BSK

SOIL INVESTIGATION REPORT

Alameda County Transportation Corridor
West of First Street, between Bernal Avenue and Stanley Boulevard
Pleasanton, California

BSK E07.049.01F

Prepared for:

Mr. Michael Roush, City Attorney
City of Pleasanton
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January 25, 2008

Engineers, Geologists, Environmental Scientists

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SUBJECT: Phase II Soil Investigation Report
Alameda County Transportation Corridor
West of First Street between Bernal Avenue and Stanley Boulevard
Pleasanton, California

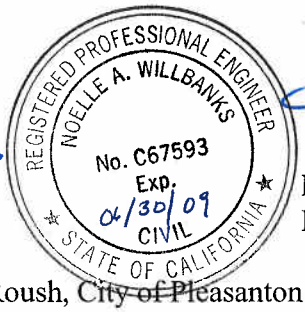
Dear Mr. Roush:

BSK Associates (BSK) has prepared the enclosed Phase II Soil Investigation Report (Report) which presents the results of the investigation conducted in November 2007, at the Alameda County Transportation Corridor (Corridor) located west of First Street between Bernal Avenue and Stanley Boulevard in Pleasanton, California. The Phase II Soil Investigation and the Report were completed in response to a request from the City of Pleasanton based on the findings presented in BSK's Phase I Environmental Assessment (ESA) of the Corridor dated November 7, 2007.

The purpose of the Phase II Soil Investigation was to assess concentrations of metals and herbicides in surface soil throughout the length of the Corridor and the possible presence of petroleum hydrocarbons in subsurface soil within the Corridor north of Ray Street, on Alameda County Assessors Parcel Numbers 094-011004600 and 094-11004800. This Report presents sample collection methodology, tabulated field screening measurements, analytical results, conclusions, and recommendations for the Corridor.

Please contact the undersigned at 559.497.2880, if you have questions regarding the Report.

Sincerely,
BSK ASSOCIATES



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PLEASANTON, CALIFORNIA

1.0 INTRODUCTION

BSK Associates (BSK) has prepared this Phase II Soil Investigation Report (Report) to summarize the results of the soil investigation that was conducted in November 2007 along the Alameda County Transportation Corridor (Corridor), located west of First Street between Bernal Avenue and Stanley Boulevard in Pleasanton, California (Figure 1). The soil investigation was completed in accordance with BSK Proposal EF07.0122, dated October 10, 2007. The soil investigation was requested by the City of Pleasanton based on the findings presented in BSK's Phase I Environmental Corridor Assessment (ESA) dated November 7, 2007.

Based on the findings of the Phase I ESA, BSK concluded that the presence of the active environmental investigation and remediation projects being conducted at two facilities located at the intersection of Ray and First Streets created a "recognized environmental condition" (REC) in relation to the Corridor.

Review of environmental reports on-file with the Alameda County Environmental Health Department (ACEHD) indicated that petroleum hydrocarbons in groundwater associated with the Unocal 76 facility, located at 4191 North First Street, immediately adjacent to the east of the Corridor, have migrated beneath the Corridor. In addition, groundwater remediation efforts are being conducted at the Shell Service Station, located at 4226 First Street, approximately 1/16 mile east (hydrologically upgradient) of the Corridor. Petroleum hydrocarbons in soil and groundwater associated with these facilities are attributed to leakage from the use of underground fuel storage tanks (USTs) and dispensing equipment that have since been either removed or repaired.

Although not considered to be an REC, BSK also noted the potential for concentrations of metals and residual herbicides in soil, due to the former use of the Corridor as a railway line. Concentrations of heavy metals (i.e., lead, arsenic) are commonly associated with railway facilities due to the presence of these constituents in treated wood (railroad ties), disposal of wastewater from rail cars, and exhaust from diesel fuels. Herbicides are typically used along railway corridors to control vegetation growth within the vicinity of railroad tracks.

The Phase II Soil Investigation was conducted to assess concentrations of metals and herbicides in surface soil throughout the length of the Corridor that may be associated with the former operation of the railway. In addition, subsurface soil samples were collected and analyzed from the Corridor parcels situated directly north of Ray Street and adjacent to the western border of the Unocal 76 facility (Alameda County Assessors Parcel Numbers [APNs] 094-011004600 and 094-11004800) to assess the potential presence of petroleum hydrocarbons in soil beneath the Corridor that may be attributable to migration of these constituents from the fuel service station. This Report presents BSK's sample collection methodology, tabulated field screening

measurements, analytical results, conclusions, and recommendations associated with the soil investigation of the Corridor.

2.0 CORRIDOR DESCRIPTION

The Corridor is currently occupied by public parking areas in the southern portion, and primarily vacant, unused land in the central and northern portions. The northernmost portion of the Corridor is occupied by a wooden bridge that still maintains the original rail road tracks. The Corridor also houses the right-of-way for an underground, 10-inch diameter, Kinder Morgan Aviation Fuel Pipeline. The pipeline runs the entire length of the Corridor and is situated approximately 6 to 8 feet below surface grade along the Corridor's east side. Figures 2 through 9 show the various parcels associated with the Corridor and the surrounding property uses.

3.0 CORRIDOR AND ADJACENT PROPERTY HISTORY

According to the BSK's November 7, 2007 Phase I ESA, a review of available historic aerial photographs indicates that the Corridor appears to have been occupied by a railway line with some associated spurs from 1939 until at least 1982. Review of historic topographic maps indicated that the Corridor was occupied by a railway line from 1906 until at least 1973.

Additionally, the findings of the Phase I ESA indicated that two facilities adjacent to the Corridor have been the subject of regulatory oversight regarding the unauthorized release of petroleum hydrocarbons. The regulatory events associated with these two facilities are outlined in the following sections.

3.1 Unocal 76 – 4191 North First Street

The Unocal 76 facility is an active gasoline service station located immediately adjacent to the Corridor's eastern boundary, north of Ray Street (Figure 7). Five monitoring wells associated with the Unocal 76 groundwater investigation are located within the Corridor (APNs 094-011004600 and 094-11004800), and two monitoring wells are located within the apartment complex on the west side of the Corridor. Additionally, 12 active monitoring wells and one abandoned monitoring well are located on the Unocal 76 property.

In 1899, the Unocal 76 property had been developed as a warehouse to store grains and hay (Amador-Livermore Valley Historical Society). Sanborn map research indicates an "in-ground storage tank for oil" was located on the warehouse property in 1907 (Appendix A). In 1976, the property was developed as a retail fuel service station with USTs and fuel dispensing equipment. The petroleum fuel release occurred prior to Unocal purchasing the service station and ConocoPhillips (the current property owner) assuming operations.

Several investigations have been conducted at the Unocal 76 facility, including, but not limited to: exploratory soil borings, monitoring well installations, replacement of four 12,000-gallon USTs with two 12,000-gallon double-walled USTs, dispenser and product piping upgrade, and the installation of additional monitoring wells within the Corridor. Separate phase hydrocarbons

(SPHs) were identified in Monitoring Well MW-5, which was installed within the Corridor as part of the Unocal 76 groundwater investigation (Figure 7).

As of 2007, the Unocal 76 facility's four on-site and eight off-site wells are being monitored and sampled on a quarterly basis throughout the year. Second quarter 2007 results indicated SPHs were not present in Well MW-5 during the most recent or the previous quarter, but have been present periodically in the well since June 1997. Groundwater flow direction has been sporadic and currently appears to be flowing to the west. Total petroleum hydrocarbons as gasoline (TPHg) were detected in eight of the 12 wells sampled with a maximum concentration of 13,000 micrograms per liter (µg/L) in reported in the sample collected from Well MW-5 (located within the Corridor). Benzene was detected in three of the 12 wells sampled with a maximum concentration of 1,400 µg/L reported in the sample collected from Well MW-5. Fuel oxygenates (methyl tertiary butyl ether [MTBE]) were detected in nine of the 12 wells sampled with a maximum concentration of 9,300 µg/L reported in the sample collected from Well MW-2B, located on the Unocal 76 property, just east of the Corridor. Additionally, total petroleum hydrocarbons as diesel (TPHd) were detected in 11 of the 12 wells sampled, with a maximum concentration of 29,000 µg/L reported in the sample collected from Well MW-5. Copies of the most recently available groundwater monitoring maps prepared by ConocoPhillips' environmental consultant, TRC Companies, Inc. (TRC), showing the groundwater flow direction and petroleum hydrocarbon plume beneath the Unocal 76 facility and the Corridor are provided in Appendix B.

An approved Workplan for further investigation of the Unocal 76 facility is currently on-file with the Alameda County Environmental Health Department (ACEHD) which proposes further investigation of soil and groundwater within the Corridor, down gradient of the Unocal 76 facility. However, the investigation has not been conducted due to the lack of an access agreement between the Alameda County Public Works Department (the current Corridor owner) and ConocoPhillips (the current Unocal 76 service station owner).

3.2 Shell – 4226 North First Street

The Shell gasoline service station is located east of the Corridor, to the southeast of the Unocal 76 station (Figure 7). The Shell service station is currently closed and Livermore-Pleasanton Fire Department (LPFD) records confirm that the facility has a temporary closure permit for three USTs.

ACEHD records indicate that four USTs were removed from the Shell facility in May 1986. Laboratory analysis of soil samples collected from beneath the USTs at the time of removal indicated detectable concentrations of TPHg. New USTs were installed in a different location on the facility. Soil borings were advanced and groundwater monitoring wells were installed to further assess the extent of petroleum hydrocarbons in groundwater beneath the Shell facility. Soil sample collection and analysis with intermittent quarterly groundwater monitoring has occurred at the facility since that time. An Interim Remedial Action Plan, dated January 18, 2007, on-file with the ACEHD, specifies using groundwater extraction as a means of removing the contaminated groundwater from the property. According to Mr. Jerry Wickman (ACEHD representative), groundwater extraction has proven to be an insufficient method for groundwater remediation.

Mr. Wickman is currently waiting for the Shell facility's consultant to propose an alternative remediation method.

4.0 GEOLOGY AND HYDROGEOLOGY

The Corridor is located within Section 21, Township 3 South, Range 1 East on the Livermore and Dublin, California 7.5 minute USGS topographic map, dated in 1961 (photo revised in 1980). The ground surface of the Corridor is relatively level, with a slope to the east and west, away from the former railway track locations, in the northern portion of the Corridor. The Corridor is situated at an average elevation of approximately 350 feet above mean sea level.

The Corridor is located within the Coast Range Geomorphic Province, a region of generally northwest-southeast trending ranges of mountains and valleys between the Pacific Ocean and the Central Valley. Large-scale folds, faults and other associated geologic structures are the result of past and ongoing tectonic processes that arise from the relative motion of the North America and Pacific lithospheric plates. Dominant rock types in the region are from the Franciscan Assemblage and Coast Range Ophiolite, which consist of metamorphosed mafic volcanic rocks, deep-sea cherts, greywacke sandstones, limestones, serpentine, shales, and high-pressure metamorphic rocks, all faulted and chaotically mixed due to tectonic processes. The soils are derived from the surrounding mountain ranges having been deposited from stream and river channels dating from Pliocene to Holocene.

The Corridor is situated in the Livermore Valley which is a structural trough of the Diablo Range. The groundwater basin extends approximately 14 miles east-west and approximately 3 miles north-south. Within the Livermore Valley, streams merge on the west side of the basin and travel south into the Sunol Groundwater Basin. Geologic structures (i.e. faults) hinder the lateral movement of groundwater, but generally the groundwater gradient is to the west within the valley. Depth to groundwater is variable within the Livermore Valley, but generally between 50 to 100 feet below ground surface.

In the Livermore Valley, groundwater-bearing materials occur in valley fill material, the Livermore Formation, and the Tassajara Formation. The valley-fill and Livermore deposits yield large quantities of groundwater to many types of wells (DWR Bulletin 118).

The Zone 7 Water Agency indicates the regional groundwater flow is northwest and is approximately 40 feet below the grade surface within the vicinity of the Corridor. However, local Corridor groundwater direction and depth seem to vary greatly depending on the time of year.

5.0 SURFACE SOIL SAMPLING

Surface soil samples were collected from the Corridor as outlined in BSK's Proposal EF07.0122 dated, October 10, 2007. Approximately two surface soil samples were collected from each parcel along the Corridor, with the exception of APN No: 094-010200601 which has been paved with asphaltic concrete.

