Stem Auger
Date drilled: 11/13/06	Sampling Method: Split Spoon
Drilling company: HBW	Hammer weight and size: 140#
LFR Staff: LPL	

Reviewed by: _____ Signed: _____ Date: _____

Lithology and Sample Data

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Project Number: 001-09867-00 **Page** 1 **of** 1

Project Name: HANSON RADOM **Date:** 11/17/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
			SANDY SILT (ML) Light olive brown (2.5Y 6/4) Fine grained sand, moist to moderately grased	DRY			0.1
							0.2
							0.1
5			silty clay (CL) DARK brown (10YR 3/3) moist, B-3-5' medium plasticity, hard				0.2
			petroleum hydrocarbon odor below 6½ Feet B3-7				65
			petro hydro odor B-12'				
10			clayey silt (ML) very DARK gray (2.5Y 3/0) B-3-10 moist				157 45
							32
			silty clay (CL) DARK gray (Gley N4/) moist, low to medium plasticity, soft			NR	
				B3-14			30
15			Color change to DARK grayish brown (10YR 4/2) ?			NR	
			clayey silt (CL) DARK yellowish brown (10YR 4/6) moist, none to low plasticity	B-3-18			0.2
							0.1
20			Gravelly SAND (SW) olive (5Y 4/3) Dry FINE grained SAND, poorly sorted subangular grand up to 1¼" DIA.			NR	
			BOTTOM of boring @ 20 Feet				

2-INCH DIAMETER Borehole

Boring/Well No.: B-3	Drilling method: Direct Push
Date drilled: 11/14/06	Sampling Method: —
Drilling company: V&W	Hammer weight and size: —
LFR Staff: LPL	NR = No Recovery

Boring/Well Location Schematic

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001 09567-00 **Page** 1 of 1

Project Name: HANSON RADUM **Date:** 11/14/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			GRAVELLY SILT (ML) DRY TO DAMP, FINE, POORLY SORTED SUBANGULAR TO SUBROUNDED GRAVEL, UP TO 1½" DIA				0.2
							0.1
							0.2
5		2-INCH DIAMETER BOREHOLE	CLAYEY SILT (ML) OLIVE, MOIST, LOW TO NO PLASTICITY	B-4-5		NR	0.1
			SILTY GRAVEL (GM) OLIVE, DAMP TO MOIST, POORLY SORTED, SUBANGULAR GRAVEL UP TO 1½" DIA				0.2
		CEMENT GROUT	REDDISH BROWN 5½-10'			NR	0.1
10			~~SILTY CLAY (CL) / CLAYEY SILT (ML)~~ MOIST, DARK GRAY, LOW PLASTICITY, SLIGHT PETROLEUM HYDROCARBON ODOR IN TEN CLAY/SILT NOT IN GRAVEL & SAND	B-4-10.5		NR	25
							148
				B-4-15			70
15						NR	120
							24
			SILTY SAND (SM) / SANDY SILT (ML) DARK YELLOWISH BROWN, MOIST, FINE GRAINED SAND, SUBANGULAR GRAVEL	B-4-18			0.1
							0.1
20			BOTTOM OF BORING @ 20'				

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-4 Drilling method: Direct Push

Date drilled: 11/14/06 Sampling Method: —

Drilling company: V&W Hammer weight and size: —

LFR Staff: LPL

NR = No Recovery

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR

Project Number: 001-09567-00 **Page** 1 of 1

Project Name: Hanson Radum Site, Pleasanton CA **Date:** 11/15/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
0							
5'	0940		Sand 10YR 4/4, F-Crs Subangular Gravel, med. Sand, silt, dry (20,65,15,0)	SB5-5.0	4' 2/3 5.5'	5/3/7	0.0 ppmv
10'	0950		Silt 10YR 5/1, F-Crs Gravel, Med sand, moist (25,15,65,0)	SB5-10.0	9' 3/3 10.5'	6/7/50	0.0
15'	1000		Gravel 10YR 4/2, F-Crs Gravel, F-Med Sand, silt, dry (40,20,40,0)	SB5-15.0	14' 3/3 15.5'	6/5/17	0.0
20'							

Notes:

- 1.5' split spoon sampler (3" x 6.0" brass liners)
  - All samples collected from middle liner (4.5'-5.0')
- * All lost soil assumed from bottom of drive
- Drill Rig = CME-75 Hollow Stem Auger (HSA)
- TD ≈ 16.0' bgs

Boring/Well No.: SB-5	Drilling method: H.S.A.
Date drilled: 11/15/06	Sampling Method: Split-Spoon
Drilling company: HEW	Hammer weight and size: 1.5'
LFR Staff: J Trado	

Boring/Well Location Schematic

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR

Project Number: 001-09567-00 **Page** 1 of 1

Project Name: Hanson Radum Site, Pleasanton CA **Date:** 11/15/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
0							
5'	0915		Sand 10YR 4/1 F-Crs Subangular Gravel, Med sand, silt, moist (20,65,15,0)	SB 6-5.0	11/9/15		0.0
10'	0820		Silt 10YR 5/1, F. Gravel, F. sand, Silt, clay, moist (10, 10, 70, 10)	SB 6-10.0	10/8/6		0.0
15'	0830		Gravel 10YR 4/1 F-Crs Gravel, F-Med Sand, silt, dry (40, 20, 40, 0)	SB-15.0	5/19/16		0.0
20'							

Notes:

- 1.5' split spoon sampler (3" x 6.0" brass liners)
  - All samples collected from middle liner (4.5'-5.0')
- * All lost soil assumed from bottom of drive
- Drill Rig = CME-75 Hollow Stem Auger (HSA)
- TD ≈ 16.0' bgs

Boring/Well No.: SB-6 Drilling method: H.S.A.

Date drilled: 11/15/06 Sampling Method: Split-Spoon

Drilling company: HEW Hammer weight and size: 1.5'

LFR Staff: J Toldo

Boring/Well Location Schematic

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR

Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: Hanson Radum Site, Pleasanton CA **Date:** 11/15/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
0							
5'	4' 3/3 5.5'		Sand 10YR 4/4 F-Crs Subangular Gravel, Med sand, silt, dry (20,65,15,0)	SB7-5.0	13/12/14		0.0
10'	9' 0/3 10.5'					9/3/3	
	12' 3/3		Silt 10YR 4/1, F-Crs Sand, moist. (0,10,90,0)	SB7-11.0	2/3/5		0.0
15'	14' 3/3 15.5'		Gravel 10YR 4/1, F-Crs Gravel (Qtzite) F-Med Sand, silt, dry (40,20,40,0)	SB7-15.0	4/12/20		0.0
20'							

Notes:

- 1.5' split spoon sampler (3" x 6.0" brass liners)
  - All samples collected from middle liner (4.5'-5.0')
- * All lost soil assumed from bottom of drive
- Drill Rig = CME-75 Hollow Stem Auger (HSA)
- TD ≈ 16.0' bgs

Boring/Well No.: SB-7 Drilling method: H.S.A.

Date drilled: 11/15/06 Sampling Method: Split-Spoon

Drilling company: HEW Hammer weight and size: 1.5'

LFR Staff: J Toldo

Boring/Well Location Schematic

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

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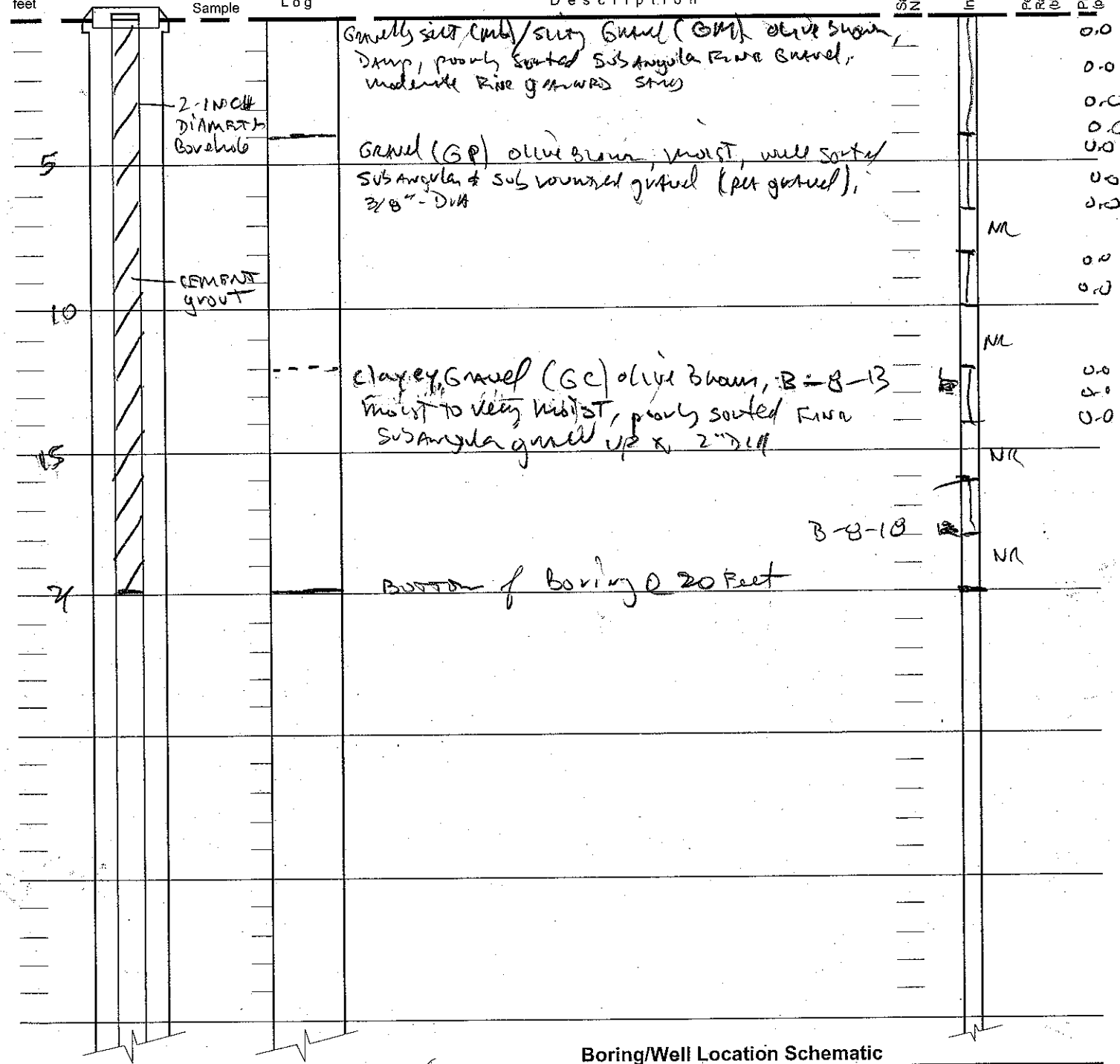
Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADUM **Date:** 11/14/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA



Boring/Well Location Schematic

N indicate

Boring/Well No.: B-8 Drilling method: Direct Push

Date drilled: 11/14/06 Sampling Method: —

Drilling company: V&W Hammer weight and size: —

LFR Staff: LPL NR: No Recovery

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR

Project Number: 001-09567-00 **Page** 1 of 1

Project Name: Hanson Radum Site, Pleasanton CA **Date:** 11/15/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
0							
5'	1130		Sand 10YR 4/2 F-Med Sand, silt, moist (0, 90, 10, 0)	SB9-5.0	8/4/5		0.0
10'	1140		Same as above (SAAB) w/F-Crs Sand.	SB9-10.0	7/7/7		0.0
15'	1150		Gravel 10YR 4/2 F Subangular Gravel (Pea-Gravel), Med-Crs sand, silt, moist (70, 20, 10, 0)	SB9-15.0	3/6/8		0.0
20'							

Notes:

- 1.5' split spoon sampler (3" x 6.0" brass liners)
  - All samples collected from middle liner (4.5'-5.0')
- * All lost soil assumed from bottom of drive
- Drill Rig = CME-75 Hollow Stem Auger (HSA)
- TD ≈ 16.0' bgs

Boring/Well Location Schematic

N indicate

Boring/Well No.: SB-9 Drilling method: H.S.A.

Date drilled: 11/15/06 Sampling Method: Split-Spoon

Drilling company: HEW Hammer weight and size: 1.5'

LFR Staff: J Toldo

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR

Project Number: 001-09567-00

Page 1 of 1

Project Name: Hanson Radum Site, Pleasanton CA

Date: 11/15/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
0							
5'	1040		Sand 10YR 4/1, F-Crs Subangular Gravel, Med Sand, Silt, dry (30,50,20,0)	SB10-5.0	4' 2/3 5.5'	35/50	0.0
10'	1045		Sand 10YR 4/2 F Gravel, Med Sand Silt, moist (10,80,10,0)	SB10-10.0	9' 2/3 10.5'	4/8/9	0.0
15'	1050		Gravel 10YR 4/2 F Gravel (Pea-Gravel) Med-Crs Sand, Silt, moist (70,20,10,0)	SB10-15.0	14' 3/3 15.5'	3/2/4	0.0
20'			SAAB		1/3	2/3/3	0.0

Notes:

- 1.5' split spoon sampler (3" x 6.0" brass liners)
  - All samples collected from middle liner (4.5'-5.0')
- * All lost soil assumed from bottom of drive
- Drill Rig = CME-75 Hollow Stem Auger (HSA)
- TD ≈ 22' bgs b/c sample location approx. 3.0' above surrounding grade

Boring/Well No.:	SB-10	Drilling method:	H.S.A.
Date drilled:	11/15/06	Sampling Method:	Split-Spoon
Drilling company:	HEW	Hammer weight and size:	1.5'
LFR Staff:	JTrido		

Boring/Well Location Schematic

N indicate

Reviewed by: _____ Signed: _____ Date: _____

Lithology and Sample Data

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Project Number: 001-09567-00 **Page** 1 of 1

Project Name: Hanson Radum Site, Pleasanton CA **Date:** 11/15/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
0							
5	2/3 1320		Sand 10YR 4/1, F-Cvs Subangular Gravel, Med Sand, silt, dry (30, 50, 20, 0)	SB11-5.0		9/10/7	0.0
	2/3 NR					9/16/6	
10	1/3 1330		SAAB w/ moth-balls like odor*	SB11-10.0		8/6/4	0.0
15	2/3 1335		SAAB	SB11-15.0		2/3/2	0.0
	0/3 NR					5/3/3	
20	0/3 NR					2/3/3	
	3/3 1350		SAAB w/ slight odors (maybe from slough) (35, 50, 15, 0)	SB11-22.5		3/3/3	0.0
25			Notes: o Same as other logs except strong odors from upper 15.0' bgs. → Moth ball like odors – Naphthalene o TD ≈ 23.0' bgs				

Boring/Well No.: SB-11 Drilling method: H.S.A.