Sample locations were selected based on field observations and were targeted for low elevation areas (LS samples), and in the location of the former railroad tracks (RR samples). The LS samples were collected from lower areas within the Corridor, where residual concentrations of herbicides potentially used for vegetation control along the railway may have settled as a result of surface water flow during storm events. The RR samples were collected from the former railroad track locations, where concentrations of metals from former railway activities (i.e., railroad tie preservation, waste water discharge, fuel emissions) were most likely to be present.

Additionally, four background surface soil samples (BG samples) were collected from nearby public park and unpaved areas situated outside of the Corridor. The background samples were collected to provide data concerning background metals and herbicide concentrations in soil outside of the Corridor. Approximate locations of all surface soil samples are depicted on Figures 2 through 9.

5.1 Surface Sample Collection Methodology and Analysis

Surface soil samples were collected using a shovel and two trowels. The low elevation (LS) and background (BG) soil samples were collected from approximately 6 to 12 inches below ground surface (bgs). The former railroad surface (RR) soil samples were collected from approximately 2 to 6 inches bgs due to the compact gravely soil. Sampling equipment was cleaned using a laboratory grade cleaning detergent between each sample location. The former railroad (RR), low elevation (LS), and background (BG) samples were placed in glass soil jars and stored on ice for shipment to BSK Analytical Laboratories in Fresno, California for analysis.

5.2 Laboratory Analyses

Chemical analyses were performed by BSK Analytical Laboratories, a DHS certified analytical laboratory in Fresno, California. A total of 18 soil samples collected on November 5, 2007, were analyzed. The low elevation (LS) and background (BG) soil samples were analyzed for chlorinated herbicides by EPA Method 8151A and metals by EPA Method 6020. The former railroad (RR) soil samples were analyzed for metals by EPA Method 6020.

6.0 SUBSURFACE SOIL SAMPLING

Seven subsurface soil borings were advanced along the eastern boundary of the Corridor parcels that located north of Ray Street, adjacent to the Unocal 76 service station (Alameda County APNs: 094-011004600 and 094-011004800). The locations of the subsurface soil borings are shown on Figures 7 and 8. Borings SB-1 through SB-6 were advanced within APN 094-011004600, while boring SB-7 was advanced within APN 094-011004800.

The soil borings were advanced by Soilprobe a licensed drilling contractor, under the direction of a BSK field engineer on November 6 and November 7, 2007. Soilprobe used a limited access Geoprobe 66 DT Rig to push a 4-foot long hollow sampler directly into the soil. The soil samples from Borings SB-1 through SB-7 were collected at varying depths, which included 10, 20, 30, 40, 50, and 60 feet bgs.

6.1 Lithologic Logging

A BSK field engineer prepared lithologic logs of the materials encountered during the advancement of the soil borings to assess the soil conditions beneath the Corridor. Visual classifications of soils were conducted in general accordance the Unified Soil Classification System (ASTM D2487). Subsurface soils encountered during the boring activities were comprised of interbedded, unconsolidated sedimentary deposits, including substantial gravels, silts, sands and clays. Gravel zones were typically encountered at the 30-foot bgs sample interval with mixtures of gravel with clay and sand noted above and below the 30-foot zone. The lithologic logs are included in Appendix C.

6.2 Subsurface Soil Sampling

The direct-push rig drove hollow-stem casing lined with acetate tubes and internal solid rods through soil to the desired sample depths. Upon reaching the desired depth, the solid rod was removed and the hollow-stem casing advanced until the acetate tube at the bottom of the casing was filled with a relatively undisturbed soil sample. The soil samples were field screened with a photo ionization detector/flame ionization detector (PID/FID) to assess the presence of volatile organic compounds (VOCs), and observed for discoloration and odor associated with petroleum hydrocarbons. Petroleum odors were detected in soil samples collected from Borings SB-2 and SB-4 through SB-7. Strength of odors generally correlated with PID/FID field measurements and analytical results.

Soil samples were collected in acetate tubes, covered with Teflon tape, capped and placed in a cooled ice chest for transport to BSK Analytical Laboratories under proper Chain-of-Custody (COC) procedures for analysis. Field PID/FID recorded values are presented on Table 2 and summarized below.

6.3 Laboratory Analyses

Chemical analyses were performed by BSK Analytical Laboratories, a DHS certified analytical laboratory in Fresno, California. A total of 28 subsurface soil samples collected from November 6 through November 7, 2007 were analyzed. The soil samples were analyzed for the following:

- Total recoverable petroleum hydrocarbons by EPA Method 5520CF
- Total petroleum hydrocarbons as referenced to gasoline (TPHg), benzene, toluene, ethyl benzene, and xylenes (collectively BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8021
- Fuel oxygenates by EPA Method 8260A
- Total petroleum hydrocarbons as referenced to diesel (TPHd), total petroleum hydrocarbons as referenced to aviation fuel (TPHaf), and total petroleum hydrocarbons as referenced to jet fuel (TPHj) by EPA Method 8015B

7.0 RESULTS OF ANALYSES

7.1 Surface Soil Samples

Eighteen surface soil samples, including four background samples, were submitted to the laboratory for analysis. Results of the analyses were compared to the California Human Health

Screening Levels (CHHSLs) as published by the California Environmental Protection Agency (CalEPA), January 2005.

CHSSLs were developed by the Office of Environmental Health Hazard Assessment (OEHHA) on behalf of CalEPA, and contained in their report entitled "Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil." The thresholds of concern used to develop CHSSLs are an excess lifetime cancer risk of one-in-a-million (10^{-6}) and a hazard quotient of 1.0 for non-cancer health effects. The CHSSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and CalEPA.

The analysis results indicated the following:

- Results of analyses of the background (BG) surface soil samples, collected from areas located outside of the Corridor, indicated concentrations of lead that were either near or below the CHHSL for lead in residential soil (150 milligrams per kilogram [mg/kg]). Laboratory results of the background sample BG-1 collected from the public park area near the intersection of Bernal Avenue and Main Street (Figure 2) reported a lead concentration 190 mg/kg, which is just above the CHSSL for lead in residential soil. Laboratory results of all of the background soil samples indicated that the lead concentrations were significantly below the CHSSL for lead in commercial/industrial soil (3,500 mg/kg).
- Results of analysis of the low elevation sample collected from the northern area of Corridor APN 094-0157001403, located between Bernal Avenue and Abbie Street reported a lead concentration of 160 mg/kg, which is just above the CHSSL for lead in residential soil (150 mg/kg) and significantly less than the CHSSL for lead in commercial/industrial soil (3,500 mg/kg).
- Results of analyses of all the surface soil samples collected from the former railroad track areas (RR) reported concentrations of lead that were below the CHSSL for lead in residential soil (150 mg/kg).
- Results of analysis of all of the background (BG), low elevation (LS), and former railroad track (RR) surface samples reported concentrations of arsenic that exceeded the CHSSL for arsenic in residential and commercial/industrial soil (0.07 mg/kg and 0.24 mg/kg, respectively). The maximum arsenic concentration reported within the railroad area was 68 mg/kg (RR-3). Concentrations within the railroad area exceed the highest background concentration of 6 mg/kg.
- Concentrations of the metals barium, cadmium, total chromium, mercury, selenium, and silver were reported as either "none-detected" or below their associated CHSSLs for the surface soil samples collected from the background (BG) and Corridor (LS and RR) sampling locations.
- Laboratory results of all of the surface soil samples collected from the background (BG) and Corridor (LS and RR) sampling locations reported herbicides as "none-detected."

Sample results are summarized on Table 1. Laboratory reports including chain-of-custody documentation are provided in Appendix D.

7.2 Subsurface Soil Samples

Twenty-eight subsurface soil samples collected from the borings advanced along the eastern boundary of Corridor APNs 094-011004600 and 094-011004800 were submitted to the laboratory for analysis. The results of the laboratory analyses indicated the following:

- Laboratory results of samples from Borings SB-1 through SB-4 reported trace or low concentrations of hydrocarbons or fuel constituents.
- Results of analysis of samples collected from Boring SB-5 indicated a presence of significant concentrations of petroleum hydrocarbons at depths ranging from approximately 30 feet bgs to approximately 50 feet bgs.
- Laboratory results of samples collected from Boring SB-6 indicated decreasing concentrations of hydrocarbons and fuel constituents at a depth of 30 feet bgs; however the presence of thick gravels inhibited the further advancement of the soil probe and the collection of deeper samples at this boring location.
- Laboratory results of samples collected from Boring SB-7 indicated the presence of low concentration hydrocarbons and fuel constituents at a depth of approximately 40 feet bgs.

Approximate subsurface soil sample locations, including a cross section of the boring locations and sample depths, with the estimated location of hydrocarbons based on laboratory results are presented as Figure 11. Subsurface sample results are summarized on Table 2. Laboratory reports with chain-of-custody documentation are provided in Appendix D.

Initial subsurface soil analyses indicated the presence of TPHj. Upon further investigation of the analytical results and review of the laboratory chromatograms, it appears that information initially interpreted as TPHj was actually within the diesel range for hydrocarbons. A memorandum from the laboratory regarding the review of the TPH fingerprints and the chromatograms are included with the laboratory reports in Appendix D.

8.0 CONCLUSIONS

8.1 Surface Soils

Based on analytical results of samples collected from shallow surface soil throughout the length of the Corridor, herbicides were not detected and metals, with the exception of arsenic, were near or below their respective CHSSL concentrations for residential soil.

Arsenic was reported in shallow surface samples collected along the length of the Corridor at concentrations that exceeded the CHSSL for arsenic in commercial/industrial and residential soil. The concentrations of arsenic in shallow soil samples collected from the Corridor also exceeded background sample concentrations (collected from locations outside of the Corridor).

BSK understands that the redevelopment plans for the Corridor consist of the construction of paved parking areas only. Based on the results of the analyses and the arsenic concentrations exceeding the CHHSLs for background and commercial/industrial property, BSK recommends that prior to site development involving the disturbance of surface soil within the Corridor, a site-specific health and safety plan be prepared. The health and safety plan should include recommendations for personal protective wear, proper soil treatment and dust abatement measures for construction workers performing work within the Corridor.

While BSK has used CHSSLs for comparison of metals in soil, it should be noted that CHSSLs are concentrations of hazardous materials the California EPA (Cal/EPA) considers to be below thresholds of concern for risks to human health. The CHSSLs were developed by the Office of Environmental Health Hazard Assessment (OEHHA) on behalf of Cal/EPA, and contained in their report entitled "Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soil." The thresholds of concern used to develop CHSSLs are an excess lifetime cancer risk of one-in-a-million (10^{-6}) and a hazard quotient of 1.0 for non-cancer health effects. The CHSSLs were developed using standard exposure assumptions and chemical toxicity values published by the USEPA and Cal/EPA.

Although the concentrations of arsenic in shallow soil samples collected from the Corridor exceeded the CHSSL, the maximum concentration of arsenic reported during this investigation was 68 mg/kg, which is less than the California Code of Regulations (CCR) Title 22 Total Threshold Limit Concentration (TTLC) of 500 mg/kg. When a target analyte exceeds the CCR Title 22 TTLC limit within a substance (i.e., soil), the substance is classified as hazardous, based on compound (s) exceeding the TTLC. None of the concentrations of arsenic reported in the surface soil samples collected from within the Corridor exceeded the CCR Title 22 TTLC; therefore, the soil would not be considered to be a hazardous waste. In the event that soil is removed from the Corridor as part of regrading or redevelopment operations, BSK recommends that the soil be sampled and analyzed for the Soluble Threshold Limit Concentration (STLC) to evaluate the ability of the arsenic to leach from the soil. The STLC will aid in determining the proper disposal method for the soil at the time of the removal.

8.2 Subsurface Soils

Hydrocarbons were detected in the vicinity of Boring SB-5, which was advanced along the eastern boundary of the Corridor, adjacent to the northern end of the Unocal 76 facility. Petroleum hydrocarbons were reported in soil at depths ranging from approximately 30 to 50 feet bgs. The hydrocarbons encountered are typically within the diesel and gasoline range with some other gasoline constituents reported. Gasoline-range petroleum hydrocarbons in subsurface soil beneath the Corridor are most likely attributable to operations associated with the underground fuel storage and dispensing equipment at the adjacent Unocal 26 facility. It is not possible to determine the exact source of the diesel-range petroleum hydrocarbons based on data obtained from this limited investigation. However, based on the depth and location of the petroleum hydrocarbons detected in soil, it does not appear that the hydrocarbons are attributable to the sub-grade Kinder Morgan fuel lines that run along the length of the Corridor. The current depth of the pipeline, which is reported to have contained diesel, gasoline and jet fuel, is approximately 8 to 12 feet bgs. The first hydrocarbons encountered, immediately adjacent to the pipeline and

within the limits if this investigation, were at approximately 20 feet bgs with no indications of hydrocarbons at the 10 foot sample depth.