Date drilled: 11/15/06 Sampling Method: Split-Spoon

Drilling company: HEW Hammer weight and size: 1.5'

LFR Staff: JT rio/o

Boring/Well Location Schematic

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567-00 **Page** 1 **of**

Project Name: HANSON RADIUM **Date:** 11/13/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			Gravelly silt (ML) light yellowish brown (2.5Y 6/4) dry, well sorted rounded gravel 1/4" DIA, MINOR GRAVEL UP TO 1" DIA.				0.2
		8-INCH DIAMETER Borehole					0.7
			COLOR CHANGE TO DARK BROWN (7.5YR 3/4) MOIST SUBANGULAR GRAVEL POORLY SORTED UP TO 1" DIA, FINE GRAINED SAND	B-12-4.5		4 4 4	0.1
5		CEMENT GROUT					0.3
							1.2
			GRAVEL (GP) OLIVE BROWN (2.5Y 4/4) MOIST, WELL SORTED, SUBANGULAR TO SUBROUNDED GRAVEL UP TO 3/8" DIA	B-12-9.5		4 4 5	2.3
10							0.2
							1.1
				B-12-14.5		5 5 6	0.7
15			BOTTOM OF BORING @ 15'				

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-12
Date drilled: 11/13/06
Drilling company: HSW
LFR Staff: LPL

Drilling method: Hollow STEM Auger
Sampling Method: CA Mod SPLIT SPOON
Hammer weight and size: 140 lbs

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-095 **Page** 1 **of** 1

Project Name: HANSON RADIUM **Date:** 11/15/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			SILTY GRAVEL (GM) light olive brown, dry, poorly sorted subangular gravel up to 1¼" DIA				
			SILTY CLAY (CL) olive brown, moist, medium plasticity, soft, moderate fine grained sand.	B-13-5		5 4 12	0.0 0.0
5			CLAYEY SAND (SC) olive brown, moist, fine grained sand, medium gravel	B-13-7.5		9 14 21	0.0 0.0
			SILTY GRAVEL (GM) olive brown, fine well sorted subangular gravel ¼" DIA	B-13-10		17 21 24	0.0 0.0
10			BOTTOM OF BORING @ 9 Feet BOTTOM OF GRAPHIC 10½ Feet				
15							

BENTONITE DYNAMITED BOREHOLE

CEMENT GROUT

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-13 Drilling method: Hollow Stem

Date drilled: 11/15/06 Sampling Method: CA Mod

Drilling company: HSW Hammer weight and size: 140 lb

LFR Staff: LPL

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR

Project Number: 001-09567-00

Page 1 of 1

Project Name: Hanson Radum Site, Pleasanton CA

Date: 11/15/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
0							
5'	1420		Sand 10YR 4/1 F. Subangular Gravel (Pea-Gravel), F-Med Sand, silt, dry (20, 75, 5, 0)	B14-5.0	11/10/11		0.0
10'	1430		Gravel 10YR 4/1, F. Gravel, F-Med Sand, silt, dry (50, 30, 20, 0)	B14-10.0	16/15/12		0.0
15'	1440		SAA B, moist (50, 25, 25, 0)	B14-15.0	8/6/5		0.0
20'							

Notes:

- 1.5' split spoon sampler (3 x 6.0" brass liners)
  - All samples collected from middle liner (4.5'-5.0')
- * All lost soil assumed from bottom of drive
- Drill Rig = CME-75 Hollow Stem Auger (HSA)
- TD ≈ 16.0' bgs

Boring/Well Location Schematic

N indicate

Boring/Well No.: SB-14

Date drilled: 11/15/06

Drilling company: HEW

LFR Staff: J Trido

Drilling method: H.S.A.

Sampling Method: Split-Spoon

Hammer weight and size: 1.5'

Reviewed by: _____ Signed: _____ Date: _____

Lithology and Sample Data

LFR LEVINE•FRICKE

Project Number: 001-09567-00 **Page** 1 of 1

Project Name: HANSON RADUM **Date:** 11/16/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
			Gravelly SILT (ML) Light olive Brown dry fine sub Angular Gravel poorly Sorted up to ½" dia				0.0
							0.0
				B-15-4		7 8 12	0.0
5							
			Silty Gravel (GM) olive brown moist fine poorly sorted sub angular gravel up to ½" dia,	B-15-7		6 6 6	0.0 0.0 0.0
10			- Bottom of Boring @ 9' Bottomed Sample at 10ft Feet.	B-15-10		12 12 12	0.0 0.0 0.0
15							

8-inch diameter borehole

Cement grout

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-15
Date drilled: 11/16/06
Drilling company: HBW
LFR Staff: LPL

Drilling method: Hollow Stem Auger
Sampling Method: CA Mod Split Spoon
Hammer weight and size: 140#

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-095-00 **Page** 1 **of** 2

Project Name: HANSON RADIUM **Date:** 11/13/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			Silty Gravel (GM) Light yellowish brown (2.5Y 6/4) Damp, to moist, poorly sorted subangular gravel up to 1" dia			44	0.2
						45	
				B-16-3		40	0.1
			Gravel (SP) light yellowish brown (2.5Y 6/4) Damp to moist, minor to medium coarse gravel up to 1½ dia				2.3
5							
10							
15							
20							
25				B-16-25.5		8	6.2
			Clayey Gravel (GC) olive brown (2.5Y 4/4) Damp			13	2.0
						14	0.8
30			(brownish gray)				
			color change to dark gray; Faint petroleum Hydrocarbon odor - Black oily (like asphaltic oils)	B-16-31.5			
			petroleum Hydrocarbon odor				
35							

8-INCH DIAMETER BOREHOLE

CEMENT GROUT

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-16 Drilling method: HOLLOW STEM

Date drilled: 11/13/06 Sampling Method: CA MODIFIED

Drilling company: HEW Hammer weight and size: 140#

LFR Staff: LPL

Reviewed by: _____ Signed: _____ Date: _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-095 T00 **Page** 2 of 2

Project Name: HANSON RADIUM **Date:** 11/13/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
			CEMENT GROUT				
			SILTY CLAY (CL) DARK GRAY (7.5YR 3/1 TO 10-YR N/3) MOIST TO VERY MOIST, MEDIUM PLASTICITY, SOFT				
			BOTTOM OF BORING 35' BOTTOM OF SAMPLE 36½ FEET				
40							

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-16 Drilling method: HOLLOW STEM AUGER

Date drilled: 11/13/06 Sampling Method: CA MODIFIED

Drilling company: HELA Hammer weight and size: 140 #

LFR Staff: LPL

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567 **Page** 1 **of** 1

Project Name: WANSON RADIUM **Date:** 11/13/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
			Gravelly silt (ML) light olive brown (2.5Y 5/6) dry, poorly sorted sub angular gravel up to ½" dia				0.1
		8-inch diameter borehole	silty GRAVEL (GM) light olive brown (2.5Y 5/6) moist, well sorted sub angular gravel, ⅜" dia				0.2
5				B-17-5.5		4 6	0.2
		cement grout					0.2
			clayey GRAVEL @ 9 Feet			14 21	0.1
			Bottom of Boring @ 9'	B-17-9		27	0.1
10							
15							

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-17
Date drilled: 11/13/06
Drilling company: HEW
LFR Staff: LPL

Drilling method: Hollow Stem Auger
Sampling Method: CA MOD SPLIT SPOON
Hammer weight and size: 140 #

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE·FRICKE

Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADIUM **Date:** 11/16/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			GRAVEL (GP) OLIVE BROWN, DAMP, FINE SUBANGULAR, WELL SORTED GRAVEL UP TO 3/8" W/ A MINOR SILT.				
5				B-18-6		14 14	
			INCREASING SILT BELOW 9 FEET				
10			BOTTOM OF BORING 9' BOTTOM OF SAMPLE @ 10½	B-18-10		13 13 13	
15							
20							

B-INCH DIAMETER BOREHOLE

CEMENT

Boring/Well No.: B-18
Date drilled: 11/16/06
Drilling company: HEIN
LFR Staff: LPL

Drilling method: Hollow Stem Auger
Sampling Method: CA. Mod SPLIT Spoon
Hammer weight and size: 140#

Boring/Well Location Schematic

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567 **Page** 1 **of** 1

Project Name: HANSON RADUM **Date:** 11/16/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
			SILTY GRAVEL (GM) / GRAVELLY SILT (ML) OLIVE BROWN MOIST, FINE SUBANGULAR GRAVEL. POORLY SORTED, UP TO 1" DIA				0.0
							0.0
5			SILTY SAND (SM) DARK YELLOWISH BROWN, DAMP TO MOIST, FINE GRAINED SAND, ABUNDANT SUBANGULAR POORLY SORTED GRAVEL.	B-19-6			0.0
			SANDY SILT (ML) DARK YELLOWISH BROWN, MODERATE GRAVEL				0.0
							0.0
10			SILTY SAND (SM) LIGHT OLIVE, DAMP, FINE GRAINED SAND, MINOR COARSE SAND	B-19-10		8 11 12	0.0 0.0
			SILTY GRAVEL (GM) OLIVE BROWN, MOIST, FINE SUBROUNDED GRAVEL POORLY SORTED, UP TO ½" DIA				
			BOTTOM OF BORING @ 9'				
			BOTTOM OF SAMPLE @ 10½				
15							

B-1 INCH DIAMETER borehole

CEMENT grout

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-19
Date drilled: 11/16/06
Drilling company: HSW
LFR Staff: LPL

Drilling method: Hollow Stem Auger
Sampling Method: SA Lined Split Spoon
Hammer weight and size: 140#

Reviewed by: _____ Signed: _____ Date: _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADUM **Date:** 11/16/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			GRAVEL (GP) light olive brown, DAMP, FINE SUBANGULAR GRAVEL WELL SORTED, UP TO 3/8" DIA				0.0
							0.0
				B-20-4		7 14 22	0.0
5							0.0
				B-20-7		9 20 25	0.0 0.0
							0.0
			GRAVELLY SILT (ML) OLIVE BROWN, MOIST, FINE SUBANGULAR GRAVEL WELL SORTED UP TO 3/8" DIA	B-20-10		19 29 29	0.0
10							0.0
							0.0
			BOTTOM OF BORING @ 14' BOTTOM OF SAMPLE 15 1/2'	B-20-15		17 29 22	0.0 0.0
15							
20							

8-INCH DIAMETER BOREHOLE

CEMENT GROUT

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-20
Date drilled: 11/16/06
Drilling company: H&W
LFR Staff: LPL

Drilling method: Hollow Stem Auger
Sampling Method: CA Mod SPLIT 2.0in
Hammer weight and size: 140#

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADUM **Date:** 11/15/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet | Time of Sample | Graphic Log | Description | Sample Number | Interval | Penetration Rate (blows/ft.) | PID/FID (ppm)

0 — SILTY GRAVEL (GM) olive, dry, poorly sorted subangular to subrounded gravel up to 2" DIA.

8-INCH DIAMETER ABOVE BOG

10

20 — Collected GRAB GROUNDWATER SAMPLE AT 11:30 on 11/15/06

CEMENT GROUT BACKFILL (ABANDONMENT)

30

40 — GRAVELLY CLAY (CL) DARK yellowish BROWN, moist, medium plasticity, STIFF, ANGULAR GRAVEL up to ½" DIA

50 — SILTY CLAY (CL) DARK yellowish BROWN, moist, medium plasticity, STIFF, WATER ENCOUNTERED IN A ½" GRAVEL SEAM AT 51 FEET, MINOR GRAVEL

SILTY CLAY AS ABOVE NO GRAVEL

60 — SILTY CLAY AS ABOVE

soil samples collected for lithologic description @ 45', 50', 55'-60' bgs

BOTTOM OF BORING @ 65'

DTW 55.6' 11/16/06 @ 3:30

70

Boring/Well Location Schematic

grab groundwater sample collected from 2-inch PVC temporarily set in borehole

N indicate

Boring/Well No.: B-21 Drilling method: Hollow STEM Auger

Date drilled: 11/15/06 Sampling Method: CALMOD SPLIT Spoon

Drilling company: HEW Hammer weight and size: 140#

LFR Staff: LPL ▽ WATER ENCOUNTERED IN SEDIMENT AT TIME OF DRILLING

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADUM **Date:** 11/15/06

WELL CONSTRUCTION	LITHOLOGY	SAMPLE DATA

Depth, feet | Time of Sample | Graphic Log | Description | Sample Number | Interval | Penetration Rate (blows/ft.) | PID/ FID (ppm)

0 — CEMENT GROUT BACKFILL (ABANDONMENT)

8-INCH DIAMETER Bore hole

GRAVELLY SILT (ML) OLIVE BROWN, DRY, POORLY SORTED SUBANGULAR TO SUBROUNDED GRAVEL UP TO 1½ DIA

10

GRAVEL (SP) BROWN, DAMP TO MOIST, WELL SORTED, SUBROUNDED GRAVEL 3/8" TO ½" DIA

20

COLLECTED GRAB GROUNDWATER SAMPLE AT 16:00 ON 11/15/06

30

40

SILTY GRAVEL (GM) DARK BROWN, WET, WELL SORTED SUBROUNDED GRAVEL 3/8" DIA, PETROLEUM HYDROCARBON ODOR, SHEEN ON SEDIMENTS @ 45 FEET (WEATHERED DIESEL ODOR)

50

SILTY CLAY (CL) DARK YELLOWISH BROWN, MOIST, MEDIUM PLASTICITY, FIRM TO HARD

B-22-50.5 (#22-50.5)

BOTTOM OF BORING @ 50'

BOTTOM OF SAMPLE 51'

60

SOIL SAMPLES COLLECTED FOR LITHOLOGIC DESCRIPTION @ 45 + 50' BGS

DTW 47.6' 11/16/06 @ 3:30

Boring/Well No.: B-22

Date drilled: 11/15/06

Drilling company: HEW

LFR Staff: LPL

Drilling method: Hollow STEM AUGER

Sampling Method: CA. Mod SPLIT SPOON

Hammer weight and size: 140#

▼ DEPTH OF WATER ENCOUNTERED IN BOREHOLE AT TIME OF DRILLING

Boring/Well Location Schematic

Grab GW sample collected from 2-inch PVC temporarily set in borehole.

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADIUM **Date:** 11/16/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/ FID (ppm)
0			Silty GRAVEL (GM) DARK BROWN, DRY, POORLY SORTED SUBANGULAR TO SUBROUNDED GRAVEL UP TO 3½" DIA				
			8-INCH DIAMETER BOREHOLE				
10							
20							
			CEMENT GROUT BACKFILL (ABANDONMENT)				
30							
			Collected GRAB GROUNDWATER SAMPLE AT 14:50 on 11/16/06				
40							
	▼						
50			BOTTOM OF BORING @ 53'				
			Soil samples collected for lithology @ 40', 45' + 50'				
60							
			DTW ~ 45.7' 11/16/06 @ 3:30				

Boring/Well No.: B-23
Date drilled: 11/16/06
Drilling company: HSA
LFR Staff: LPL
Drilling method: Hollow Stem Auger
Sampling Method: CA. Mod Split Spoon
Hammer weight and size: 140#
▼ DEPTH OF WATER ENCOUNTERED IN SEDIMENT AT TIME OF DRILLING

Boring/Well Location Schematic

Grab GW sample collected from PVC casing temporarily placed in borehole.

N indicate

Reviewed by: _____ **Signed:** _____ **Date:** _____

Lithology and Sample Data

LFR LEVINE • FRICKE

Project Number: 001-09567-00 **Page** 1 **of** 1

Project Name: HANSON RADUM **Date:** 11/16/06

WELL CONSTRUCTION | LITHOLOGY | SAMPLE DATA

Depth, feet	Time of Sample	Graphic Log	Description	Sample Number	Interval	Penetration Rate (blows/ft.)	PID/FID (ppm)
			Gravel (GP) Black DAMP, FINE SUBANGULA gravel well sorted up to 3/8" DIA, LOOKS LIKE DRIED ASPHALT COATED ROCK				
		8-INCH DIAMETER Borehole	BLACK @ 4'	B-24-4		11 14 16	0.0 0.0
5		CEMENT grout	BLACK AT 7'	B-24-7		5 5 7	0.0 0.0
10			BLACK & OILY BELOW 9½ FEET	B-24-10		9 25 35	0.0 0.0
15			BLACK TAR, LIKE RUBBER BELOW 14½ FEET	B-24-15		17 25 36	0.0 0.0
20			BOTTOM OF BOREHOLE 19' BOTTOM OF SAMPLE 20½ STRONG PID LOSS & STRONG PETROLEUM ODOR BUT DOES NOT REGISTER ON THE PID.	B-24-20		40 40 40	0.0 0.0
25							

Boring/Well Location Schematic

N indicate

Boring/Well No.: B-24
Date drilled: 11/16/06
Drilling company: HSW
LFR Staff: LPL

Drilling method: HOLLOW STEM AUGER
Sampling Method: CA MOD SPLIT SPOON
Hammer weight and size: 140#

Reviewed by: _____ **Signed:** _____ **Date:** _____

APPENDIX E

Laboratory Certified Analytical Reports

SunStar Laboratories, Inc.

16 November 2006

Katrin Schliewen
LFR Inc. -- Emeryville
1900 Powell Street, 12th Floor
Emeryville, CA 94608-1827

RE: Hansoy Radum Facility

Enclosed are the results of analyses for samples received by the laboratory on 11/14/06 08:46. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Maria Bonifacio For John Shepler
Laboratory Director

3002 Dow Avenue, Suite 212, Tustin, CA 92780 Phone (714) 505-4010 Fax (714) 505-4028

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-2-5	T601553-01	Soil	11/13/06 00:00	11/14/06 08:46
B-2-10	T601553-02	Soil	11/13/06 00:00	11/14/06 08:46
B-2-14	T601553-03	Soil	11/13/06 00:00	11/14/06 08:46
B-12-4.5	T601553-05	Soil	11/13/06 00:00	11/14/06 08:46
B-12-9.5	T601553-06	Soil	11/13/06 00:00	11/14/06 08:46
B-17-5.5	T601553-08	Soil	11/13/06 00:00	11/14/06 08:46
B-17-9	T601553-09	Soil	11/13/06 00:00	11/14/06 08:46
B-16-3	T601553-10	Soil	11/13/06 00:00	11/14/06 08:46

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

Purgeable Petroleum Hydrocarbons by EPA 8015m

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2-5 (T601553-01) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C6-C12 (GRO)	ND	500	ug/kg	1	6111411	11/14/06	11/14/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*98.4 %*	*65-135*		"	"	"	"	
B-2-10 (T601553-02) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C6-C12 (GRO)	ND	500	ug/kg	1	6111411	11/14/06	11/14/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*98.4 %*	*65-135*		"	"	"	"	
B-2-14 (T601553-03) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C6-C12 (GRO)	ND	500	ug/kg	1	6111411	11/14/06	11/14/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*101 %*	*65-135*		"	"	"	"	

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2-5 (T601553-01) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	ND	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*108 %*	*65-135*		"	"	"	"	
B-2-10 (T601553-02) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	ND	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*118 %*	*65-135*		"	"	"	"	
B-2-14 (T601553-03) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	ND	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*122 %*	*65-135*		"	"	"	"	
B-12-4.5 (T601553-05) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	ND	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*119 %*	*65-135*		"	"	"	"	
B-12-9.5 (T601553-06) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	ND	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*112 %*	*65-135*		"	"	"	"	
B-17-5.5 (T601553-08) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	ND	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*117 %*	*65-135*		"	"	"	"	

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.

Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-17-9 (T601553-09) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	ND	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*106 %*	*65-135*		"	"	"	"	
B-16-3 (T601553-10) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
C13-C28 (DRO)	**890**	10	mg/kg	1	6111409	11/14/06	11/14/06	EPA 8015m	
C29-C40 (MORO)	**180**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*122 %*	*65-135*		"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

Metals by EPA 6000/7000 Series Methods

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-17-5.5 (T601553-08) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
Arsenic	ND	5.0	mg/kg	1	6111410	11/14/06	11/15/06	EPA 6010B	
Barium	**45**	1.0	"	"	"	"	"	"	
Chromium	**16**	2.0	"	"	"	"	"	"	
Cobalt	**4.1**	2.0	"	"	"	"	"	"	
Copper	**9.6**	1.0	"	"	"	"	"	"	
Nickel	**29**	2.0	"	"	"	"	"	"	
Vanadium	**11**	5.0	"	"	"	"	"	"	
B-17-9 (T601553-09) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
Arsenic	ND	5.0	mg/kg	1	6111410	11/14/06	11/15/06	EPA 6010B	
Barium	**74**	1.0	"	"	"	"	"	"	
Chromium	**28**	2.0	"	"	"	"	"	"	
Cobalt	**6.4**	2.0	"	"	"	"	"	"	
Copper	**21**	1.0	"	"	"	"	"	"	
Nickel	**54**	2.0	"	"	"	"	"	"	
Vanadium	**16**	5.0	"	"	"	"	"	"	
B-16-3 (T601553-10) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
Arsenic	ND	5.0	mg/kg	1	6111410	11/14/06	11/15/06	EPA 6010B	
Barium	**77**	1.0	"	"	"	"	"	"	
Chromium	**27**	2.0	"	"	"	"	"	"	
Cobalt	**6.3**	2.0	"	"	"	"	"	"	
Copper	**21**	1.0	"	"	"	"	"	"	
Nickel	**44**	2.0	"	"	"	"	"	"	
Vanadium	**17**	5.0	"	"	"	"	"	"	

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-16-3 (T601553-10) Soil Sampled: 11/13/06 00:00 Received: 11/14/06 08:46									
Acenaphthene	ND	300	ug/kg	1	6111510	11/15/06	11/15/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*57.4 %*	*18.1-101*		"	"	"	"	
Surrogate: Terphenyl-dl4		*66.5 %*	*29.1-130*		"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

Purgeable Petroleum Hydrocarbons by EPA 8015m - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111411 - EPA 5030 GC										
Blank (6111411-BLK1)				Prepared & Analyzed: 11/14/06						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*106*		"	*125*		*84.8*	*65-135*			
LCS (6111411-BS1)				Prepared & Analyzed: 11/14/06						
C6-C12 (GRO)	14100	500	ug/kg	13800		102	75-125			
Surrogate: 4-Bromofluorobenzene	*125*		"	*125*		*100*	*65-135*			
Matrix Spike (6111411-MS1)	**Source: T601553-01**			Prepared & Analyzed: 11/14/06						
C6-C12 (GRO)	12000	500	ug/kg	13800	69	86.5	65-135			
Surrogate: 4-Bromofluorobenzene	*128*		"	*125*		*102*	*65-135*			
Matrix Spike Dup (6111411-MSD1)	**Source: T601553-01**			Prepared & Analyzed: 11/14/06						
C6-C12 (GRO)	11800	500	ug/kg	13800	69	85.0	65-135	1.68	20	
Surrogate: 4-Bromofluorobenzene	*133*		"	*125*		*106*	*65-135*			

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111409 - EPA 3550B GC										
Blank (6111409-BLK1)				Prepared & Analyzed: 11/14/06						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: Chrysene	*119*		"	*100*		*119*	*65-135*			
LCS (6111409-BS1)				Prepared & Analyzed: 11/14/06						
C13-C28 (DRO)	540	10	mg/kg	500		108	75-125			
Surrogate: Chrysene	*118*		"	*100*		*118*	*65-135*			
Matrix Spike (6111409-MS1)	**Source: T601553-01**			Prepared & Analyzed: 11/14/06						
C13-C28 (DRO)	580	10	mg/kg	500	ND	116	75-125			
Surrogate: Chrysene	*112*		"	*100*		*112*	*65-135*			
Matrix Spike Dup (6111409-MSD1)	**Source: T601553-01**			Prepared & Analyzed: 11/14/06						
C13-C28 (DRO)	570	10	mg/kg	500	ND	114	75-125	1.74	20	
Surrogate: Chrysene	*92.4*		"	*100*		*92.4*	*65-135*			

SunStar Laboratories, Inc.

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Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

Metals by EPA 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111410 - EPA 3051										
Blank (6111410-BLK1)				Prepared: 11/14/06 Analyzed: 11/15/06						
Arsenic	ND	5.0	mg/kg							
Barium	ND	1.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Nickel	ND	2.0	"							
Vanadium	ND	5.0	"							
LCS (6111410-BS1)				Prepared: 11/14/06 Analyzed: 11/15/06						
Arsenic	96.5	5.0	mg/kg	100		96.5	75-125			
Barium	87.4	1.0	"	100		87.4	75-125			
Chromium	92.5	2.0	"	100		92.5	75-125			
Matrix Spike (6111410-MS1)	**Source: T601553-10**			Prepared: 11/14/06 Analyzed: 11/15/06						
Arsenic	93.0	5.0	mg/kg	100	ND	93.0	75-125			
Barium	169	1.0	"	100	77	92.0	75-125			
Chromium	109	2.0	"	100	27	82.0	75-125			
Matrix Spike Dup (6111410-MSD1)	**Source: T601553-10**			Prepared: 11/14/06 Analyzed: 11/15/06						
Arsenic	96.4	5.0	mg/kg	100	ND	96.4	75-125	3.59	20	
Barium	171	1.0	"	100	77	94.0	75-125	1.18	20	
Chromium	104	2.0	"	100	27	77.0	75-125	4.69	20	

SunStar Laboratories, Inc.

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Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hansoy Radum Facility	
1900 Powell Street, 12th Floor	Project Number: [none]	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/16/06 10:43

PAH compounds by Semivolatile GCMS - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111510 - EPA 3550 ECD/GCMS										
Blank (6111510-BLK1)				Prepared & Analyzed: 11/15/06						
Acenaphthene	ND	300	ug/kg							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Naphthalene	ND	300	"							
Phenanthrene	ND	300	"							
Pyrene	ND	300	"							
Surrogate: 2,4,6-Tribromophenol	*1030*		"	*1670*		*61.7*	*18.1-101*			
Surrogate: Terphenyl-dl4	*1400*		"	*1670*		*83.8*	*29.1-130*			
LCS (6111510-BS1)				Prepared & Analyzed: 11/15/06						
Acenaphthene	1140	300	ug/kg	1670		68.3	38.9-79.4			
Pyrene	840	300	"	1670		50.3	25-85.2			
Surrogate: 2,4,6-Tribromophenol	*1160*		"	*1670*		*69.5*	*18.1-101*			
Surrogate: Terphenyl-dl4	*1460*		"	*1670*		*87.4*	*29.1-130*			
LCS Dup (6111510-BSD1)				Prepared & Analyzed: 11/15/06						
Acenaphthene	1100	300	ug/kg	1670		65.9	38.9-79.4	3.57	31	
Pyrene	824	300	"	1670		49.3	25-85.2	1.92	31	
Surrogate: 2,4,6-Tribromophenol	*1030*		"	*1670*		*61.7*	*18.1-101*			
Surrogate: Terphenyl-dl4	*1280*		"	*1670*		*76.6*	*29.1-130*			

SunStar Laboratories, Inc.

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Maria Bonifacio For John Shepler, Laboratory Director

Notes and Definitions

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

T601553

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

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

PROJECT NO.:
SECTION NO.:
DATE: 11/13/06
SAMPLER'S INITIALS: LPL
SERIAL NO.: Nº 201959
PROJECT NAME: HANSON RADUM Facility
SAMPLER (Signature):

SAMPLE / ANALYSES / REMARKS

SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	Soil	Water	TYPE	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602)	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	TAT Standard	TAT RUSH:	TAT HOLD	REMARKS
B-2-5	11/13/06		01	1	X			X	X	X				X			24 HOUR
B-2-10			02					X	X	X				X			24 hr
B-2-14			03					X	X	X				X			24 hr
B-2-19.5			04												X		hold
B-12-4.5			05					X	X					X			24 hr
B-13-9.5			06					X	X					X			24 hr
B-12-14.5			07					X	X			X				X	hold
B-17-5.5			08					X	X			Y		X			24 hr
B-17-9			09					X	X			X		X			24 hr
B-16-3			10					X	X			X		X			24 hr
B-16-31.5			11													X	hold
B-16-30.5			12													X	hold
B-16-25.5			13													X	hold
																	* As, Ba, Co, Cr, Cu, Ni, V
																	** if TPHd or TPHmo > 100 mg/kg run for PAH
																	24 HRS

SAMPLE RECEIPT: ☑ Intact ☑ Cold ☑ On Ice ☐ Ambient
Cooler Temp: 5.6°C
Cooler No:
Preservative Correct? ☐ Yes ☐ No ☑ N/A

ANALYTICAL LABORATORY: SUNSTAR ANALYTICAL

METHOD OF SHIPMENT:
LAB REPORT NO.:
FAX COC CONFIRMATION TO: KATRIN SCHLIEWEN
FAX RESULTS TO:
SEND HARDCOPY TO:
SEND EDD TO: EMV.LABEDDS.COM

	1	2	3
RELINQUISHED BY:	(SIGNATURE) KATRIN SCHLIEWEN (DATE) 11/13/06	(SIGNATURE) (DATE) 11/14/06	(SIGNATURE) (DATE)
	(PRINTED NAME) LARRY LAPUYADE (TIME) 5:05	(PRINTED NAME) GSO (TIME) 846	(PRINTED NAME) (TIME)
	(COMPANY) LFR, INC	(COMPANY)	(COMPANY)
RECEIVED BY:	(SIGNATURE) (DATE) 11/15/06	(SIGNATURE) (DATE) 11/14/06	(SIGNATURE) (DATE)
	(PRINTED NAME) Anna Mizer (TIME) 505 PM	(PRINTED NAME) Maria Bonifacio (TIME) 846	(PRINTED NAME) (TIME)
	(COMPANY) SUNSTAR	(COMPANY) Sunstar labs	(COMPANY)
			RECEIVED BY (LABORATORY):

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

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

20 November 2006

Katrin Schliewen
LFR Inc. -- Emeryville
1900 Powell Street, 12th Floor
Emeryville, CA 94608-1827

RE: Hanson Radum Facility

Enclosed are the results of analyses for samples received by the laboratory on 11/15/06 10:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Maria Bonifacio
Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum Facility	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/20/06 11:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1-4.5	T601559-01	Soil	11/14/06 09:00	11/15/06 10:30
B-1-7.5	T601559-02	Soil	11/14/06 09:10	11/15/06 10:30
B-1-10	T601559-03	Soil	11/14/06 09:20	11/15/06 10:30
B-3-7	T601559-07	Soil	11/14/06 11:04	11/15/06 10:30
B-3-10	T601559-08	Soil	11/14/06 10:40	11/15/06 10:30
B-3-14	T601559-09	Soil	11/14/06 11:15	11/15/06 10:30
B-3-18	T601559-10	Soil	11/14/06 11:20	11/15/06 10:30
B-4-10.5	T601559-12	Soil	11/14/06 12:30	11/15/06 10:30
B-4-15	T601559-13	Soil	11/14/06 12:30	11/15/06 10:30
B-8-13	T601559-17	Soil	11/14/06 16:40	11/15/06 10:30

SunStar Laboratories, Inc.