Review of historic documents, aerial photographs, regulatory agency files, and maps dating back to 1907 suggested the presence of a former bunker fuel oil storage tank and operational fueling stations on the property adjacent to the eastern boundary of the Corridor, just north of Ray Street. This property was previously developed as a grain and hay storage warehouse as early as 1899 and eventually developed as a retail fuel service station in 1976. This property is currently operated as a Unocal 76 retail gasoline station. It is unknown if the adjacent service station has ever had diesel fuel storage tanks on-site as part of the regular fueling operations. The adjacent Unocal 76 service station does not currently sell diesel fuel.

There were no records found indicating that the underground (bunker) fuel storage tank depicted on the 1907 Sanborn maps (Appendix A), adjacent to the corridor, was ever abandoned, removed, or located as part of any investigation. The majority of petroleum hydrocarbons reported in subsurface soil samples collected within the Corridor during this investigation were within the general vicinity of the former bunker fuel tank as depicted on the Sanborn Map (Figure 10). It is possible that diesel-range petroleum hydrocarbons in subsurface soil within the Corridor may be attributable to operation of the bunker fuel storage tank at the former grain and hay storage warehouse. The fuel oil tank may have also been used at some time for the storage of diesel. Additionally, degradation of longer-chain hydrocarbons such as fuel oils in soil over a long period of time could possibly result in these hydrocarbons being detected within the range of shorter-chain hydrocarbons like diesel.

The 1907 Sanborn fire insurance map shows the former bunker fuel storage tank to be located near the "boundary" of the former grain and hay warehouse and the Corridor; however, a definite border between the two properties is not defined on the map. To evaluate whether the former bunker fuel storage tank is not located within the Corridor, BSK recommends that further investigation of this historical fuel storage area be conducted. A subsurface magnetometer survey may be conducted to aid in the confirmation that the former bunker fuel storage area is not located within (or partially within) the boundaries of the Corridor.

9.0 LIMITATIONS

This Report has been prepared for the exclusive use of the City of Pleasanton. Unauthorized use of or reliance on the information contained in this report by others, unless given the express written consent by BSK Associates, is prohibited.

The conclusions presented in this Report are professional opinions based on the indicated data described in this Report. This Report has been prepared in accordance with generally accepted methodologies and standards of professional practice. No other warranties express or implied, are made as to the findings or conclusions included in the Report. This Report is not a specification, and should not be used as such. Conclusions and recommendations are intended only for the purpose, Corridor location and project indicated.

Opinions presented herein apply to Corridor conditions existing at the time of our study and those reasonably foreseeable. They cannot necessarily apply to Corridor changes of which this office is not aware and has not had the opportunity to evaluate. Changes in the conditions of the subject property can occur with time, because of natural processes or the works of humans, on the subject Corridor or on adjacent properties.

BSK ASSOCIATES

10.0 REFERENCES

Phase I Environmental Site Assessment Report, Alameda County Transportation Corridor, West of First Street between Bernal Avenue and Stanley Boulevard, Pleasanton, California, BSK Associates, November 7, 2007

Zone 7 Water Agency, Depth to Water Information Request, November 6, 2007

TABLES

TABLE 1
SURFACE SOIL SAMPLE ANALYTICAL RESULTS
Alameda County Transportation Corridor
Pleasanton, California

Sample Location	Sample Depth (inches)	Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Total Chromium* (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	2,4,5-T (mg/kg)	2,4,5-TP (Silvex) (mg/kg)	2,4-D (mg/kg)	2,4-DB (mg/kg)	Dichloroprop (mg/kg)	Dinoseb (mg/kg)
RR-1	6-8	11/5/2007	**18**	130	<1.0	28	79	0.1	<1.0	<2.0	NA	NA	NA	NA	NA	NA
LS-1	6-12	11/5/2007	**9.5**	170	<1.0	36	**160**	0.24	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
BG-1	6-12	11/5/2007	**4.9**	200	<1.0	32	**190**	0.1	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
RR-2	6-12	11/5/2007	**32**	120	<1.0	28	83	<0.10	<1.0	<2.0	NA	NA	NA	NA	NA	NA
LS-2	6-12	11/5/2007	**62**	95	<1.0	28	120	0.26	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
RR-3	6-12	11/5/2007	**68**	97	<1.0	26	130	0.14	<1.0	<2.0	NA	NA	NA	NA	NA	NA
LS-3	6-12	11/5/2007	**2.6**	110	<1.0	25	25	<0.10	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
BG-3	6-12	11/5/2007	**3.2**	120	<1.0	31	58	0.13	1.1	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
RR-4	6-12	11/5/2007	**18**	110	<1.0	26	33	<0.10	<1.0	<2.0	NA	NA	NA	NA	NA	NA
LS-4	6-12	11/5/2007	**3.9**	130	<1.0	27	49	0.14	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
BG-4	6-12	11/5/2007	**2.3**	120	<1.0	25	39	<0.10	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
RR-5	6-12	11/5/2007	**37**	140	<1.0	30	70	<0.10	<1.0	<2.0	NA	NA	NA	NA	NA	NA
LS-5	6-12	11/5/2007	**19**	100	<1.0	30	47	<0.10	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
RR-6	1-3	11/5/2007	**14**	100	<1.0	26	30	<0.10	<1.0	<2.0	NA	NA	NA	NA	NA	NA
LS-6	6-12	11/5/2007	**5.3**	130	<1.0	36	25	<0.10	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
RR-7	6-12	11/5/2007	**52**	100	<1.0	30	74	<0.10	<1.0	<2.0	NA	NA	NA	NA	NA	NA
LS-7	6-12	11/5/2007	**3.1**	110	<1.0	33	12	<0.10	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
BG-7	6-12	11/5/2007	**6**	120	<1.0	36	18	<0.10	<1.0	<2.0	<0.020	<0.010	<0.040	<0.10	<0.10	<0.010
CHHSL (Residential)			0.07	5,200	1.7	17x6=102	150	18	380	380	550	NE	690	NE	NE	NE
CHHSL (Commerical/Ind)			0.24	63,000	7.5	37x6=222	3,500	180	4,800	4,800	6,100	NE	770	NE	NE	NE

mg/kg - milligrams per kilogram
2,4,5-T - Trichlorophenoxyacetic acid
2,4,5-TP (Silvex) -
2,4-D - Dichlorophenoxyacetic acid
2,4-DB -
Dichloroprop -
Dinoseb (DNBP) -
ND - None Detected
NA - Not Analyzed
NE - Not Established
* Assume 1/6 of Total Chrom is Chromium VI/ CHHSL Reported for Chromium VI

TABLE 2

SUBSURFACE SOIL SAMPLE ANALYTICAL RESULTS - PID/FID RESULTS

Alameda County Transportation Corridor

Pleasanton, California

Sample Location	Sample Depth	Date	PID Reading (ppm)	FID Reading (ppm)	TPH-d (mg/kg)	TPH-g Aviation Fuel (mg/kg)	TPH-g (mg/kg)	TPH-j** Jet Fuel (mg/kg)	Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	Hydrocarbon Oil & Grease	Tert-Butyl Alchohol (mg/kg)	MTBE (mg/kg)
SB-1	10	11/6/2007	19.5	0	<4.0	<1.0	<1.0	<4.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	30	11/6/2007	21.5	0	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	60	11/6/2007	23.5	0	<4.0	<1.0	<1.0	<4.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
SB-2	10	11/6/2007	24	0	<4.0	<1.0	<1.0	<4.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	30	11/6/2007	19.5	0	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	6.1
	40	11/6/2007	19	0	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	50	11/6/2007	24	16	<4.0	<1.0	<1.0	<4.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
SB-3	10	11/6/2007	7	0	<4.0	<1.0	<1.0	<4.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	30	11/6/2007	7	6	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	50	11/6/2007	20	2	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
SB-4	10	11/6/2007	7	0	<2.0	<1.0	<1.0	2.7	<0.0050	<0.0050	<0.0050	<0.0050	93	<50	<5.0
	30	11/6/2007	16	2	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	40	11/6/2007	17	1	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	50	11/6/2007	17	1	<4.0	<1.0	<1.0	<4.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
SB-5	10	11/7/2007	2	0	<4.0	<1.0	<1.0	<4.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	20	11/7/2007	67	360	140	1.5	8.5	150	0.39	0.028	0.059	0.084	290	69	21
	30	11/7/2007	500	41,700	8,100	860	170	9,600	37	0.38	1.2	1.2	11,000	<310	260
	40	11/7/2007	400	5200	1300	8.9	28	1,400	0.69	0.5	0.11	0.46	2,400	69	52
	50	11/7/2007	300	3,500	1,700	9	52	1,800	2.4	1.2	0.55	1	3,400	130	81
	60	11/7/2007	95	360	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	120	7.1
SB-6	10	11/7/2007	200	350	<2.0	<1.0	<1.0	2.1	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	20	11/7/2007	35	20	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	6.6
	30	11/7/2007	1,500	22,000	1,100	67	380	1,400	1.4	4.8	1.2	21	2,400	<2500	<250
SB-7	10	11/7/2007	22	0	82	<1.0	<1.0	73	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	20	11/7/2007	23	8	<2.0	<1.0	<1.0	2.1	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	30	11/7/2007	25	60	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	<50	<5.0
	40	11/7/2007	300	2,300	58	3	4.7	66	0.21	0.015	0.057	<0.0050	250	<50	<5.0
	50	11/7/2007	11	20	<2.0	<1.0	<1.0	<2.0	<0.0050	<0.0050	<0.0050	<0.0050	<20	130	170

TABLE 2

SUBSURFACE SOIL SAMPLE ANALYTICAL RESULTS - PID/FID RESULTS

Alameda County Transportation Corridor

Pleasanton, California

Sample Location	Sample Depth	Date	PID Reading (ppm)	FID Reading (ppm)	TPH-d (mg/kg)	TPH-g Aviation Fuel (mg/kg)	TPH-g (mg/kg)	TPH-j** Jet Fuel (mg/kg)	Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Total Xylenes (mg/kg)	Hydrocarbon Oil & Grease	Tert-Butyl Alchohol (mg/kg)	MTBE (mg/kg)

ppm - parts per million

mg/kg - milligrams per kilogram

PID - Photo Ionization Detector

FID - Flame Ionization Detector

TPHd - Total Petroleum Hydrocarbons as diesel

TPH-g Total Petroleum Hydrocarbons - Aviation Fuel

TPHg - Total Petroleum Hydrocarbons as gasoline

TPHg- Total Petroleum Hydrocarbons - Jet Fuel** (Hydrocarbons reported within diesel range)