Maria Bonifacio, Project Coordinator

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.

Purgeable Petroleum Hydrocarbons by EPA 8015m

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-4.5 (T601559-01) Soil Sampled: 11/14/06 09:00 Received: 11/15/06 10:30									
C6-C12 (GRO)	ND	500	ug/kg	1	6111507	11/15/06	11/15/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*71.1 %*	*65-135*		"	"	"	"	
B-1-7.5 (T601559-02) Soil Sampled: 11/14/06 09:10 Received: 11/15/06 10:30									
C6-C12 (GRO)	**5900**	500	ug/kg	1	6111507	11/15/06	11/15/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*110 %*	*65-135*		"	"	"	"	
B-1-10 (T601559-03) Soil Sampled: 11/14/06 09:20 Received: 11/15/06 10:30									
C6-C12 (GRO)	ND	500	ug/kg	1	6111507	11/15/06	11/15/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*102 %*	*65-135*		"	"	"	"	
B-3-7 (T601559-07) Soil Sampled: 11/14/06 11:04 Received: 11/15/06 10:30									
C6-C12 (GRO)	**500**	500	ug/kg	1	6111507	11/15/06	11/15/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*99.2 %*	*65-135*		"	"	"	"	
B-3-10 (T601559-08) Soil Sampled: 11/14/06 10:40 Received: 11/15/06 10:30									
C6-C12 (GRO)	**38000**	500	ug/kg	1	6111507	11/15/06	11/15/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*175 %*	*65-135*		"	"	"	"	*S-02*
B-4-10.5 (T601559-12) Soil Sampled: 11/14/06 12:30 Received: 11/15/06 10:30									
C6-C12 (GRO)	**33000**	500	ug/kg	1	6111507	11/15/06	11/15/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*87.2 %*	*65-135*		"	"	"	"	
B-8-13 (T601559-17) Soil Sampled: 11/14/06 16:40 Received: 11/15/06 10:30									
C6-C12 (GRO)	ND	500	ug/kg	1	6111507	11/15/06	11/16/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*65-135*		"	"	"	"	

LFR Inc. -- Emeryville	Project: Hanson Radum Facility	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/20/06 11:26

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-4.5 (T601559-01) Soil Sampled: 11/14/06 09:00 Received: 11/15/06 10:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111506	11/15/06	11/16/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*94.5 %*	*65-135*		*"*	*"*	*"*	*"*	
B-1-7.5 (T601559-02) Soil Sampled: 11/14/06 09:10 Received: 11/15/06 10:30									
C13-C28 (DRO)	**320**	10	mg/kg	1	6111506	11/15/06	11/16/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*92.1 %*	*65-135*		*"*	*"*	*"*	*"*	
B-1-10 (T601559-03) Soil Sampled: 11/14/06 09:20 Received: 11/15/06 10:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111506	11/15/06	11/16/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*93.2 %*	*65-135*		*"*	*"*	*"*	*"*	
B-3-7 (T601559-07) Soil Sampled: 11/14/06 11:04 Received: 11/15/06 10:30									
C13-C28 (DRO)	**27**	10	mg/kg	1	6111506	11/15/06	11/16/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*92.6 %*	*65-135*		*"*	*"*	*"*	*"*	
B-3-10 (T601559-08) Soil Sampled: 11/14/06 10:40 Received: 11/15/06 10:30									
C13-C28 (DRO)	**7300**	10	mg/kg	1	6111506	11/15/06	11/16/06	EPA 8015m	
C29-C40 (MORO)	**330**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*104 %*	*65-135*		*"*	*"*	*"*	*"*	
B-3-14 (T601559-09) Soil Sampled: 11/14/06 11:15 Received: 11/15/06 10:30									
C13-C28 (DRO)	**2100**	10	mg/kg	1	6111705	11/17/06	11/18/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*113 %*	*65-135*		*"*	*"*	*"*	*"*	

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-3-18 (T601559-10) Soil Sampled: 11/14/06 11:20 Received: 11/15/06 10:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111705	11/17/06	11/18/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*112 %*	*65-135*		*"*	*"*	*"*	*"*	
B-4-10.5 (T601559-12) Soil Sampled: 11/14/06 12:30 Received: 11/15/06 10:30									
C13-C28 (DRO)	**6400**	10	mg/kg	1	6111506	11/15/06	11/16/06	EPA 8015m	
C29-C40 (MORO)	**460**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*89.3 %*	*65-135*		*"*	*"*	*"*	*"*	
B-4-15 (T601559-13) Soil Sampled: 11/14/06 12:30 Received: 11/15/06 10:30									
C13-C28 (DRO)	**7100**	10	mg/kg	1	6111705	11/17/06	11/18/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*127 %*	*65-135*		*"*	*"*	*"*	*"*	
B-8-13 (T601559-17) Soil Sampled: 11/14/06 16:40 Received: 11/15/06 10:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111506	11/15/06	11/16/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*88.5 %*	*65-135*		*"*	*"*	*"*	*"*	

LFR Inc. -- Emeryville	Project: Hanson Radum Facility	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/20/06 11:26

Volatile Organic Compounds by EPA Method 8260B

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-7.5 (T601559-02) Soil Sampled: 11/14/06 09:10 Received: 11/15/06 10:30									
Bromobenzene	ND	2.0	ug/kg	1	6111508	11/15/06	11/15/06	EPA 8260B	
Bromochloromethane	ND	2.0	"	"	"	"	"	"	
Bromodichloromethane	ND	2.0	"	"	"	"	"	"	
Bromoform	ND	2.0	"	"	"	"	"	"	
Bromomethane	ND	2.0	"	"	"	"	"	"	
n-Butylbenzene	**13**	2.0	"	"	"	"	"	"	
sec-Butylbenzene	**12**	2.0	"	"	"	"	"	"	
tert-Butylbenzene	**7.4**	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	2.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	2.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	2.0	"	"	"	"	"	"	
n-Propylbenzene	**7.7**	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

Volatile Organic Compounds by EPA Method 8260B

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-7.5 (T601559-02) Soil Sampled: 11/14/06 09:10 Received: 11/15/06 10:30									
1,1,1,2-Tetrachloroethane	ND	2.0	ug/kg	1	6111508	11/15/06	11/15/06	EPA 8260B	
Tetrachloroethene	ND	2.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	**11**	2.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	**7.2**	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**18**	2.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**23**	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
Benzene	ND	2.0	"	"	"	"	"	"	
Toluene	ND	2.0	"	"	"	"	"	"	
Ethylbenzene	ND	2.0	"	"	"	"	"	"	
m,p-Xylene	ND	4.0	"	"	"	"	"	"	
o-Xylene	ND	2.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*88.4 %*	*85.5-116*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*115 %*	*81.2-123*		"	"	"	"	
Surrogate: Dibromofluoromethane		*121 %*	*90-135*		"	"	"	"	
B-8-13 (T601559-17) Soil Sampled: 11/14/06 16:40 Received: 11/15/06 10:30									
Bromobenzene	ND	2.0	ug/kg	1	6111508	11/15/06	11/15/06	EPA 8260B	
Bromochloromethane	ND	2.0	"	"	"	"	"	"	
Bromodichloromethane	ND	2.0	"	"	"	"	"	"	
Bromoform	ND	2.0	"	"	"	"	"	"	
Bromomethane	ND	2.0	"	"	"	"	"	"	
n-Butylbenzene	**3.3**	2.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	2.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	2.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	2.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum Facility	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/20/06 11:26

Volatile Organic Compounds by EPA Method 8260B

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-8-13 (T601559-17) Soil Sampled: 11/14/06 16:40 Received: 11/15/06 10:30									
1,3-Dichlorobenzene	ND	2.0	ug/kg	1	6111508	11/15/06	11/15/06	EPA 8260B	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	2.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	2.0	"	"	"	"	"	"	
Isopropylbenzene	ND	2.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	2.0	"	"	"	"	"	"	
n-Propylbenzene	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	ND	2.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	**2.1**	2.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	**2.1**	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	2.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	2.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
Benzene	ND	2.0	"	"	"	"	"	"	
Toluene	ND	2.0	"	"	"	"	"	"	
Ethylbenzene	ND	2.0	"	"	"	"	"	"	
m,p-Xylene	ND	4.0	"	"	"	"	"	"	
o-Xylene	ND	2.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		*109 %*	*85.5-116*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*120 %*	*81.2-123*		"	"	"	"	
Surrogate: Dibromofluoromethane		*66.9 %*	*90-135*		"	"	"	"	*S-GC*

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-7.5 (T601559-02) Soil Sampled: 11/14/06 09:10 Received: 11/15/06 10:30									
Acenaphthene	ND	300	ug/kg	1	6111706	11/17/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	**440**	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*78.4 %*	*18.1-101*		"	"	"	"	
Surrogate: Terphenyl-dl4		*74.9 %*	*29.1-130*		"	"	"	"	
B-3-10 (T601559-08) Soil Sampled: 11/14/06 10:40 Received: 11/15/06 10:30									
Acenaphthene	ND	300	ug/kg	1	6111706	11/17/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*63.5 %*	*18.1-101*		"	"	"	"	
Surrogate: Terphenyl-dl4		*52.2 %*	*29.1-130*		"	"	"	"	

LFR Inc. -- Emeryville	Project: Hanson Radum Facility	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/20/06 11:26

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-4-10.5 (T601559-12) Soil Sampled: 11/14/06 12:30 Received: 11/15/06 10:30									
Acenaphthene	ND	300	ug/kg	1	6111706	11/17/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*45.0 %*	*18.1-101*		"	"	"	"	
Surrogate: Terphenyl-dl4		*48.2 %*	*29.1-130*		"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

Purgeable Petroleum Hydrocarbons by EPA 8015m - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111507 - EPA 5030 GC										
Blank (6111507-BLK1)				Prepared & Analyzed: 11/15/06						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*114*		*"*	*125*		*91.2*	*65-135*			
LCS (6111507-BS1)				Prepared & Analyzed: 11/15/06						
C6-C12 (GRO)	12200	500	ug/kg	13800		88.4	75-125			
Surrogate: 4-Bromofluorobenzene	*117*		*"*	*125*		*93.6*	*65-135*			
Matrix Spike (6111507-MS1)	**Source: T601559-01**			Prepared & Analyzed: 11/15/06						
C6-C12 (GRO)	10500	500	ug/kg	13800	ND	76.1	65-135			
Surrogate: 4-Bromofluorobenzene	*134*		*"*	*125*		*107*	*65-135*			
Matrix Spike Dup (6111507-MSD1)	**Source: T601559-01**			Prepared & Analyzed: 11/15/06						
C6-C12 (GRO)	12100	500	ug/kg	13800	ND	87.7	65-135	14.2	20	
Surrogate: 4-Bromofluorobenzene	*131*		*"*	*125*		*105*	*65-135*			

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111506 - EPA 3550B GC										
Blank (6111506-BLK1)				Prepared: 11/15/06 Analyzed: 11/16/06						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: Chrysene	*91.5*		*"*	*100*		*91.5*	*65-135*			
LCS (6111506-BS1)				Prepared: 11/15/06 Analyzed: 11/16/06						
C13-C28 (DRO)	480	10	mg/kg	500		96.0	75-125			
Surrogate: Chrysene	*93.6*		*"*	*100*		*93.6*	*65-135*			
Matrix Spike (6111506-MS1)	**Source: T601559-01**			Prepared: 11/15/06 Analyzed: 11/16/06						
C13-C28 (DRO)	570	10	mg/kg	500	ND	114	75-125			
Surrogate: Chrysene	*114*		*"*	*100*		*114*	*65-135*			
Matrix Spike Dup (6111506-MSD1)	**Source: T601559-01**			Prepared: 11/15/06 Analyzed: 11/16/06						
C13-C28 (DRO)	570	10	mg/kg	500	ND	114	75-125	0.00	20	
Surrogate: Chrysene	*121*		*"*	*100*		*121*	*65-135*			
Batch 6111705 - EPA 3550B GC										
Blank (6111705-BLK1)				Prepared: 11/17/06 Analyzed: 11/18/06						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: Chrysene	*101*		*"*	*100*		*101*	*65-135*			
LCS (6111705-BS1)				Prepared: 11/17/06 Analyzed: 11/18/06						
C13-C28 (DRO)	570	10	mg/kg	500		114	75-125			
Surrogate: Chrysene	*118*		*"*	*100*		*118*	*65-135*			

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111705 - EPA 3550B GC										
Matrix Spike (6111705-MS1)	**Source: T601559-09**			Prepared: 11/17/06		Analyzed: 11/18/06				
C13-C28 (DRO)	2700	10	mg/kg	500	2100	120	75-125			
Surrogate: Chrysene	*118*		*"*	*100*		*118*	*65-135*			
Matrix Spike Dup (6111705-MSD1)	**Source: T601559-09**			Prepared: 11/17/06		Analyzed: 11/18/06				
C13-C28 (DRO)	2700	10	mg/kg	500	2100	120	75-125	0.00	20	
Surrogate: Chrysene	*115*		*"*	*100*		*115*	*65-135*			