MTBE- Methyl tert-butyl ether

ND - None Detected

FIGURES

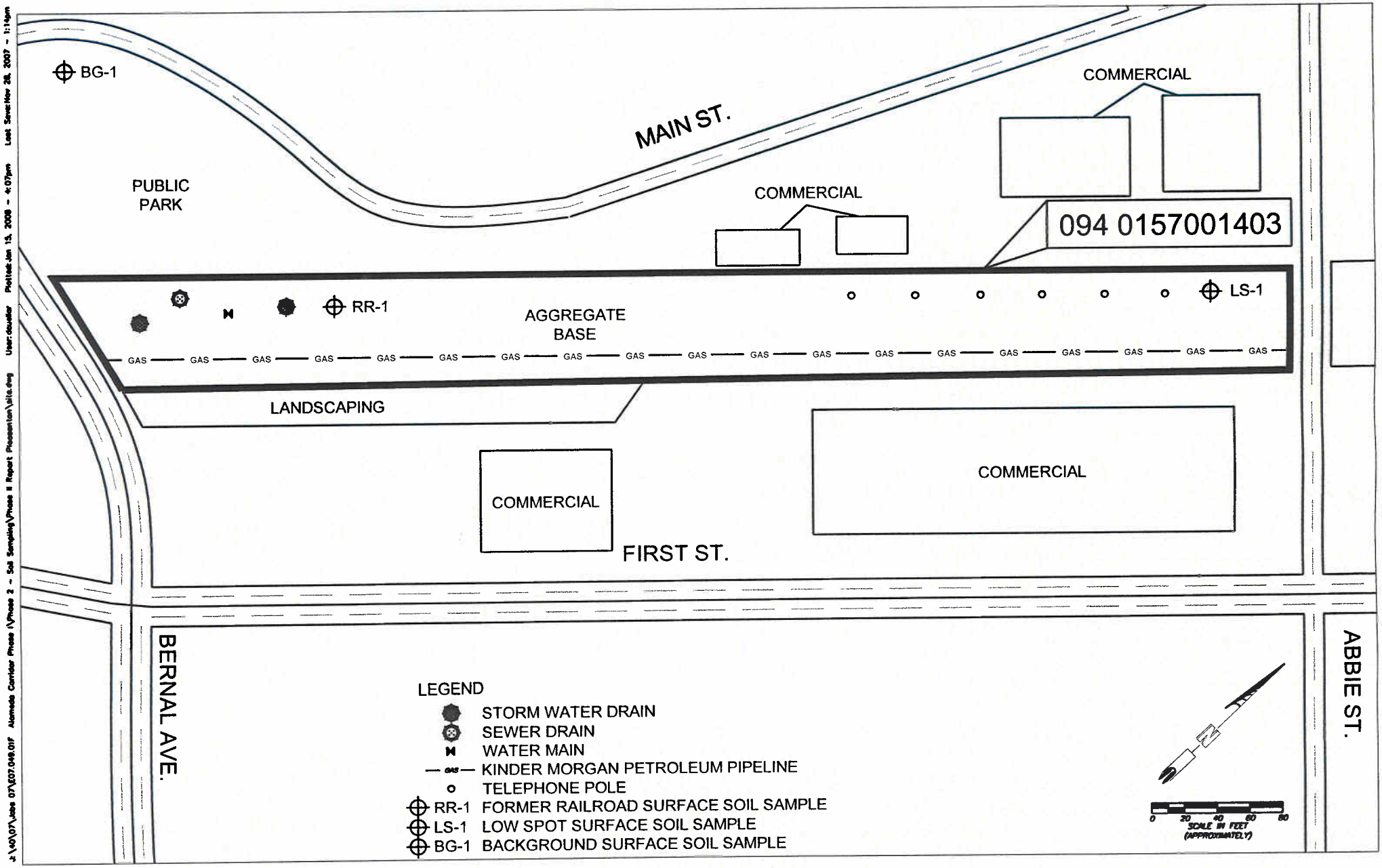
BSK

SITE VICINITY

Alameda County Transportation Corridor Phase II
County of Alameda
Pleasanton, California

E07.049.01F | DJC | Vicinity.dwg | 01/15/08

FIGURE 1



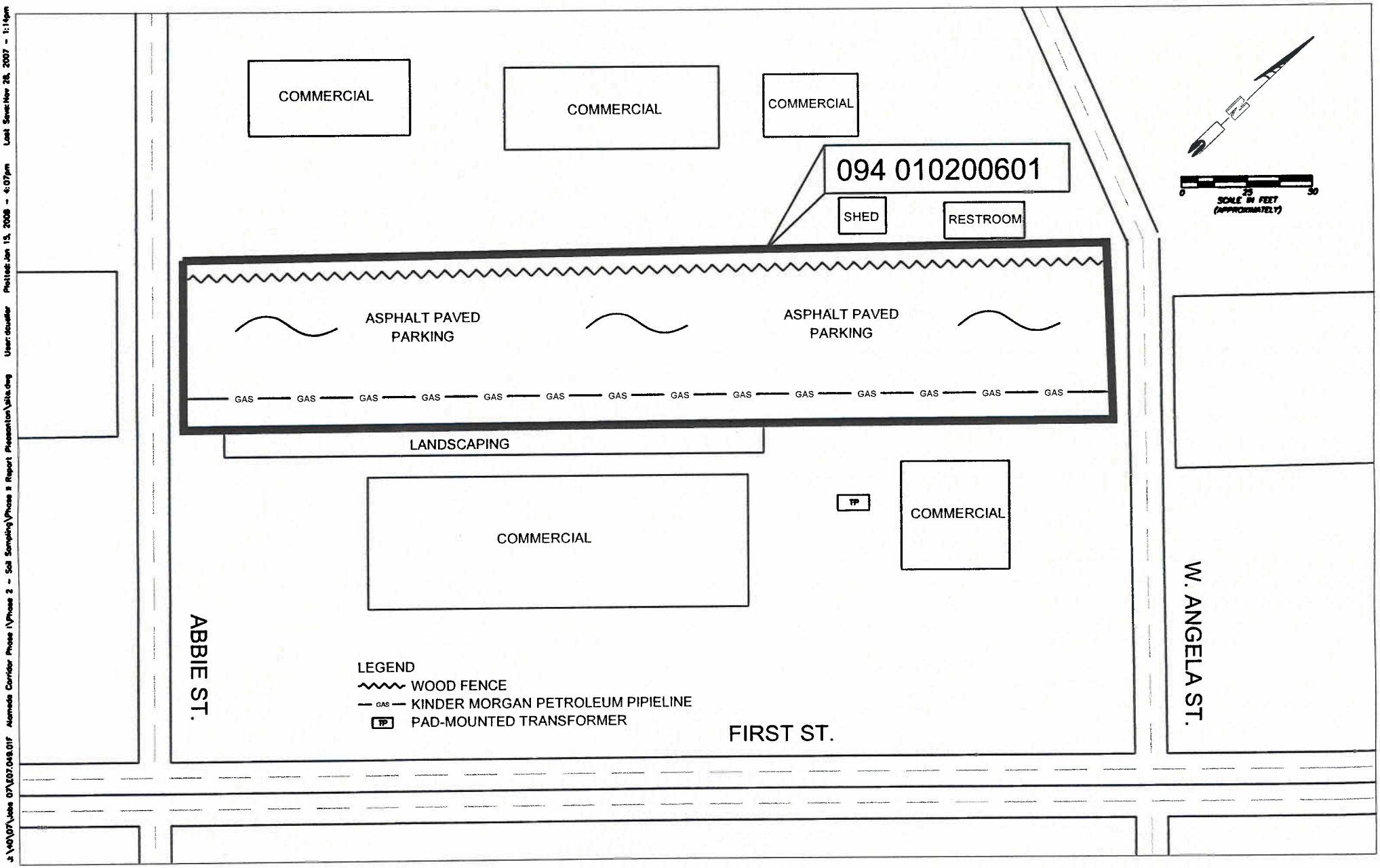
J:\40\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\site.dwg User:douster Plotted:Jan 15, 2008 - 4:07pm Last Save:Nov 28, 2007 - 1:14pm

BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 094 0157001403
Pleasanton, California

E07.049.01F | DJC | site.dwg | 01/15/08 | FIGURE 2



J:\40\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\site.dwg User: dcutler Plotted: Jan 15, 2008 - 4:07pm Last Saved: Nov 26, 2007 - 1:14pm

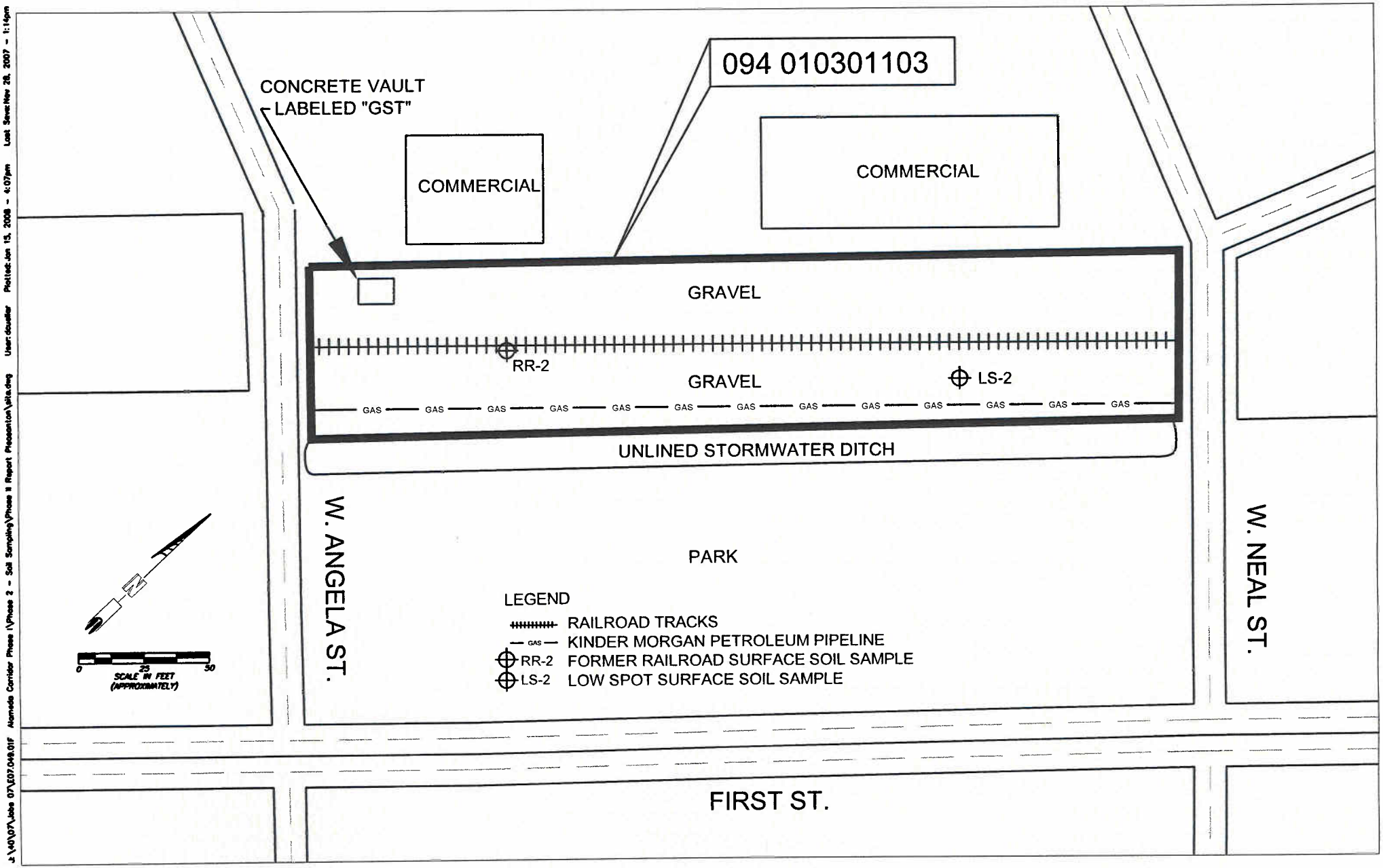
BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 094 010200601
Pleasanton, California

FIGURE 3

E07.049.01F DJC site.dwg 01/15/08



J:\40\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\plts.dwg User: dcutler Plotted: Jan 15, 2008 - 4:07pm Last Save: Nov 28, 2007 - 1:14pm