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 6111508 - EPA 5030 GCMS										
Blank (6111508-BLK1)				Prepared & Analyzed: 11/15/06						
Bromobenzene	ND	2.0	ug/kg							
Bromochloromethane	ND	2.0	"							
Bromodichloromethane	ND	2.0	"							
Bromoform	ND	2.0	"							
Bromomethane	ND	2.0	"							
n-Butylbenzene	ND	2.0	"							
sec-Butylbenzene	ND	2.0	"							
tert-Butylbenzene	ND	2.0	"							
Carbon tetrachloride	ND	2.0	"							
Chlorobenzene	ND	2.0	"							
Chloroethane	ND	2.0	"							
Chloroform	ND	2.0	"							
Chloromethane	ND	2.0	"							
2-Chlorotoluene	ND	2.0	"							
4-Chlorotoluene	ND	2.0	"							
Dibromochloromethane	ND	2.0	"							
1,2-Dibromo-3-chloropropane	ND	2.0	"							
1,2-Dibromoethane (EDB)	ND	2.0	"							
Dibromomethane	ND	2.0	"							
1,2-Dichlorobenzene	ND	2.0	"							
1,3-Dichlorobenzene	ND	2.0	"							
1,4-Dichlorobenzene	ND	2.0	"							
Dichlorodifluoromethane	ND	2.0	"							
1,1-Dichloroethane	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
1,1-Dichloroethene	ND	2.0	"							
cis-1,2-Dichloroethene	ND	2.0	"							
trans-1,2-Dichloroethene	ND	2.0	"							
1,2-Dichloropropane	ND	2.0	"							
1,3-Dichloropropane	ND	2.0	"							
2,2-Dichloropropane	ND	2.0	"							
1,1-Dichloropropene	ND	2.0	"							
cis-1,3-Dichloropropene	ND	2.0	"							
trans-1,3-Dichloropropene	ND	2.0	"							
Hexachlorobutadiene	ND	2.0	"							
Isopropylbenzene	ND	2.0	"							
p-Isopropyltoluene	ND	2.0	"							
Methylene chloride	ND	2.0	"							

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 6111508 - EPA 5030 GCMS										
Blank (6111508-BLK1)				Prepared & Analyzed: 11/15/06						
Naphthalene	ND	2.0	ug/kg							
n-Propylbenzene	ND	2.0	"							
Styrene	ND	2.0	"							
1,1,2,2-Tetrachloroethane	ND	2.0	"							
1,1,1,2-Tetrachloroethane	ND	2.0	"							
Tetrachloroethene	ND	2.0	"							
1,2,3-Trichlorobenzene	ND	2.0	"							
1,2,4-Trichlorobenzene	ND	2.0	"							
1,1,2-Trichloroethane	ND	2.0	"							
1,1,1-Trichloroethane	ND	2.0	"							
Trichloroethene	ND	2.0	"							
Trichlorofluoromethane	ND	2.0	"							
1,2,3-Trichloropropane	ND	2.0	"							
1,3,5-Trimethylbenzene	ND	2.0	"							
1,2,4-Trimethylbenzene	ND	2.0	"							
Vinyl chloride	ND	2.0	"							
Benzene	ND	2.0	"							
Toluene	ND	2.0	"							
Ethylbenzene	ND	2.0	"							
m,p-Xylene	ND	4.0	"							
o-Xylene	ND	2.0	"							
Surrogate: Toluene-d8	*102*		*"*	*100*		*102*	*85.5-116*			
Surrogate: 4-Bromofluorobenzene	*116*		*"*	*100*		*116*	*81.2-123*			
Surrogate: Dibromofluoromethane	*92.0*		*"*	*100*		*92.0*	*90-135*			
LCS (6111508-BS1)				Prepared: 11/15/06 Analyzed: 11/17/06						
Chlorobenzene	281	2.0	ug/kg	250		112	75-125			
1,1-Dichloroethene	233	2.0	"	250		93.2	75-125			
Trichloroethene	230	2.0	"	250		92.0	75-125			
Benzene	232	2.0	"	250		92.8	75-125			
Toluene	243	2.0	"	250		97.2	75-125			
Surrogate: Toluene-d8	*99.0*		*"*	*100*		*99.0*	*85.5-116*			
Surrogate: 4-Bromofluorobenzene	*111*		*"*	*100*		*111*	*81.2-123*			
Surrogate: Dibromofluoromethane	*112*		*"*	*100*		*112*	*90-135*			

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 6111508 - EPA 5030 GCMS										
Matrix Spike (6111508-MS1)	**Source: T601559-17**			Prepared & Analyzed: 11/15/06						
Chlorobenzene	212	2.0	ug/kg	250	ND	84.8	75-125			
1,1-Dichloroethene	162	2.0	"	250	ND	64.8	75-125			QM-07
Trichloroethene	184	2.0	"	250	ND	73.6	75-125			QM-07
Benzene	195	2.0	"	250	ND	78.0	75-125			
Toluene	216	2.0	"	250	ND	86.4	75-125			
Surrogate: Toluene-d8	*103*		*"*	*100*		*103*	*85.5-116*			
Surrogate: 4-Bromofluorobenzene	*118*		*"*	*100*		*118*	*81.2-123*			
Surrogate: Dibromofluoromethane	*64.8*		*"*	*100*		*64.8*	*90-135*			*S-GC*
Matrix Spike Dup (6111508-MSD1)	**Source: T601559-17**			Prepared & Analyzed: 11/15/06						
Chlorobenzene	192	2.0	ug/kg	250	ND	76.8	75-125	9.90	20	
1,1-Dichloroethene	188	2.0	"	250	ND	75.2	75-125	14.9	20	
Trichloroethene	181	2.0	"	250	ND	72.4	75-125	1.64	20	QM-07
Benzene	194	2.0	"	250	ND	77.6	75-125	0.514	20	
Toluene	189	2.0	"	250	ND	75.6	75-125	13.3	20	
Surrogate: Toluene-d8	*96.6*		*"*	*100*		*96.6*	*85.5-116*			
Surrogate: 4-Bromofluorobenzene	*115*		*"*	*100*		*115*	*81.2-123*			
Surrogate: Dibromofluoromethane	*80.3*		*"*	*100*		*80.3*	*90-135*			*S-GC*

PAH compounds by Semivolatile GCMS - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111706 - EPA 3550 ECD/GCMS										
Blank (6111706-BLK1)				Prepared: 11/17/06 Analyzed: 11/19/06						
Acenaphthene	ND	300	ug/kg							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Naphthalene	ND	300	"							
Phenanthrene	ND	300	"							
Pyrene	ND	300	"							
Surrogate: 2,4,6-Tribromophenol	*1300*		*"*	*1670*		*77.8*	*18.1-101*			
Surrogate: Terphenyl-dl4	*1480*		*"*	*1670*		*88.6*	*29.1-130*			
LCS (6111706-BS1)				Prepared: 11/17/06 Analyzed: 11/20/06						
Acenaphthene	1250	300	ug/kg	1670		74.9	38.9-79.4			
Pyrene	908	300	"	1670		54.4	25-85.2			
Surrogate: 2,4,6-Tribromophenol	*1640*		*"*	*1670*		*98.2*	*18.1-101*			
Surrogate: Terphenyl-dl4	*1420*		*"*	*1670*		*85.0*	*29.1-130*			
Matrix Spike (6111706-MS1)		**Source: T601559-02**		Prepared: 11/17/06 Analyzed: 11/20/06						
Acenaphthene	1240	300	ug/kg	1670	ND	74.3	33.8-76.1			
Pyrene	792	300	"	1670	ND	47.4	24.5-100			
Surrogate: 2,4,6-Tribromophenol	*1490*		*"*	*1670*		*89.2*	*18.1-101*			
Surrogate: Terphenyl-dl4	*1160*		*"*	*1670*		*69.5*	*29.1-130*			

PAH compounds by Semivolatile GCMS - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111706 - EPA 3550 ECD/GCMS										
Matrix Spike Dup (6111706-MSD1)	**Source: T601559-02**			Prepared: 11/17/06 Analyzed: 11/20/06						
Acenaphthene	1210	300	ug/kg	1670	ND	72.5	33.8-76.1	2.45	31	
Pyrene	731	300	"	1670	ND	43.8	24.5-100	8.01	31	
Surrogate: 2,4,6-Tribromophenol	*1180*		*"*	*1670*		*70.7*	*18.1-101*			
Surrogate: Terphenyl-dl4	*1080*		*"*	*1670*		*64.7*	*29.1-130*			

Notes and Definitions

S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

T601559

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

SAMPLE COLLECTOR:

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

PROJECT NO.: 001-09567-00 ~~xxx~~ SECTION NO.:
PROJECT NAME: HANSON RADUM
DATE: 11/14/06
SAMPLER'S INITIALS: LA
SAMPLER (Signature): [signature]
SERIAL NO.: № 202162

SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	Soil	Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602)	VOCs (EPA 8260/624) 8260	Metals (EPA 6010/7000)			LAB ID #	Standard	RUSH:	HOLD
B-1-4.5	11/14/06	900		1	X		X	X	X						01		X	
B-1-7.5		910					X	X	X		X				02			
B-1-10		920					X	X	X						03			
B-1-14.5		935													04			X
B-1-18		945													05			X
B-3-5		1050													06			X
B-3-7		1109					X	X	X						07			
B-3-10		1040					X	X	X						08			
B-3-14		1115													09			X
B-3-18		1120													10			X
B-4-5		1210													11			X
B-4-10.5		1230					X	X	X						12			
B-4-15		1230													13			X
B-4-18		1245													14			X
B-5-5.5		1400													15			X
B-7-5		1530													16			X
B-8-13		1640					X	X	X		X				17			
B-8-18		1650													18			X

REMARKS

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

IF TPHd + TPHmo IS GREATER THAN 100 mg/Kg, THEN RUN FOR PAH ~~FOR THE Sample~~

Metals: As, Ba, Co, Cr, Cu, Ni, VN

24 HRS

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

METHOD OF SHIPMENT:
LAB REPORT NO.:
FAX COC CONFIRMATION TO: KATRIN SCHLIEWE
FAX RESULTS TO:
SEND HARDCOPY TO:
SEND EDD TO: EMV.LABEDDS.COM

ANALYTICAL LABORATORY: SUNSTAR ANALYTICAL LAB

RELINQUISHED BY: 1
(SIGNATURE) [signature] (DATE) 11/14/06
(PRINTED NAME) LARRY LAPUYADE (TIME) 1714
(COMPANY) LFR, INC

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

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

RECEIVED BY: 1
(SIGNATURE) [signature] (DATE) 11/14/06
(PRINTED NAME) Jane Mizu (TIME) 1714
(COMPANY) SunSTAR

RECEIVED BY: 2
(SIGNATURE) [signature] (DATE) 11-15-06
(PRINTED NAME) Albert Vargas (TIME) 10:20
(COMPANY) Sunstar

RECEIVED BY (LABORATORY): 3
(SIGNATURE) (DATE)
(PRINTED NAME) (TIME)
(COMPANY)

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

21 November 2006

Katrin Schliewen
LFR Inc. -- Emeryville
1900 Powell Street, 12th Floor
Emeryville, CA 94608-1827

RE: Hanson Radum

Enclosed are the results of analyses for samples received by the laboratory on 11/16/06 08:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Maria Bonifacio For John Shepler
Laboratory Director

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 11:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B14-5.0	T601568-01	Soil	11/15/06 14:20	11/16/06 08:30
B14-10.0	T601568-02	Soil	11/15/06 14:30	11/16/06 08:30
B13-5	T601568-04	Soil	11/15/06 13:18	11/16/06 08:30
B13-7.5	T601568-05	Soil	11/15/06 13:20	11/16/06 08:30
GGW-21	T601568-08	Water	11/15/06 11:30	11/16/06 08:30
GGW-22	T601568-09	Water	11/15/06 16:00	11/16/06 08:30

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.

Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 11:11

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B14-5.0 (T601568-01) Soil Sampled: 11/15/06 14:20 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*107 %*	*65-135*		"	"	"	"	
B14-10.0 (T601568-02) Soil Sampled: 11/15/06 14:30 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*101 %*	*65-135*		"	"	"	"	
B13-5 (T601568-04) Soil Sampled: 11/15/06 13:18 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*102 %*	*65-135*		"	"	"	"	
B13-7.5 (T601568-05) Soil Sampled: 11/15/06 13:20 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*98.7 %*	*65-135*		"	"	"	"	
GGW-21 (T601568-08) Water Sampled: 11/15/06 11:30 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	0.050	mg/l	1	6111604	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	0.050	"	"	"	"	"	"	
Surrogate: Chrysene		*127 %*	*65-135*		"	"	"	"	
GGW-22 (T601568-09) Water Sampled: 11/15/06 16:00 Received: 11/16/06 08:30									
C13-C28 (DRO)	**1.7**	0.050	mg/l	1	6111604	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	0.050	"	"	"	"	"	"	
Surrogate: Chrysene		*73.5 %*	*65-135*		"	"	"	"	

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.

Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 11:11

Volatile Organic Compounds by EPA Method 8260B

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GGW-22 (T601568-09) Water Sampled: 11/15/06 16:00 Received: 11/16/06 08:30									
Bromobenzene	ND	1.0	ug/l	1	6111723	11/17/06	11/17/06	EPA 8260B	
Bromochloromethane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
n-Butylbenzene	ND	1.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	1.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
Chloromethane	ND	1.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	1.0	"	"	"	"	"	"	
Dibromochloromethane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1.0	"	"	"	"	"	"	
Dibromomethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	1.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Hexachlorobutadiene	ND	1.0	"	"	"	"	"	"	
Isopropylbenzene	**2.5**	1.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
n-Propylbenzene	ND	1.0	"	"	"	"	"	"	
Styrene	ND	1.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	

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.

Maria Bonifacio For John Shepler, Laboratory Director

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 11:11

Volatile Organic Compounds by EPA Method 8260B

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
GGW-22 (T601568-09) Water	**Sampled: 11/15/06 16:00**	**Received: 11/16/06 08:30**							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/l	1	6111723	11/17/06	11/17/06	EPA 8260B	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	1.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**0.59**	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	1.0	"	"	"	"	"	"	
o-Xylene	**1.2**	0.50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*88.8-117*		"	"	"	"	
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.

Maria Bonifacio For John Shepler, Laboratory Director

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111604 - EPA 3510C GC										
Blank (6111604-BLK1)				Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	ND	0.050	mg/l							
C29-C40 (MORO)	ND	0.050	"							
Surrogate: Chrysene	*3.20*		*"*	*4.00*		*80.0*	*65-135*			
LCS (6111604-BS1)				Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	18.7	0.050	mg/l	20.0		93.5	75-125			
Surrogate: Chrysene	*2.87*		*"*	*4.00*		*71.8*	*65-135*			
Matrix Spike (6111604-MS1)	**Source: T601568-08**			Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	21.8	0.050	mg/l	20.0	ND	109	75-125			
Surrogate: Chrysene	*3.97*		*"*	*4.00*		*99.2*	*65-135*			
Matrix Spike Dup (6111604-MSD1)	**Source: T601568-08**			Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	24.0	0.050	mg/l	20.0	ND	120	75-125	9.61	20	
Surrogate: Chrysene	*4.18*		*"*	*4.00*		*104*	*65-135*			
Batch 6111605 - EPA 3550B GC										
Blank (6111605-BLK1)				Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: Chrysene	*99.1*		*"*	*100*		*99.1*	*65-135*			
LCS (6111605-BS1)				Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	570	10	mg/kg	500		114	75-125			
Surrogate: Chrysene	*117*		*"*	*100*		*117*	*65-135*			

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 11:11

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111605 - EPA 3550B GC										
Matrix Spike (6111605-MS1)	**Source: T601569-01**			Prepared: 11/16/06		Analyzed: 11/17/06				
C13-C28 (DRO)	590	10	mg/kg	500	ND	118	75-125			
Surrogate: Chrysene	*133*		*"*	*100*		*133*	*65-135*			
Matrix Spike Dup (6111605-MSD1)	**Source: T601569-01**			Prepared: 11/16/06		Analyzed: 11/17/06				
C13-C28 (DRO)	590	10	mg/kg	500	ND	118	75-125	0.00	20	
Surrogate: Chrysene	*134*		*"*	*100*		*134*	*65-135*			

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 6111723 - EPA 5030 GCMS										
Blank (6111723-BLK1)				Prepared & Analyzed: 11/17/06						
Bromobenzene	ND	1.0	ug/l							
Bromochloromethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	1.0	"							
n-Butylbenzene	ND	1.0	"							
sec-Butylbenzene	ND	1.0	"							
tert-Butylbenzene	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	1.0	"							
Chloroethane	ND	1.0	"							
Chloroform	ND	1.0	"							
Chloromethane	ND	1.0	"							
2-Chlorotoluene	ND	1.0	"							
4-Chlorotoluene	ND	1.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	1.0	"							
1,2-Dibromoethane (EDB)	ND	1.0	"							
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,3-Dichlorobenzene	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
1,3-Dichloropropane	ND	1.0	"							
2,2-Dichloropropane	ND	1.0	"							
1,1-Dichloropropene	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Hexachlorobutadiene	ND	1.0	"							
Isopropylbenzene	ND	1.0	"							
p-Isopropyltoluene	ND	1.0	"							
Methylene chloride	ND	1.0	"							

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 6111723 - EPA 5030 GCMS										
Blank (6111723-BLK1)				Prepared & Analyzed: 11/17/06						
Naphthalene	ND	1.0	ug/l							
n-Propylbenzene	ND	1.0	"							
Styrene	ND	1.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
1,2,3-Trichlorobenzene	ND	1.0	"							
1,2,4-Trichlorobenzene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
Vinyl chloride	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
m,p-Xylene	ND	1.0	"							
o-Xylene	ND	0.50	"							
Surrogate: Toluene-d8	*40.0*		*"*	*40.0*		*100*	*88.8-117*			
Surrogate: 4-Bromofluorobenzene	*41.0*		*"*	*40.0*		*102*	*83.5-119*			
Surrogate: Dibromofluoromethane	*40.9*		*"*	*40.0*		*102*	*81.1-136*			
LCS (6111723-BS1)				Prepared & Analyzed: 11/17/06						
Chlorobenzene	97.1	1.0	ug/l	100		97.1	75-125			
1,1-Dichloroethene	108	1.0	"	100		108	75-125			
Trichloroethene	97.0	1.0	"	100		97.0	75-125			
Benzene	103	0.50	"	100		103	75-125			
Toluene	103	0.50	"	100		103	75-125			
Surrogate: Toluene-d8	*39.5*		*"*	*40.0*		*98.8*	*88.8-117*			
Surrogate: 4-Bromofluorobenzene	*44.5*		*"*	*40.0*		*111*	*83.5-119*			
Surrogate: Dibromofluoromethane	*41.7*		*"*	*40.0*		*104*	*81.1-136*			

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 6111723 - EPA 5030 GCMS										
LCS Dup (6111723-BSD1)				Prepared & Analyzed: 11/17/06						
Chlorobenzene	111	1.0	ug/l	100		111	75-125	13.4	20	
1,1-Dichloroethene	124	1.0	"	100		124	75-125	13.8	20	
Trichloroethene	107	1.0	"	100		107	75-125	9.80	20	
Benzene	117	0.50	"	100		117	75-125	12.7	20	
Toluene	106	0.50	"	100		106	75-125	2.87	20	
Surrogate: Toluene-d8	*39.9*		*"*	*40.0*		*99.8*	*88.8-117*			
Surrogate: 4-Bromofluorobenzene	*44.8*		*"*	*40.0*		*112*	*83.5-119*			
Surrogate: Dibromofluoromethane	*42.6*		*"*	*40.0*		*106*	*81.1-136*			

Notes and Definitions

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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

T601568

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

PROJECT NO.: | SECTION NO.: | DATE: 11/15/06 | SAMPLER'S INITIALS: JT | SERIAL NO.: Nº 202160

PROJECT NAME: HANSON RADUM | SAMPLER (Signature): Jason Trolo

SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	TYPE: Soil	TYPE: Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602)	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	Lab ID	TAT: Standard	TAT: RUSH:	TAT: HOLD	REMARKS
B14-5.0		1420	1	1	X		X	X					01	X			*S: liaa Gel
B14-10.0		1430					X	X					02	X			
B14-15.0		1440											03			X	Clean-up ALL
B-13-5		1318					X	X					04	X			Soils
B-13-7.5		1320					X	X					05	X			
B-13-10		1330											06			X	IF TPHd/mo is
#22-50.5		1500											07			X	
GGW-21		1130		3		X	X	X					08	X			GREATER THAN
GGW-22		1600		3		X	X	X					09	X			100 mg/kg, THEN
																	RUN FOR PAH
																	24 HOUR TURN
																	RUSH
																	METALS;

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

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

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

ANALYTICAL LABORATORY: SUN STAR

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

RELINQUISHED BY: 1
(SIGNATURE) (DATE) 11/15/06
(PRINTED NAME) LARRY LAPUYADE (TIME) 1634
(COMPANY) LFR INC

RECEIVED BY: 1
(SIGNATURE) (DATE) 11/15/06
(PRINTED NAME) (TIME) 1634
(COMPANY) SUNSTAR

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

RECEIVED BY: 2
(SIGNATURE) (DATE) 11/16/06
(PRINTED NAME) Maria Bonifacio (TIME) 830
(COMPANY) GSO

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

RECEIVED BY (LABORATORY): 3
(SIGNATURE) (DATE)
(PRINTED NAME) (TIME)
(COMPANY)

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

21 November 2006

Katrin Schliewen
LFR Inc. -- Emeryville
1900 Powell Street, 12th Floor
Emeryville, CA 94608-1827

RE: Hanson Radum

Enclosed are the results of analyses for samples received by the laboratory on 11/16/06 08:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Maria Bonifacio
Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-5-5	T601569-01	Soil	11/15/06 09:40	11/16/06 08:30
B-5-10	T601569-02	Soil	11/15/06 09:50	11/16/06 08:30
B-5-15	T601569-03	Soil	11/15/06 10:00	11/16/06 08:30
B-6-5	T601569-04	Soil	11/15/06 08:15	11/16/06 08:30
B-6-10	T601569-05	Soil	11/15/06 08:20	11/16/06 08:30
B-6-15	T601569-06	Soil	11/15/06 08:30	11/16/06 08:30
B-7-5	T601569-07	Soil	11/15/06 08:50	11/16/06 08:30
B-7-11	T601569-08	Soil	11/15/06 09:10	11/16/06 08:30
B-9-5	T601569-10	Soil	11/15/06 11:30	11/16/06 08:30
B-9-10	T601569-11	Soil	11/15/06 11:40	11/16/06 08:30
B-10-5	T601569-13	Soil	11/15/06 10:40	11/16/06 08:30
B-10-10	T601569-14	Soil	11/15/06 10:45	11/16/06 08:30
B-11-5	T601569-16	Soil	11/15/06 13:20	11/16/06 08:30
B-11-10	T601569-17	Soil	11/15/06 13:30	11/16/06 08:30
B-11-15	T601569-18	Soil	11/15/06 13:35	11/16/06 08:30

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.

Maria Bonifacio, Project Coordinator

Purgeable Petroleum Hydrocarbons by EPA 8015m

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-9-5 (T601569-10) Soil Sampled: 11/15/06 11:30 Received: 11/16/06 08:30									
C6-C12 (GRO)	ND	500	ug/kg	1	6111613	11/16/06	11/16/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*92.0 %*	*65-135*		"	"	"	"	
B-9-10 (T601569-11) Soil Sampled: 11/15/06 11:40 Received: 11/16/06 08:30									
C6-C12 (GRO)	ND	500	ug/kg	1	6111613	11/16/06	11/16/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*94.4 %*	*65-135*		"	"	"	"	
B-10-5 (T601569-13) Soil Sampled: 11/15/06 10:40 Received: 11/16/06 08:30									
C6-C12 (GRO)	ND	500	ug/kg	1	6111613	11/16/06	11/16/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*65-135*		"	"	"	"	
B-10-10 (T601569-14) Soil Sampled: 11/15/06 10:45 Received: 11/16/06 08:30									
C6-C12 (GRO)	ND	500	ug/kg	1	6111613	11/16/06	11/16/06	EPA 8015m	
Surrogate: 4-Bromofluorobenzene		*91.2 %*	*65-135*		"	"	"	"	

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5-5 (T601569-01) Soil Sampled: 11/15/06 09:40 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*129 %*	*65-135*		"	"	"	"	
B-5-10 (T601569-02) Soil Sampled: 11/15/06 09:50 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	**160**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*100 %*	*65-135*		"	"	"	"	
B-5-15 (T601569-03) Soil Sampled: 11/15/06 10:00 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	**7800**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*102 %*	*65-135*		"	"	"	"	
B-6-5 (T601569-04) Soil Sampled: 11/15/06 08:15 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	**19000**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*94.7 %*	*65-135*		"	"	"	"	
B-6-10 (T601569-05) Soil Sampled: 11/15/06 08:20 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*103 %*	*65-135*		"	"	"	"	
B-6-15 (T601569-06) Soil Sampled: 11/15/06 08:30 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*126 %*	*65-135*		"	"	"	"	

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-7-5 (T601569-07) Soil Sampled: 11/15/06 08:50 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*124 %*	*65-135*		*"*	*"*	*"*	*"*	
B-7-11 (T601569-08) Soil Sampled: 11/15/06 09:10 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*101 %*	*65-135*		*"*	*"*	*"*	*"*	
B-9-5 (T601569-10) Soil Sampled: 11/15/06 11:30 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*101 %*	*65-135*		*"*	*"*	*"*	*"*	
B-9-10 (T601569-11) Soil Sampled: 11/15/06 11:40 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*98.8 %*	*65-135*		*"*	*"*	*"*	*"*	
B-10-5 (T601569-13) Soil Sampled: 11/15/06 10:40 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*96.9 %*	*65-135*		*"*	*"*	*"*	*"*	
B-10-10 (T601569-14) Soil Sampled: 11/15/06 10:45 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*99.3 %*	*65-135*		*"*	*"*	*"*	*"*	

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-11-5 (T601569-16) Soil Sampled: 11/15/06 13:20 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*99.9 %*	*65-135*		*"*	*"*	*"*	*"*	
B-11-10 (T601569-17) Soil Sampled: 11/15/06 13:30 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*97.3 %*	*65-135*		*"*	*"*	*"*	*"*	
B-11-15 (T601569-18) Soil Sampled: 11/15/06 13:35 Received: 11/16/06 08:30									
C13-C28 (DRO)	ND	10	mg/kg	1	6111605	11/16/06	11/17/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*123 %*	*65-135*		*"*	*"*	*"*	*"*	

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

Metals by EPA 6000/7000 Series Methods

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-9-5 (T601569-10) Soil Sampled: 11/15/06 11:30 Received: 11/16/06 08:30									
Arsenic	ND	5.0	mg/kg	1	6111603	11/16/06	11/16/06	EPA 6010B	
Barium	**43**	1.0	"	"	"	"	"	"	
Chromium	**15**	2.0	"	"	"	"	"	"	
Cobalt	**4.5**	2.0	"	"	"	"	"	"	
Copper	**14**	1.0	"	"	"	"	"	"	
Nickel	**29**	2.0	"	"	"	"	"	"	
Vanadium	**8.8**	5.0	"	"	"	"	"	"	
B-9-10 (T601569-11) Soil Sampled: 11/15/06 11:40 Received: 11/16/06 08:30									
Arsenic	ND	5.0	mg/kg	1	6111603	11/16/06	11/16/06	EPA 6010B	
Barium	**49**	1.0	"	"	"	"	"	"	
Chromium	**23**	2.0	"	"	"	"	"	"	
Cobalt	**5.3**	2.0	"	"	"	"	"	"	
Copper	**14**	1.0	"	"	"	"	"	"	
Nickel	**39**	2.0	"	"	"	"	"	"	
Vanadium	**12**	5.0	"	"	"	"	"	"	
B-10-5 (T601569-13) Soil Sampled: 11/15/06 10:40 Received: 11/16/06 08:30									
Arsenic	ND	5.0	mg/kg	1	6111603	11/16/06	11/16/06	EPA 6010B	
Barium	**50**	1.0	"	"	"	"	"	"	
Chromium	**12**	2.0	"	"	"	"	"	"	
Cobalt	**3.8**	2.0	"	"	"	"	"	"	
Copper	**28**	1.0	"	"	"	"	"	"	
Nickel	**18**	2.0	"	"	"	"	"	"	
Vanadium	**7.2**	5.0	"	"	"	"	"	"	

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

Metals by EPA 6000/7000 Series Methods

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-10-10 (T601569-14) Soil Sampled: 11/15/06 10:45 Received: 11/16/06 08:30									
Arsenic	ND	5.0	mg/kg	1	6111603	11/16/06	11/16/06	EPA 6010B	
Barium	**32**	1.0	"	"	"	"	"	"	
Chromium	**13**	2.0	"	"	"	"	"	"	
Cobalt	**4.3**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Nickel	**26**	2.0	"	"	"	"	"	"	
Vanadium	**7.2**	5.0	"	"	"	"	"	"	

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-5-10 (T601569-02) Soil Sampled: 11/15/06 09:50 Received: 11/16/06 08:30									
Acenaphthene	ND	300	ug/kg	1	6112003	11/20/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*75.4 %*	*29.1-130*		"	"	"	"	
B-5-15 (T601569-03) Soil Sampled: 11/15/06 10:00 Received: 11/16/06 08:30									
Acenaphthene	ND	300	ug/kg	1	6112003	11/20/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*104 %*	*29.1-130*		"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-6-5 (T601569-04) Soil Sampled: 11/15/06 08:15 Received: 11/16/06 08:30									
Acenaphthene	ND	300	ug/kg	1	6112003	11/20/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*%*	*29.1-130*		*"*	*"*	*"*	*"*	*S-04*
B-11-5 (T601569-16) Soil Sampled: 11/15/06 13:20 Received: 11/16/06 08:30									
Acenaphthene	ND	300	ug/kg	1	6111606	11/16/06	11/19/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	**460**	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	**800**	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*71.9 %*	*29.1-130*		*"*	*"*	*"*	*"*	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/21/06 14:47