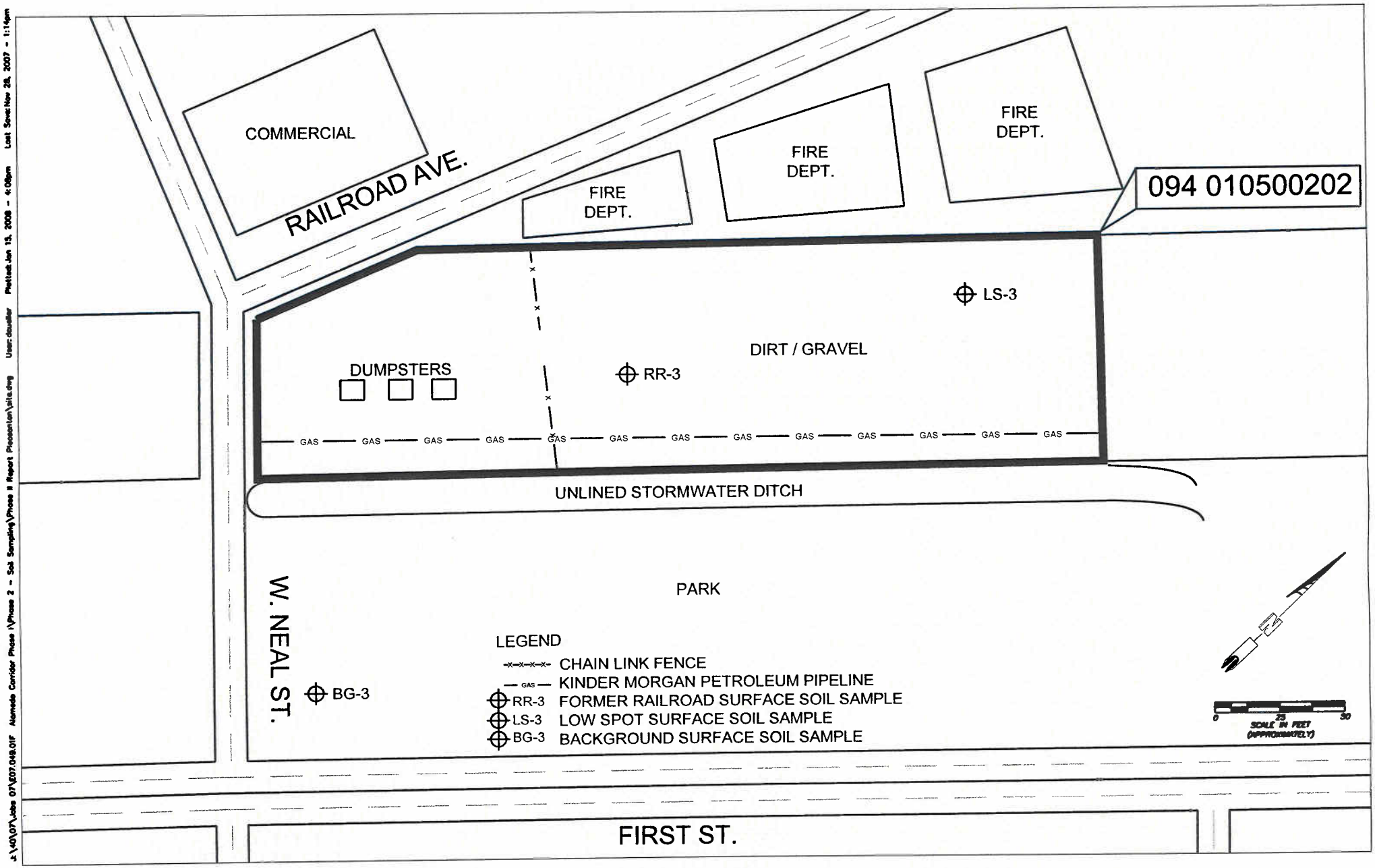
BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 094 010301103
Pleasanton, California

FIGURE 4

E07.049.01F DJC site.dwg 01/15/08



J:\40\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\site.dwg User: dsadler Plotted: Jan 15, 2008 - 4:08pm Last Save: Nov 28, 2007 - 1:14pm

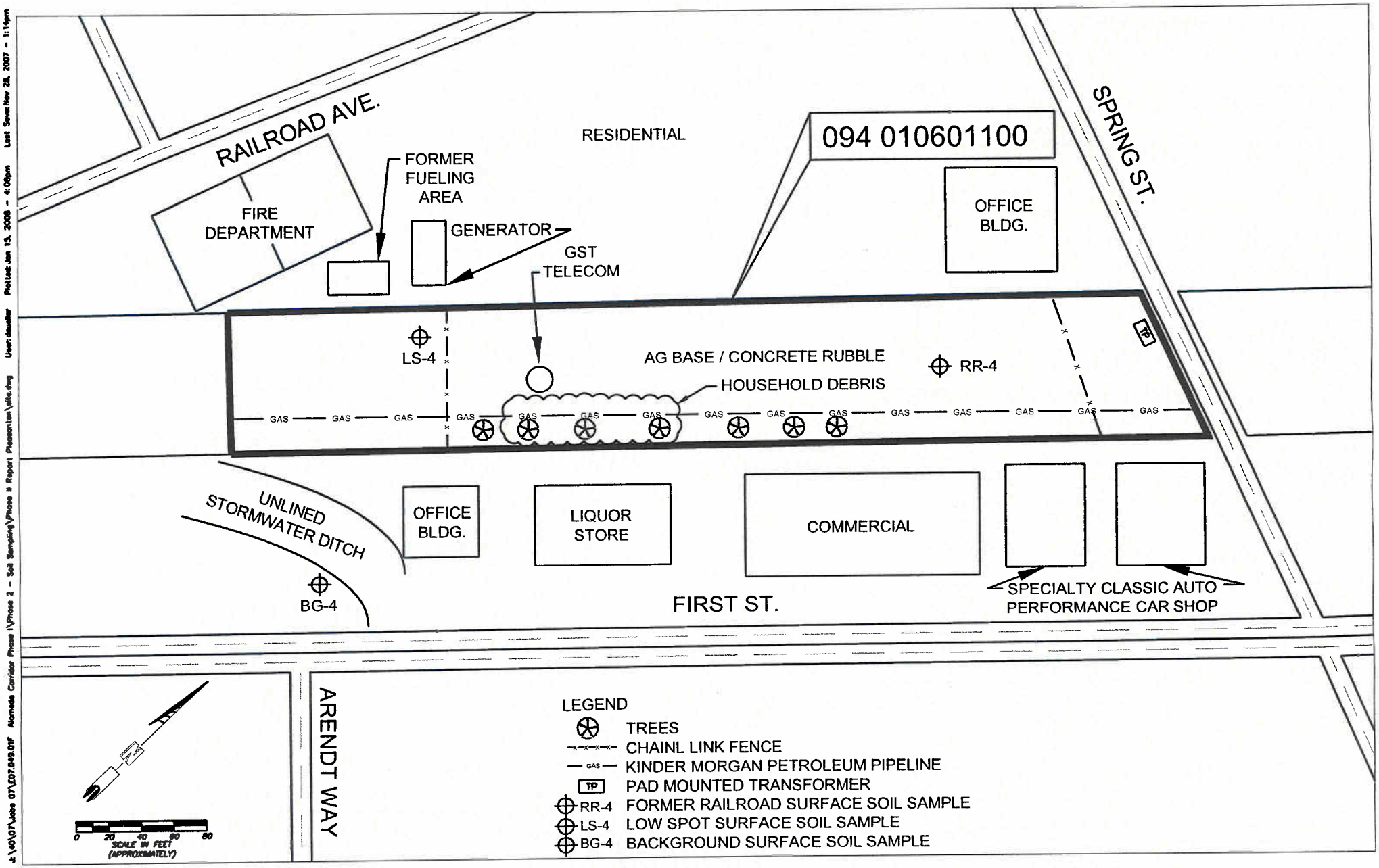
BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 094 010500202
Pleasanton, California

E07.049.01F DJC site.dwg 01/15/08

FIGURE 5



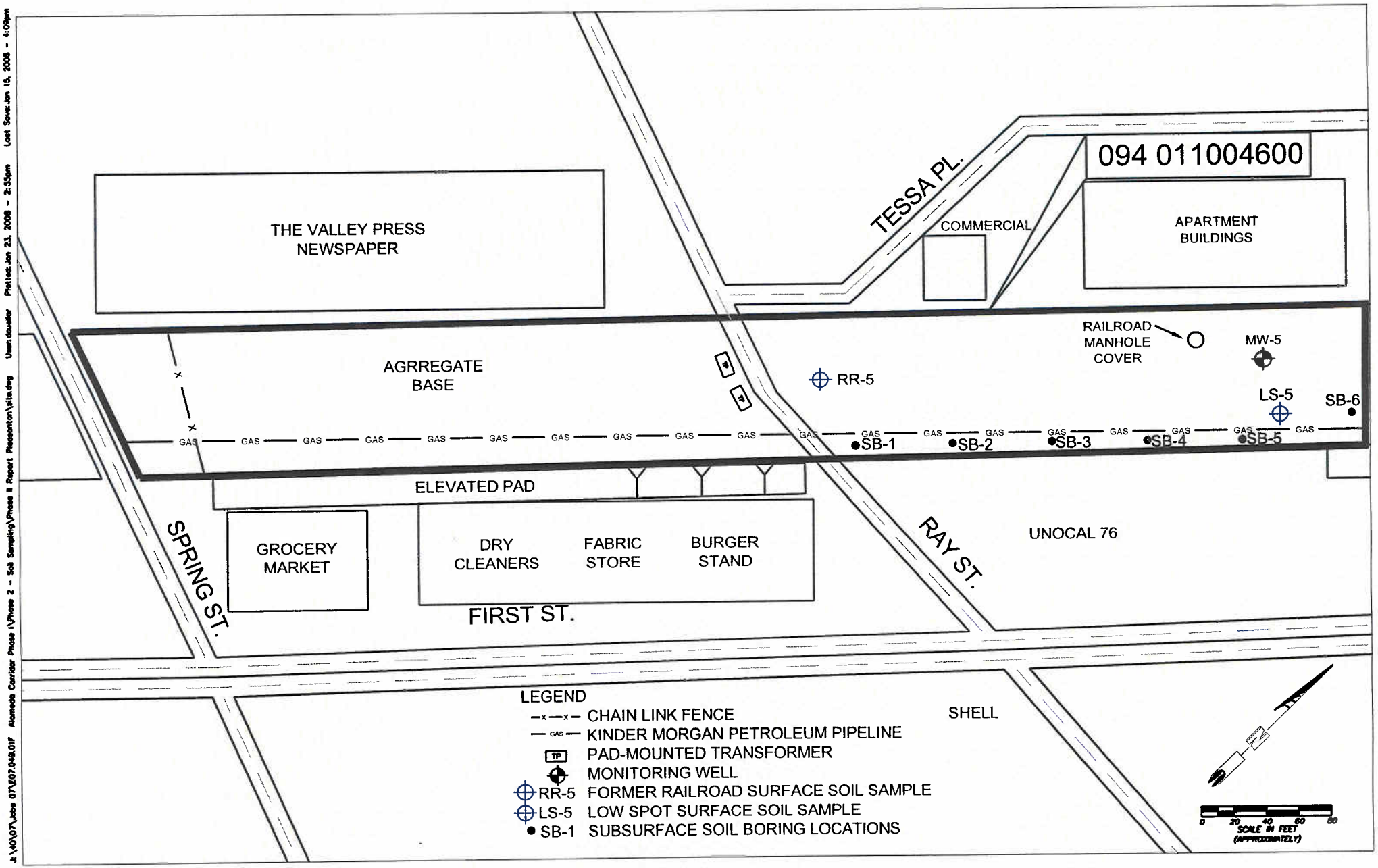
J:\40\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\site.dwg User: dsadler Plotted: Jan 15, 2008 - 4:08pm Last Saved: Nov 26, 2007 - 1:14pm

BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 094 010601100
Pleasanton, California

E07.049.01F | DJC | site.dwg | 01/15/08 | FIGURE 6



J:\40\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\site.dwg User:dcutler Plot last: Jan 23, 2008 - 2:35pm Last Save: Jan 15, 2008 - 4:09pm

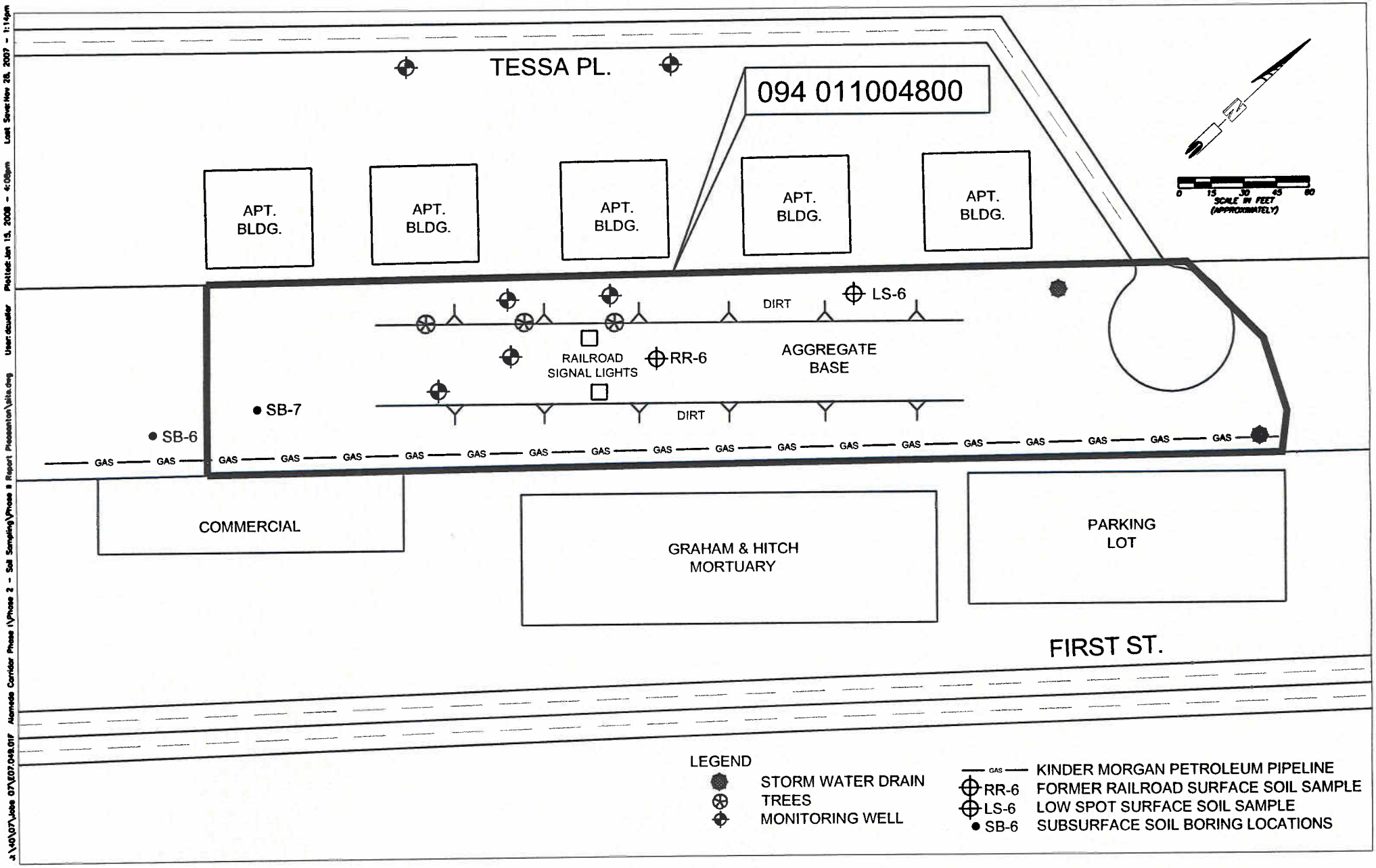
BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 094 011004600
Pleasanton, California