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-11-10 (T601569-17) Soil Sampled: 11/15/06 13:30 Received: 11/16/06 08:30									
Acenaphthene	ND	300	ug/kg	1	6111606	11/16/06	11/19/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	**360**	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*73.1 %*	*29.1-130*		*"*	*"*	*"*	*"*	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

Purgeable Petroleum Hydrocarbons by EPA 8015m - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111613 - EPA 5030 GC										
Blank (6111613-BLK1)				Prepared & Analyzed: 11/16/06						
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	*109*		*"*	*125*		*87.2*	*65-135*			
LCS (6111613-BS1)				Prepared & Analyzed: 11/16/06						
C6-C12 (GRO)	14800	500	ug/kg	13800		107	75-125			
Surrogate: 4-Bromofluorobenzene	*125*		*"*	*125*		*100*	*65-135*			
Matrix Spike (6111613-MS1)	**Source: T601569-10**			Prepared & Analyzed: 11/16/06						
C6-C12 (GRO)	12500	500	ug/kg	13800	ND	90.6	65-135			
Surrogate: 4-Bromofluorobenzene	*133*		*"*	*125*		*106*	*65-135*			
Matrix Spike Dup (6111613-MSD1)	**Source: T601569-10**			Prepared & Analyzed: 11/16/06						
C6-C12 (GRO)	14500	500	ug/kg	13800	ND	105	65-135	14.8	20	
Surrogate: 4-Bromofluorobenzene	*138*		*"*	*125*		*110*	*65-135*			

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111605 - EPA 3550B GC										
Blank (6111605-BLK1)				Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: Chrysene	*99.1*		*"*	*100*		*99.1*	*65-135*			
LCS (6111605-BS1)				Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	570	10	mg/kg	500		114	75-125			
Surrogate: Chrysene	*117*		*"*	*100*		*117*	*65-135*			
Matrix Spike (6111605-MS1)	**Source: T601569-01**			Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	590	10	mg/kg	500	ND	118	75-125			
Surrogate: Chrysene	*133*		*"*	*100*		*133*	*65-135*			
Matrix Spike Dup (6111605-MSD1)	**Source: T601569-01**			Prepared: 11/16/06 Analyzed: 11/17/06						
C13-C28 (DRO)	590	10	mg/kg	500	ND	118	75-125	0.00	20	
Surrogate: Chrysene	*134*		*"*	*100*		*134*	*65-135*			

Metals by EPA 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111603 - EPA 3051										
Blank (6111603-BLK1)				Prepared & Analyzed: 11/16/06						
Arsenic	ND	5.0	mg/kg							
Barium	ND	1.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	ND	1.0	"							
Nickel	ND	2.0	"							
Vanadium	ND	5.0	"							
LCS (6111603-BS1)				Prepared & Analyzed: 11/16/06						
Arsenic	98.5	5.0	mg/kg	100		98.5	75-125			
Barium	94.1	1.0	"	100		94.1	75-125			
Chromium	97.0	2.0	"	100		97.0	75-125			
Matrix Spike (6111603-MS1)	**Source: T601569-10**			Prepared & Analyzed: 11/16/06						
Arsenic	97.7	5.0	mg/kg	100	2.7	95.0	75-125			
Barium	136	1.0	"	100	43	93.0	75-125			
Chromium	117	2.0	"	100	15	102	75-125			
Matrix Spike Dup (6111603-MSD1)	**Source: T601569-10**			Prepared & Analyzed: 11/16/06						
Arsenic	92.4	5.0	mg/kg	100	2.7	89.7	75-125	5.58	20	
Barium	141	1.0	"	100	43	98.0	75-125	3.61	20	
Chromium	130	2.0	"	100	15	115	75-125	10.5	20	

PAH compounds by Semivolatile GCMS - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111606 - EPA 3550 ECD/GCMS										
Blank (6111606-BLK1)				Prepared: 11/16/06 Analyzed: 11/19/06						
Acenaphthene	ND	300	ug/kg							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Naphthalene	ND	300	"							
Phenanthrene	ND	300	"							
Pyrene	ND	300	"							
Surrogate: Terphenyl-dl4	*1270*		*"*	*1670*		*76.0*	*29.1-130*			
LCS (6111606-BS1)				Prepared: 11/16/06 Analyzed: 11/19/06						
Acenaphthene	1280	300	ug/kg	1670		76.6	38.9-79.4			
Pyrene	1060	300	"	1670		63.5	25-85.2			
Surrogate: Terphenyl-dl4	*1440*		*"*	*1670*		*86.2*	*29.1-130*			
LCS Dup (6111606-BSD1)				Prepared: 11/16/06 Analyzed: 11/19/06						
Acenaphthene	1220	300	ug/kg	1670		73.1	38.9-79.4	4.80	31	
Pyrene	934	300	"	1670		55.9	25-85.2	12.6	31	
Surrogate: Terphenyl-dl4	*1600*		*"*	*1670*		*95.8*	*29.1-130*			

PAH compounds by Semivolatile GCMS - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6112003 - EPA 3550 ECD/GCMS										
Blank (6112003-BLK1)				Prepared & Analyzed: 11/20/06						
Acenaphthene	ND	300	ug/kg							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Naphthalene	ND	300	"							
Phenanthrene	ND	300	"							
Pyrene	ND	300	"							
Surrogate: Terphenyl-dl4	*1290*		*"*	*1670*		*77.2*	*29.1-130*			
LCS (6112003-BS1)				Prepared & Analyzed: 11/20/06						
Acenaphthene	1240	300	ug/kg	1670		74.3	38.9-79.4			
Pyrene	865	300	"	1670		51.8	25-85.2			
Surrogate: Terphenyl-dl4	*1420*		*"*	*1670*		*85.0*	*29.1-130*			
Matrix Spike (6112003-MS1)		**Source: T601578-01**		Prepared & Analyzed: 11/20/06						
Acenaphthene	1180	300	ug/kg	1670	ND	70.7	33.8-76.1			
Pyrene	777	300	"	1670	ND	46.5	24.5-100			
Surrogate: Terphenyl-dl4	*1080*		*"*	*1670*		*64.7*	*29.1-130*			

PAH compounds by Semivolatile GCMS - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6112003 - EPA 3550 ECD/GCMS										
Matrix Spike Dup (6112003-MSD1)	**Source: T601578-01**			Prepared & Analyzed: 11/20/06						
Acenaphthene	1040	300	ug/kg	1670	ND	62.3	33.8-76.1	12.6	31	
Pyrene	727	300	"	1670	ND	43.5	24.5-100	6.65	31	
Surrogate: Terphenyl-dl4	*1060*		*"*	*1670*		*63.5*	*29.1-130*			

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

T601569

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

PROJECT NO.: 001-09567-00 | SECTION NO.: XXX | DATE: 11/15/06 | SAMPLER'S INITIALS: JT | SERIAL NO.: Nº 201953

PROJECT NAME: HANSON RADIUM | SAMPLER (Signature): Jason Trivlo

SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	TYPE: Soil	TYPE: Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602)	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	SVOCs	Lab ID	TAT: Standard	TAT: RUSH:	TAT: HOLD
B5-5.0		0940		1	X		X	X						01	X		
B5-10.0		0950					X	X						02			
B5-15.0		1000					X	X						03			
B6-5.0		0815					X	X						04			
B6-10.0		0820					X	X						05			
B6-15.0		0830					X	X						06			
B7-5.0		0850					X	X						07			
B7-11.0		0910					X	X						08			
B7-15.0		0915												09		X	
B9-5.0		1130					X	X	X	X				10	X		
B9-10.0		1140					X	X	X	X				11	X		
B9-15.0		1150												12		X	
B10-5.0		1040					X	X	X	X				13	X		
B10-10.0		1045					X	X	X	X				14	X		
B10-15.0		1050												15		X	
B11-5.0		1320					X	X					RUN THIS	16	X		
B11-10.0		1330					X	X					X	17	X		
B11-15.0		1335					X	X					2PZ	18	X		
B11-22.5		1350		V									DP2	19		X	

REMARKS:
*Silica Gel Clean-up ALL Soils
IF TPHd/mo is GREATER THAN 100 mg/kg, THEN RUN FOR PAH
24 hr Rush TURN
Metals: As, Ba, Co, Cr, Cu, Ni, V, Zn

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

SAMPLE RECEIPT: ☐ Intact ☑ Cold ☐ On Ice ☐ Ambient | Cooler Temp: 4.4 | Cooler No:
Preservative Correct? ☐ Yes ☐ No ☑ N/A

ANALYTICAL LABORATORY: SUN STAR

METHOD OF SHIPMENT:
LAB REPORT NO.:
FAX COC CONFIRMATION TO: KATRIN SCHLIEWEN
FAX RESULTS TO:
SEND HARDCOPY TO:
SEND EDD TO: EMV.LABEDDS.COM

RELINQUISHED BY: 1
(SIGNATURE) (DATE) 11/15/06
(PRINTED NAME) Larry Lacy (TIME) 1633
(COMPANY) LFR, INC.

RECEIVED BY: 1
(SIGNATURE) James Mizen (DATE) 11/15/06
(PRINTED NAME) James Mizen (TIME) 1633
(COMPANY) SUNSTAR

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

RECEIVED BY: 2
(SIGNATURE) (DATE)
(PRINTED NAME) Maria Bonifacio (TIME) 11/16/06 830
(COMPANY) GSO

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

RECEIVED BY (LABORATORY): 3
(SIGNATURE) (DATE)
(PRINTED NAME) (TIME)
(COMPANY)

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CHAIN of CUSTODY - ANALYSES FORM.CDR 5/2003

22 November 2006

Katrin Schliewen
LFR Inc. -- Emeryville
1900 Powell Street, 12th Floor
Emeryville, CA 94608-1827

RE: Hanson Radum

Enclosed are the results of analyses for samples received by the laboratory on 11/17/06 10:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Maria Bonifacio
Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/22/06 14:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-15-4	T601578-01	Soil	11/16/06 15:00	11/17/06 10:00
B-15-7	T601578-02	Soil	11/16/06 15:10	11/17/06 10:00
B-18-6	T601578-04	Soil	11/16/06 11:15	11/17/06 10:00
B-18-10	T601578-05	Soil	11/16/06 11:25	11/17/06 10:00
B-19-6	T601578-06	Soil	11/16/06 11:30	11/17/06 10:00
B-19-10	T601578-07	Soil	11/16/06 11:40	11/17/06 10:00
B-20-4	T601578-08	Soil	11/16/06 12:50	11/17/06 10:00
B-20-7	T601578-09	Soil	11/16/06 12:55	11/17/06 10:00
B-24-4	T601578-12	Soil	11/16/06 13:50	11/17/06 10:00
B-24-7	T601578-13	Soil	11/16/06 13:55	11/17/06 10:00
B-24-10	T601578-14	Soil	11/16/06 14:00	11/17/06 10:00
GGW-23	T601578-17	Water	11/16/06 14:50	11/17/06 10:00

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/22/06 14:58

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-15-4 (T601578-01) Soil	**Sampled: 11/16/06 15:00**	**Received: 11/17/06 10:00**							
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/18/06	EPA 8015m	
C29-C40 (MORO)	**220**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*170 %*	*65-135*		"	"	"	"	*S-04*
B-15-7 (T601578-02) Soil	**Sampled: 11/16/06 15:10**	**Received: 11/17/06 10:00**							
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/18/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*126 %*	*65-135*		"	"	"	"	
B-18-6 (T601578-04) Soil	**Sampled: 11/16/06 11:15**	**Received: 11/17/06 10:00**							
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/18/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*131 %*	*65-135*		"	"	"	"	
B-20-4 (T601578-08) Soil	**Sampled: 11/16/06 12:50**	**Received: 11/17/06 10:00**							
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/18/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*135 %*	*65-135*		"	"	"	"	
B-20-7 (T601578-09) Soil	**Sampled: 11/16/06 12:55**	**Received: 11/17/06 10:00**							
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/19/06	EPA 8015m	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: Chrysene		*134 %*	*65-135*		"	"	"	"	
B-24-4 (T601578-12) Soil	**Sampled: 11/16/06 13:50**	**Received: 11/17/06 10:00**							
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/19/06	EPA 8015m	
C29-C40 (MORO)	**1300**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*29.5 %*	*65-135*		"	"	"	"	*S-04*

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.

Maria Bonifacio, Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/22/06 14:58

Extractable Petroleum Hydrocarbons by 8015

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-24-7 (T601578-13) Soil Sampled: 11/16/06 13:55 Received: 11/17/06 10:00									
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/19/06	EPA 8015m	
C29-C40 (MORO)	**650**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*129 %*	*65-135*		*"*	*"*	*"*	*"*	
B-24-10 (T601578-14) Soil Sampled: 11/16/06 14:00 Received: 11/17/06 10:00									
C13-C28 (DRO)	ND	10	mg/kg	1	6111711	11/17/06	11/19/06	EPA 8015m	
C29-C40 (MORO)	**3500**	10	"	"	"	"	"	"	
Surrogate: Chrysene		*24.2 %*	*65-135*		*"*	*"*	*"*	*"*	*S-04*
GGW-23 (T601578-17) Water Sampled: 11/16/06 14:50 Received: 11/17/06 10:00									
C13-C28 (DRO)	ND	0.050	mg/l	1	6111722	11/17/06	11/19/06	EPA 8015m	
C29-C40 (MORO)	ND	0.050	"	"	"	"	"	"	
Surrogate: Chrysene		*83.2 %*	*65-135*		*"*	*"*	*"*	*"*	

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/22/06 14:58

Metals by EPA 6000/7000 Series Methods

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-18-6 (T601578-04) Soil Sampled: 11/16/06 11:15 Received: 11/17/06 10:00									
Arsenic	ND	5.0	mg/kg	1	6111714	11/17/06	11/17/06	EPA 6010B	
Barium	**48**	1.0	"	"	"	"	"	"	
Chromium	**14**	2.0	"	"	"	"	"	"	
Cobalt	**3.9**	2.0	"	"	"	"	"	"	
Copper	**37**	1.0	"	"	"	"	"	"	
Nickel	**33**	2.0	"	"	"	"	"	"	
Vanadium	**7.4**	5.0	"	"	"	"	"	"	
B-18-10 (T601578-05) Soil Sampled: 11/16/06 11:25 Received: 11/17/06 10:00									
Arsenic	ND	5.0	mg/kg	1	6111714	11/17/06	11/17/06	EPA 6010B	
Barium	**70**	1.0	"	"	"	"	"	"	
Chromium	**20**	2.0	"	"	"	"	"	"	
Cobalt	**6.3**	2.0	"	"	"	"	"	"	
Copper	**22**	1.0	"	"	"	"	"	"	
Nickel	**36**	2.0	"	"	"	"	"	"	
Vanadium	**12**	5.0	"	"	"	"	"	"	
B-19-6 (T601578-06) Soil Sampled: 11/16/06 11:30 Received: 11/17/06 10:00									
Arsenic	ND	5.0	mg/kg	1	6111714	11/17/06	11/17/06	EPA 6010B	
Barium	**58**	1.0	"	"	"	"	"	"	
Chromium	**28**	2.0	"	"	"	"	"	"	
Cobalt	**6.0**	2.0	"	"	"	"	"	"	
Copper	**19**	1.0	"	"	"	"	"	"	
Nickel	**45**	2.0	"	"	"	"	"	"	
Vanadium	**13**	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/22/06 14:58

Metals by EPA 6000/7000 Series Methods

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-19-10 (T601578-07) Soil Sampled: 11/16/06 11:40 Received: 11/17/06 10:00									
Arsenic	ND	5.0	mg/kg	1	6111714	11/17/06	11/17/06	EPA 6010B	
Barium	**110**	1.0	"	"	"	"	"	"	
Chromium	**11**	2.0	"	"	"	"	"	"	
Cobalt	**3.4**	2.0	"	"	"	"	"	"	
Copper	**19**	1.0	"	"	"	"	"	"	
Nickel	**21**	2.0	"	"	"	"	"	"	
Vanadium	**7.5**	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/22/06 14:58

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-15-4 (T601578-01) Soil Sampled: 11/16/06 15:00 Received: 11/17/06 10:00									
Acenaphthene	ND	300	ug/kg	1	6112003	11/20/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*73.7 %*	*29.1-130*		"	"	"	"	
B-24-4 (T601578-12) Soil Sampled: 11/16/06 13:50 Received: 11/17/06 10:00									
Acenaphthene	ND	300	ug/kg	1	6112003	11/20/06	11/20/06	EPA 8270C	
Acenaphthylene	ND	300	"	"	"	"	"	"	
Anthracene	ND	300	"	"	"	"	"	"	
Benzo (a) anthracene	ND	300	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	300	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	1000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	300	"	"	"	"	"	"	
Chrysene	ND	300	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	300	"	"	"	"	"	"	
Fluoranthene	ND	300	"	"	"	"	"	"	
Fluorene	ND	300	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	300	"	"	"	"	"	"	
Naphthalene	ND	300	"	"	"	"	"	"	
Phenanthrene	ND	300	"	"	"	"	"	"	
Pyrene	ND	300	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*65.3 %*	*29.1-130*		"	"	"	"	

SunStar Laboratories, Inc.

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Maria Bonifacio, Project Coordinator

LFR Inc. -- Emeryville	Project: Hanson Radum	
1900 Powell Street, 12th Floor	Project Number: 001-09567-00	**Reported:**
Emeryville CA, 94608-1827	Project Manager: Katrin Schliewen	11/22/06 14:58

PAH compounds by Semivolatile GCMS

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-24-7 (T601578-13) Soil Sampled: 11/16/06 13:55 Received: 11/17/06 10:00									
Acenaphthene	ND	3000	ug/kg	10	6112003	11/20/06	11/22/06	EPA 8270C	
Acenaphthylene	ND	3000	"	"	"	"	"	"	
Anthracene	ND	3000	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3000	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3000	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3000	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	10000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3000	"	"	"	"	"	"	
Chrysene	ND	3000	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	3000	"	"	"	"	"	"	
Fluoranthene	ND	3000	"	"	"	"	"	"	
Fluorene	ND	3000	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3000	"	"	"	"	"	"	
Naphthalene	ND	3000	"	"	"	"	"	"	
Phenanthrene	ND	3000	"	"	"	"	"	"	
Pyrene	ND	3000	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*77.8 %*	*29.1-130*		"	"	"	"	
B-24-10 (T601578-14) Soil Sampled: 11/16/06 14:00 Received: 11/17/06 10:00									
Acenaphthene	ND	3000	ug/kg	10	6112003	11/20/06	11/22/06	EPA 8270C	
Acenaphthylene	ND	3000	"	"	"	"	"	"	
Anthracene	ND	3000	"	"	"	"	"	"	
Benzo (a) anthracene	ND	3000	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	3000	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	3000	"	"	"	"	"	"	
Benzo (g,h,i) perylene	ND	10000	"	"	"	"	"	"	
Benzo (a) pyrene	ND	3000	"	"	"	"	"	"	
Chrysene	ND	3000	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	3000	"	"	"	"	"	"	
Fluoranthene	ND	3000	"	"	"	"	"	"	
Fluorene	ND	3000	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	3000	"	"	"	"	"	"	
Naphthalene	ND	3000	"	"	"	"	"	"	
Phenanthrene	ND	3000	"	"	"	"	"	"	
Pyrene	ND	3000	"	"	"	"	"	"	
Surrogate: Terphenyl-dl4		*21.6 %*	*29.1-130*		"	"	"	"	*S-02*

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.

Maria Bonifacio, Project Coordinator

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111711 - EPA 3550B GC										
Blank (6111711-BLK1)				Prepared: 11/17/06 Analyzed: 11/18/06						
C13-C28 (DRO)	ND	10	mg/kg							
C29-C40 (MORO)	ND	10	"							
Surrogate: Chrysene	*134*		*"*	*100*		*134*	*65-135*			
LCS (6111711-BS1)				Prepared: 11/17/06 Analyzed: 11/19/06						
C13-C28 (DRO)	590	10	mg/kg	500		118	75-125			
Surrogate: Chrysene	*134*		*"*	*100*		*134*	*65-135*			
Matrix Spike (6111711-MS1)	**Source: T601578-01**			Prepared: 11/17/06 Analyzed: 11/19/06						
C13-C28 (DRO)	490	10	mg/kg	500	ND	98.0	75-125			
Surrogate: Chrysene	*113*		*"*	*100*		*113*	*65-135*			
Matrix Spike Dup (6111711-MSD1)	**Source: T601578-01**			Prepared: 11/17/06 Analyzed: 11/19/06						
C13-C28 (DRO)	600	10	mg/kg	500	ND	120	75-125	20.2	20	QR-03
Surrogate: Chrysene	*132*		*"*	*100*		*132*	*65-135*			
Batch 6111722 - EPA 3510C GC										
Blank (6111722-BLK1)				Prepared: 11/17/06 Analyzed: 11/18/06						
C13-C28 (DRO)	ND	0.050	mg/l							
C29-C40 (MORO)	ND	0.050	"							
Surrogate: Chrysene	*3.49*		*"*	*4.00*		*87.2*	*65-135*			
LCS (6111722-BS1)				Prepared: 11/17/06 Analyzed: 11/19/06						
C13-C28 (DRO)	20.6	0.050	mg/l	20.0		103	75-125			
Surrogate: Chrysene	*3.85*		*"*	*4.00*		*96.2*	*65-135*			

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111722 - EPA 3510C GC										
Matrix Spike (6111722-MS1)	**Source: T601577-05**			Prepared: 11/17/06		Analyzed: 11/19/06				
C13-C28 (DRO)	22.8	0.050	mg/l	20.0	ND	114	75-125			
Surrogate: Chrysene	*4.32*		*"*	*4.00*		*108*	*65-135*			
Matrix Spike Dup (6111722-MSD1)	**Source: T601577-05**			Prepared: 11/17/06		Analyzed: 11/19/06				
C13-C28 (DRO)	21.4	0.050	mg/l	20.0	ND	107	75-125	6.33	20	
Surrogate: Chrysene	*4.04*		*"*	*4.00*		*101*	*65-135*			

Metals by EPA 6000/7000 Series Methods - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6111714 - EPA 3051										
Blank (6111714-BLK1)				Prepared & Analyzed: 11/17/06						
Arsenic	ND	5.0	mg/kg							
Barium	ND	1.0	"							
Chromium	ND	2.0	"							
Cobalt	ND	2.0	"							
Copper	1.80	1.0	"							QB-01
Nickel	ND	2.0	"							
Vanadium	ND	5.0	"							
LCS (6111714-BS1)				Prepared & Analyzed: 11/17/06						
Arsenic	97.4	5.0	mg/kg	100		97.4	75-125			
Barium	94.7	1.0	"	100		94.7	75-125			
Chromium	94.3	2.0	"	100		94.3	75-125			
Matrix Spike (6111714-MS1)	**Source: T601578-07**			Prepared & Analyzed: 11/17/06						
Arsenic	106	5.0	mg/kg	100	2.6	103	75-125			
Barium	196	1.0	"	100	110	86.0	75-125			
Chromium	127	2.0	"	100	11	116	75-125			
Matrix Spike Dup (6111714-MSD1)	**Source: T601578-07**			Prepared & Analyzed: 11/17/06						
Arsenic	99.1	5.0	mg/kg	100	2.6	96.5	75-125	6.73	20	
Barium	183	1.0	"	100	110	73.0	75-125	6.86	20	QM-03
Chromium	111	2.0	"	100	11	100	75-125	13.4	20	

PAH compounds by Semivolatile GCMS - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6112003 - EPA 3550 ECD/GCMS										
Blank (6112003-BLK1)				Prepared & Analyzed: 11/20/06						
Acenaphthene	ND	300	ug/kg							
Acenaphthylene	ND	300	"							
Anthracene	ND	300	"							
Benzo (a) anthracene	ND	300	"							
Benzo (b) fluoranthene	ND	300	"							
Benzo (k) fluoranthene	ND	300	"							
Benzo (g,h,i) perylene	ND	1000	"							
Benzo (a) pyrene	ND	300	"							
Chrysene	ND	300	"							
Dibenz (a,h) anthracene	ND	300	"							
Fluoranthene	ND	300	"							
Fluorene	ND	300	"							
Indeno (1,2,3-cd) pyrene	ND	300	"							
Naphthalene	ND	300	"							
Phenanthrene	ND	300	"							
Pyrene	ND	300	"							
Surrogate: Terphenyl-dl4	*1290*		*"*	*1670*		*77.2*	*29.1-130*			
LCS (6112003-BS1)				Prepared & Analyzed: 11/20/06						
Acenaphthene	1240	300	ug/kg	1670		74.3	38.9-79.4			
Pyrene	865	300	"	1670		51.8	25-85.2			
Surrogate: Terphenyl-dl4	*1420*		*"*	*1670*		*85.0*	*29.1-130*			
Matrix Spike (6112003-MS1)		**Source: T601578-01**		Prepared & Analyzed: 11/20/06						
Acenaphthene	1180	300	ug/kg	1670	ND	70.7	33.8-76.1			
Pyrene	777	300	"	1670	ND	46.5	24.5-100			
Surrogate: Terphenyl-dl4	*1080*		*"*	*1670*		*64.7*	*29.1-130*			

PAH compounds by Semivolatile GCMS - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6112003 - EPA 3550 ECD/GCMS										
Matrix Spike Dup (6112003-MSD1)	**Source: T601578-01**			Prepared & Analyzed: 11/20/06						
Acenaphthene	1040	300	ug/kg	1670	ND	62.3	33.8-76.1	12.6	31	
Pyrene	727	300	"	1670	ND	43.5	24.5-100	6.65	31	
Surrogate: Terphenyl-dl4	*1060*		*"*	*1670*		*63.5*	*29.1-130*			

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-03	Multiple analyses indicate the percent recovery exceeds the Quality Control acceptance criteria due to a matrix effect.
QB-01	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
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

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

T601578

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

PROJECT NO.:	SECTION NO.:	DATE:	SAMPLER'S INITIALS:	SERIAL NO.:
001-09567-00	XXX	11/16/06	LR	Nº 201964

PROJECT NAME: HANSON RADUM

SAMPLER (Signature):

SAMPLE ID.	DATE	TIME	Lab Sample No.	No. of Containers	TYPE: Soil	TYPE: Water	TPHd (EPA 8015M)	TPHmo (EPA 8015M)	TPHg (EPA 8015M)	BTEX (EPA 8021/602)	VOCs (EPA 8260/624)	Metals (EPA 6010/7000)	PAH	Lab ID	TAT: Standard	TAT: RUSH	TAT: HOLD	REMARKS
B-15-4	11/16/06	1505	1	X	X		X	X						01	X			* SILICA GEL CLEAN UP
B-15-7		1510					X	X						02	X			
B-15-10		1515												03		X		
B-18-6		1115					X	X			X			04	X			RF TPHd/mo IS
B-18-10		1125									X			05	X			GREATER THAN
B-19-6		1130									X			06	X			100 mg/kg THEN
B-19-10		1140									X			07	X			RUN FOR PAH
B-20-4		1250					X	X						08	X			
B-20-7		1255					X	X						09	X			
B-20-10		1300												10		X		24 HOUR RUSH
B-20-15		1310												11		X		TURNAROUND
B-24-4		1350					X	X						12	X			
B-24-7		1355					X	X						13	X			METALS: As, Ba
B-24-10		1400					X	X						14	X			Co, Cr, Cu, Ni,
B-24-15		1410												15		X		V, N
B-24-20		1420												16		X		
GGW-23		1450	3	3 (2)	X		X	X				X		17	X			

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

SAMPLE RECEIPT	METHOD OF SHIPMENT:	RELINQUISHED BY: 1	RELINQUISHED BY: 2	RELINQUISHED BY: 3
Cooler Temp: 0 2.2C ☐ Intact ☑ Cold ☐ On Ice ☐ Ambient Cooler No:	LAB REPORT NO.:	(SIGNATURE) (DATE) 11/16/06 LARRY LAPUYADE 1632 (PRINTED NAME) (TIME) LFR, INC (COMPANY)	(SIGNATURE) (DATE) G50 G88 (PRINTED NAME) (TIME) (COMPANY)	(SIGNATURE) (DATE) (PRINTED NAME) (TIME) (COMPANY)
Preservative Correct? ☐ Yes ☐ No ☑ N/A	FAX COC CONFIRMATION TO: KATRIN SCHILLWEIN			
ANALYTICAL LABORATORY: SUNSTAR	FAX RESULTS TO: SEND HARDCOPY TO: SEND EDD TO: EMV.LABEDDS.COM	**RECEIVED BY:** 1 (SIGNATURE) (DATE) 11/16/06 Josh Pigott 17:20 (PRINTED NAME) (TIME) Sunstar (COMPANY)	**RECEIVED BY:** 2 (SIGNATURE) (DATE) 11/17/06 10:00 Albert Vargas (PRINTED NAME) (TIME) Albert Vargas (COMPANY)	**RECEIVED BY (LABORATORY):** 3 (SIGNATURE) (DATE) (PRINTED NAME) (TIME) (COMPANY)

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

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