FIGURE 7

E07.049.01F DJC site.dwg 01/15/08



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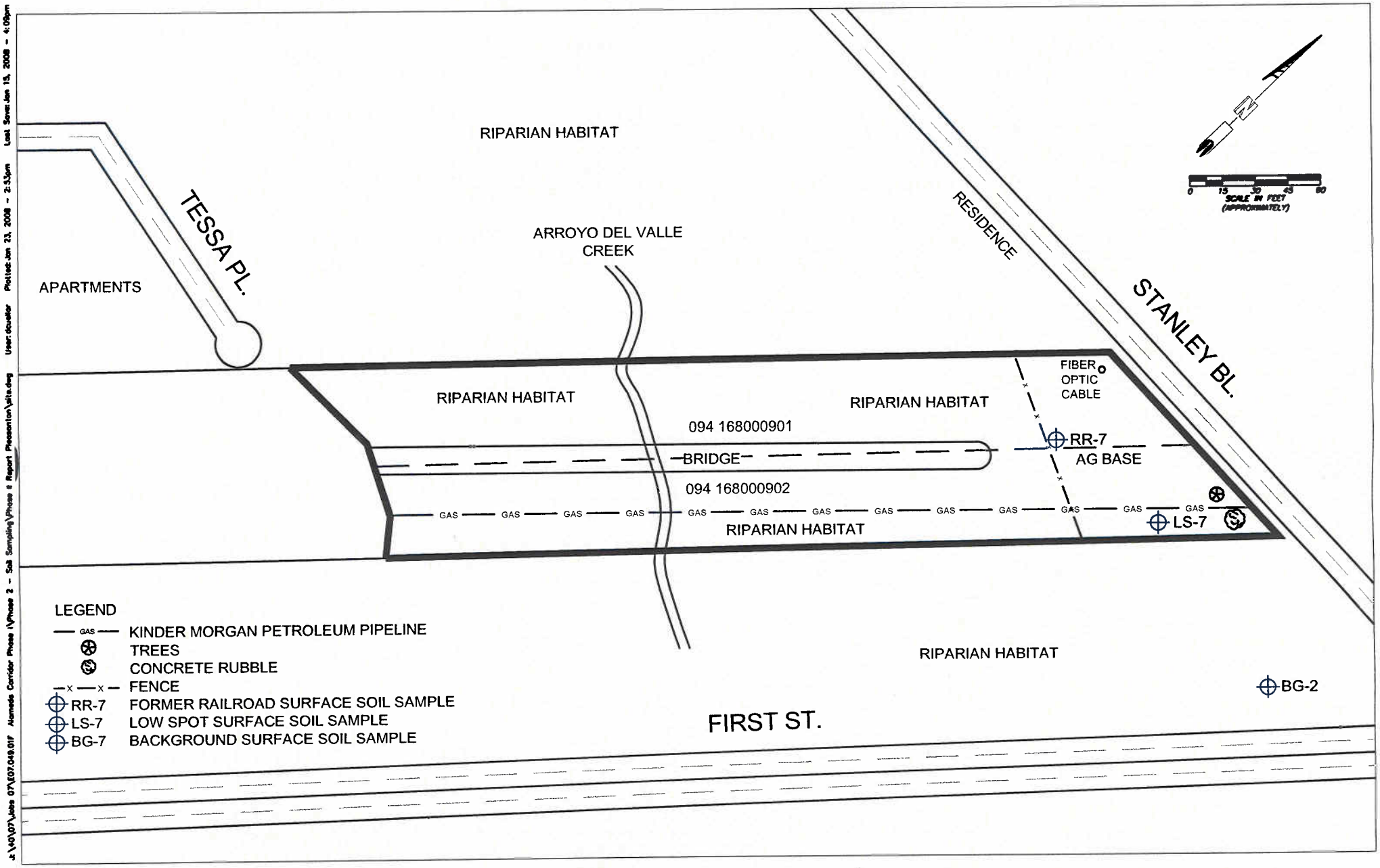
BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 094 011004800
Pleasanton, California

E07.049.01F DJC site.dwg 01/15/08

FIGURE 8



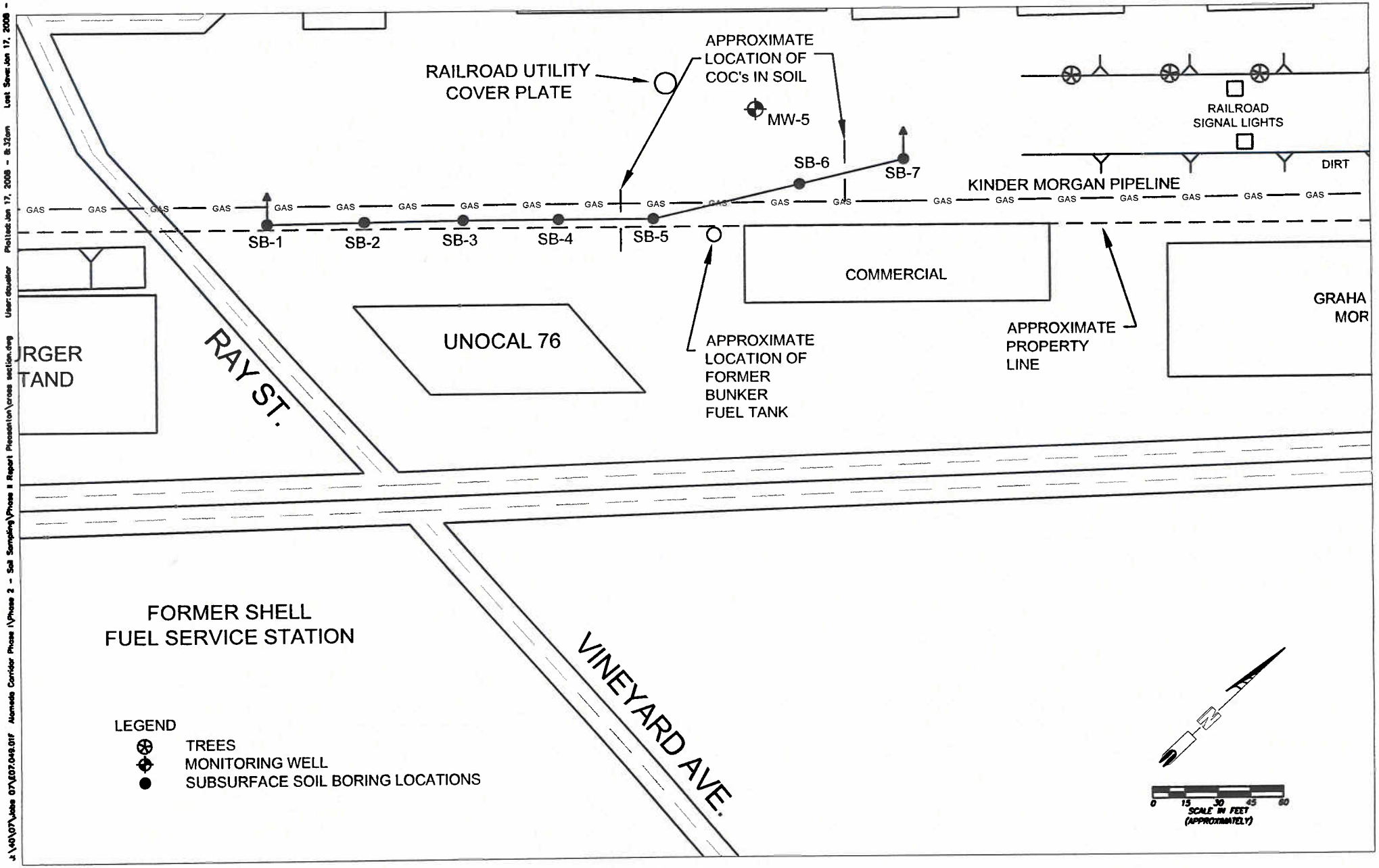
J:\e07\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\site.dwg User:dcutler Plotted:Jan 23, 2008 - 2:53pm Last Saved:Jan 15, 2008 - 4:09pm

BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 946 168000901 & 946 168000902
Pleasanton, California

E07.049.01F	DJC	site.dwg	01/15/08	FIGURE 9



J:\40\07\Jobs 07\E07.049.01F Alameda Corridor Phase I\Phase 2 - Soil Sampling\Phase II Report Pleasanton\cross section.dwg User:douglas Plotted:Jan 17, 2008 - 8:32am Last Saved:Jan 17, 2008 - 8

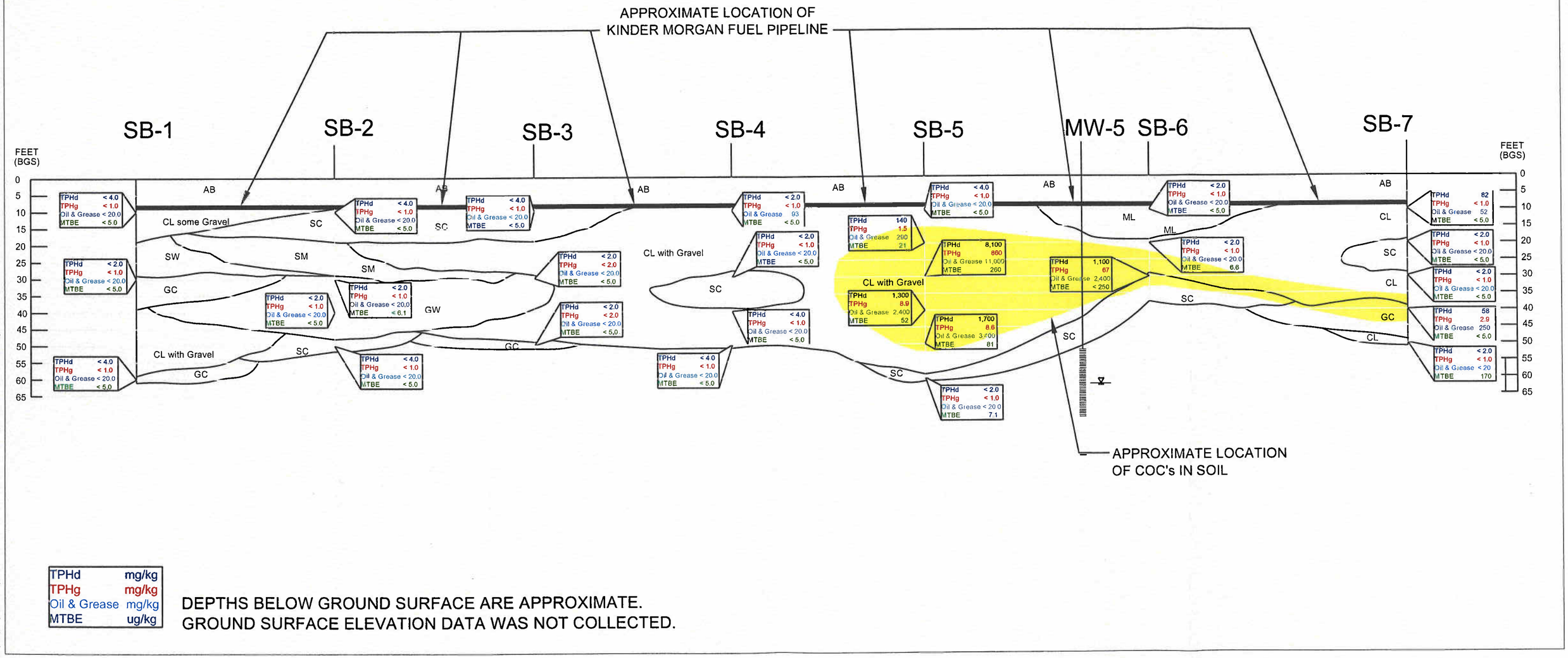
BSK

SITE PLAN

Alameda County Transportation Corridor Phase II
County of Alameda APN: 946 168000901 & 946 168000902
Pleasanton, California

E07.049.01F DJC site.dwg 01/15/08

FIGURE 10



TPHd	mg/kg
TPHg	mg/kg
Oil & Grease	mg/kg
MTBE	ug/kg

DEPTHS BELOW GROUND SURFACE ARE APPROXIMATE.
GROUND SURFACE ELEVATION DATA WAS NOT COLLECTED.

BSK

CROSS SECTION

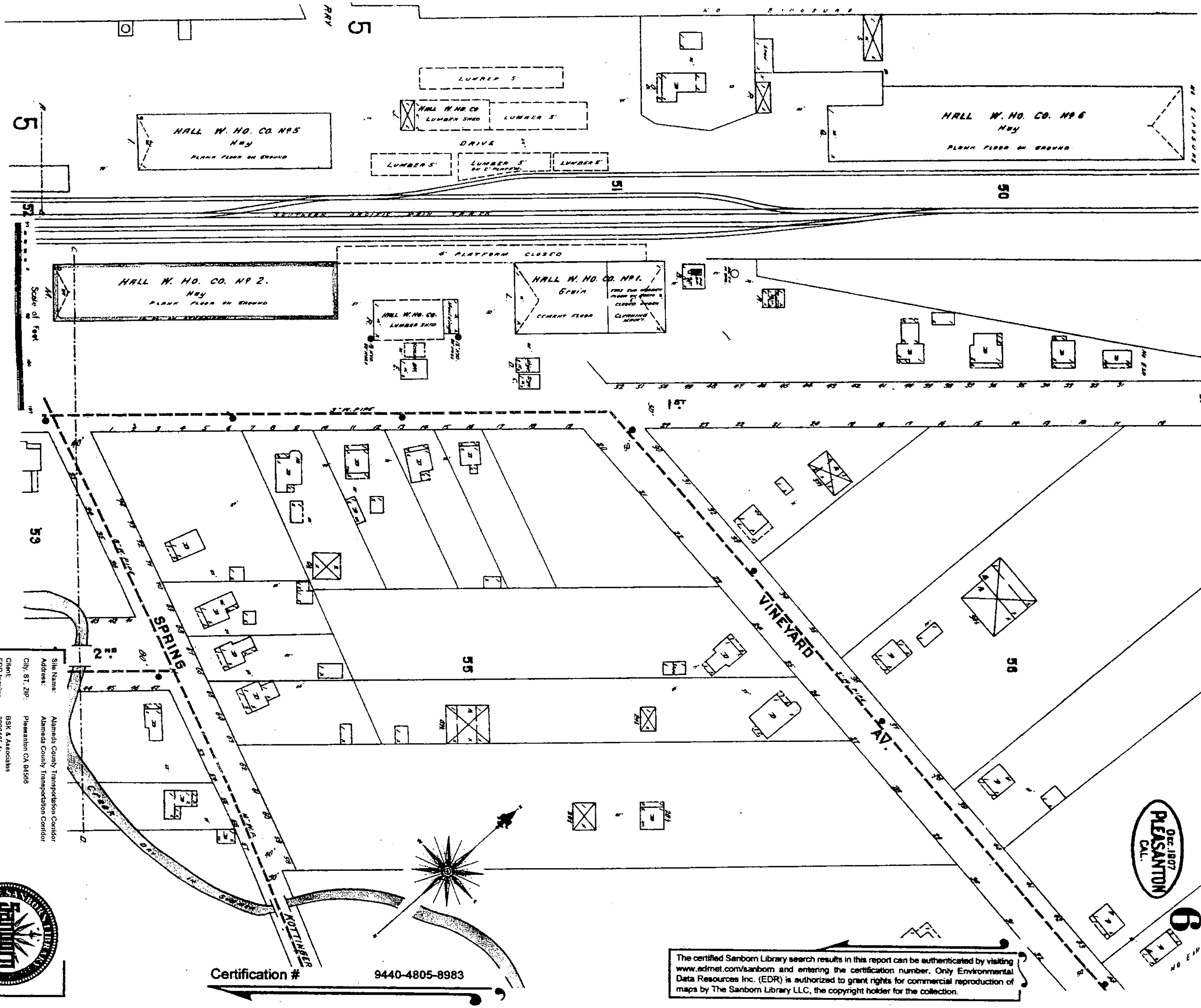
Alameda County Transportation Corridor Phase II
County of Alameda APN: 946 168000901 & 946 168000902
Pleasanton, California

E07.049.01F | DJC | site.dwg | 01/15/08 | FIGURE 11

APPENDIX A

Sanborn Fire Insurance Map – 1907

BSK



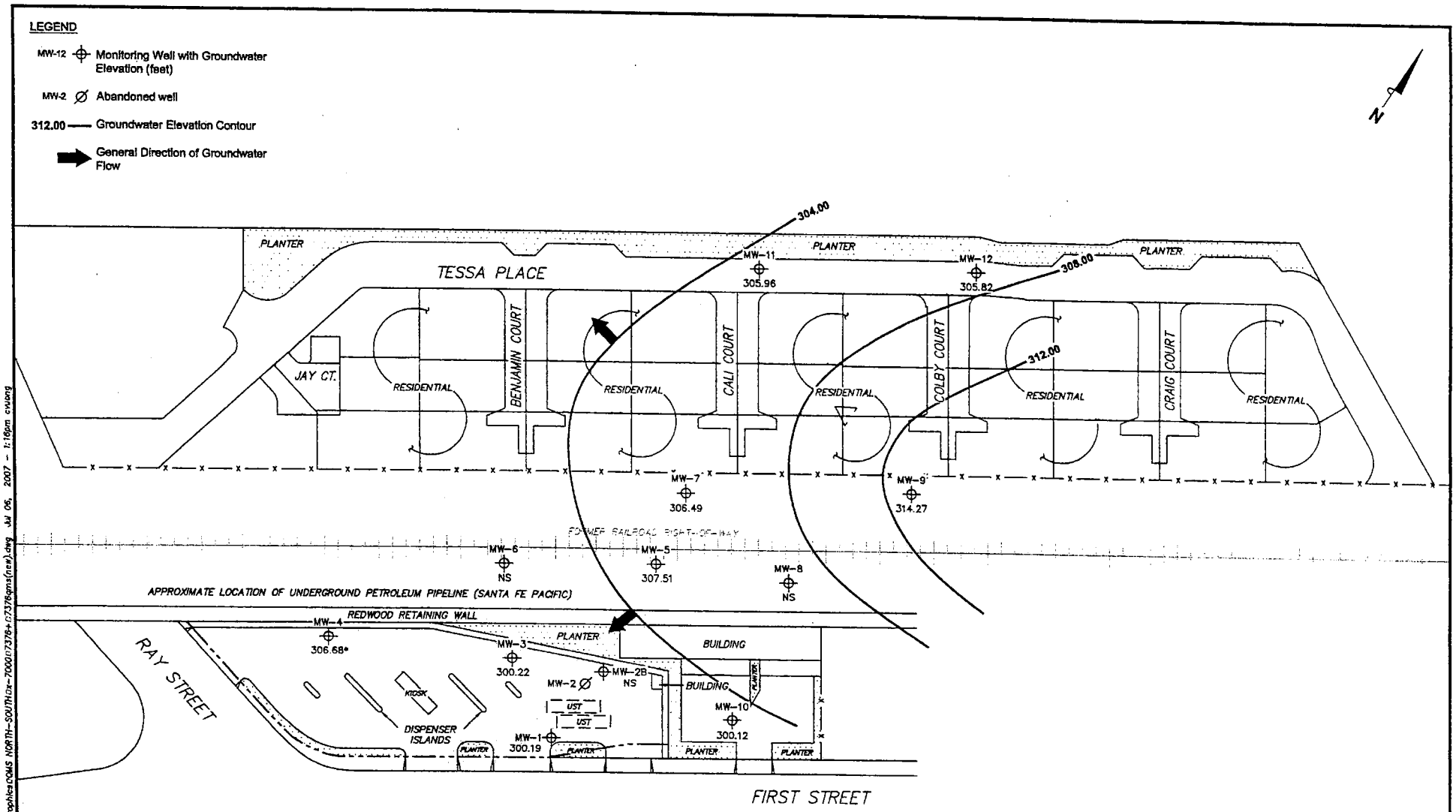
Certification # 9440-4805-8983

Site Name: Alameda County Transportation Corridor
Address: Alameda County Transportation Corridor
City, ST, ZIP: Pleasanton CA 94566
Client: BSK & Associates
EDR Inquiry: 2008465.1s
Order Date: 8/15/2007 11:04:56 AM
Certification # 9440-4805-8983
Research Associate: MJP
Copyright: 1907

APPENDIX B

TRC Quarterly Groundwater Monitoring Maps

BSK



NOTES:

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. NS = not surveyed. * = not included in groundwater contour interpretation. UST = underground storage tank.

SCALE (FEET)
0 60

TRC

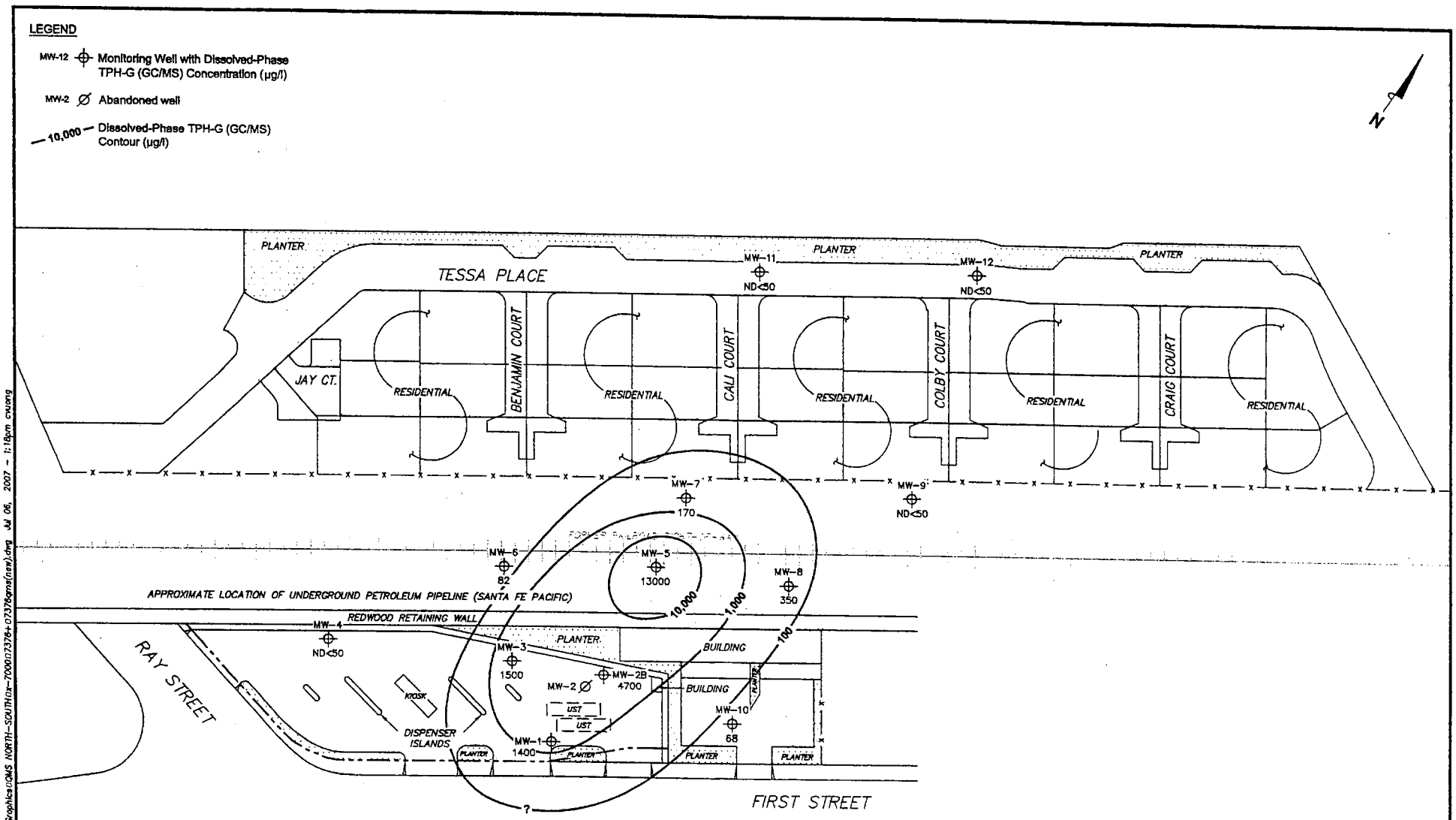
PROJECT: 125703

FACILITY:
76 STATION 7376
4191 FIRST STREET
PLEASANTON, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
June 15, 2007

FIGURE 2

MS=1:60 7376-003 L:\Graphics\GMS NORTH-SOUTH\x-7000\7376+\7376gms(new).dwg JW 06, 2007 - 1:16pm cvuong



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.
TPH-G (GC/MS) = total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B.
µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
UST = underground storage tank.

SCALE (FEET)
0 60

TRC

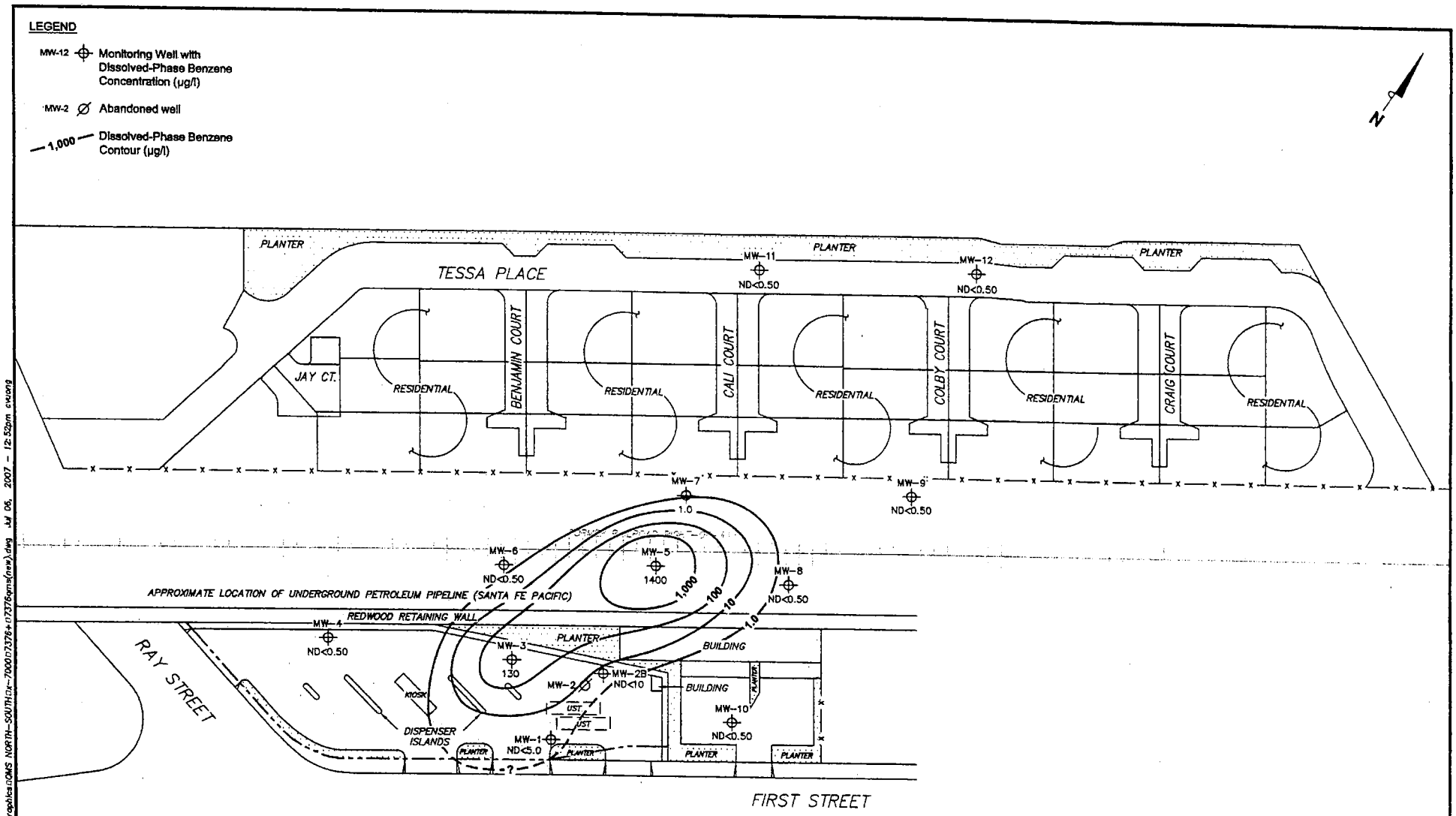
PROJECT: 125703

FACILITY:
76 STATION 7376
4191 FIRST STREET
PLEASANTON, CALIFORNIA

DISSOLVED-PHASE TPH-G (GC/MS) CONCENTRATION MAP
June 15, 2007

FIGURE 3

MS=1:60 7378-003 L:\Graphics\GMS NORTH-SOUTH\tx=7000\7376-d7378gmsn(new).dwg Jul 06, 2007 - 1:18pm cwong



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.
µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
UST = underground storage tank. Dashes indicate contour based on non-detect at elevated detection limit.

SCALE (FEET)
0 60

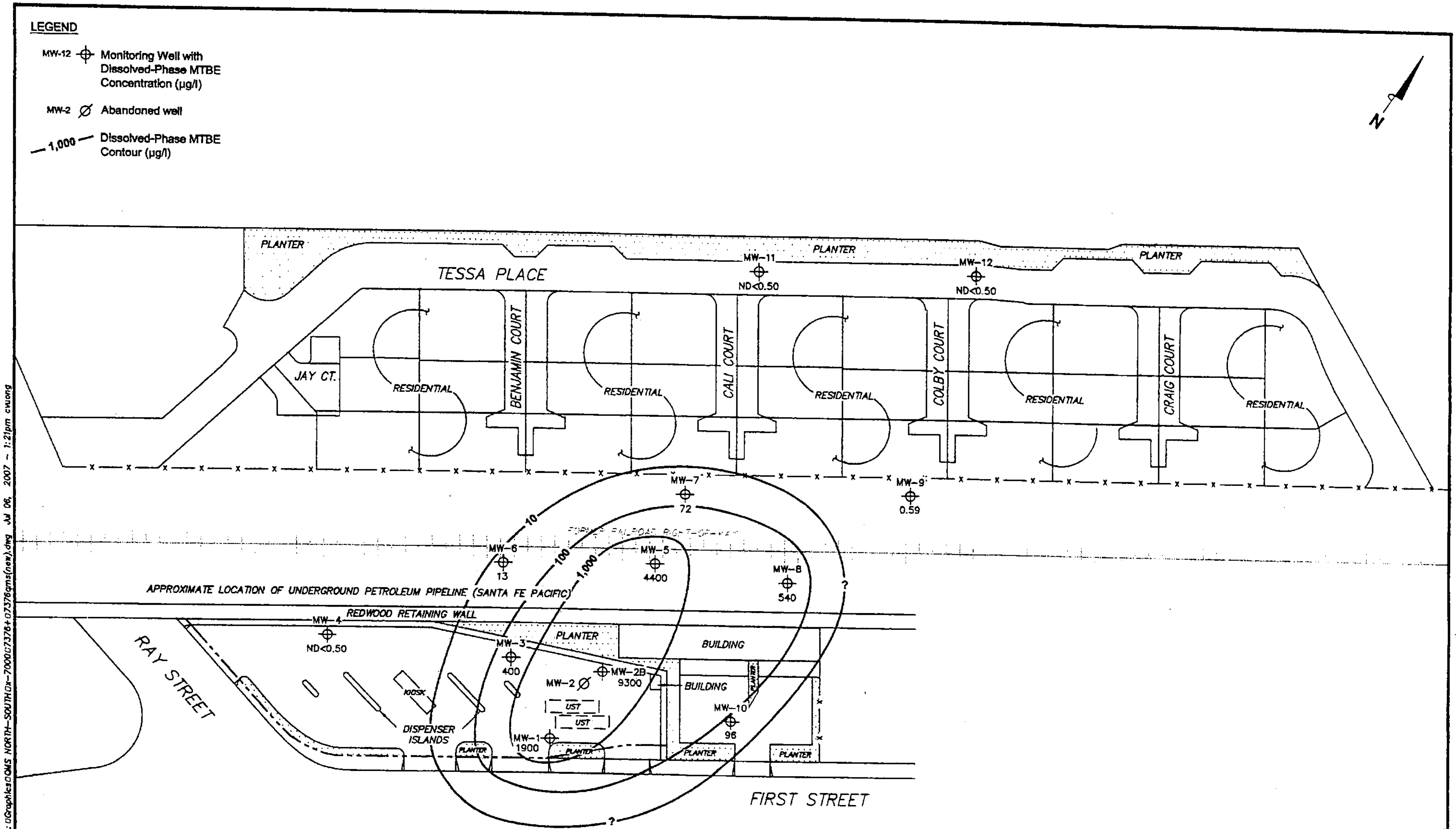
TRC

PROJECT: 125703
FACILITY:
76 STATION 7376
4191 FIRST STREET
PLEASANTON, CALIFORNIA

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
June 15, 2007

FIGURE 4

MS=1:60 7376-003 L:\Graphics\OMS NORTH-SOUTH\cx-7000\7376+07376gms(new).dwg Jul 06, 2007 - 12:52pm cwong



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

SCALE (FEET)
0 60

TRC

PROJECT: 125703

FACILITY:
76 STATION 7376
4191 FIRST STREET
PLEASANTON, CALIFORNIA

DISSOLVED-PHASE MTBE CONCENTRATION MAP
June 15, 2007

FIGURE 5

APPENDIX C

Lithologic Logs

BSK

BSK
567 W. Shaw Ave.
Fresno, CA 93704
(559)-497-2880
(559) 497-2886 FAX

Log of Boring SB-1

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 1 of 2
Job Number: E0704901F
Elevation:

Driller: Soilprobe, Inc.
Start Date: November 6, 2007
Drill Method: GeoProbe 66DT
Finish Date: November 6, 2007
Sample Method: Direct Push
Logged By: J.Rohlfing
Borehole Diameter: 2.5"
Water Level: Not encountered
Checked By: M.Hutson

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
							0	
0						**Aggregate Base**		
2								
4								
6								
8							-9	
10						**Sandy CLAY (CL)** Brown with fine gravel, dry, stiff, low plasticity		PID = 19.5 - FID = 0 No odor, no staining
12								
14								
16								
18							-19	
20						**SAND (SW)** Brown, medium grained with fine gravel, dry, dense		PID = 21.5 - FID = 0 No odor, no staining
22								
24								
26								
28							-29	
30						**Clayey GRAVEL (GC)** Brown, fine to coarse gravel, some medium sand, moist, dense		PID = 21.5 - FID = 0 No odor, no staining
32								
34								

BSK
567 W. Shaw Ave.
Fresno, CA 93704
(559) 497-2880
(559) 497-2886 FAX

Log of Boring SB-1

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 2 of 2
Job Number: E0704901F
Elevation:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
37								
39							-39	
41						**Sandy CLAY (CL)** Olive brown, with fine gravel, moist, very stiff, low plasticity		PID = 20.0 - FID = 0 No odor, no staining
43								
45								
47								
49						Grades to brown, with coarse sand, moderate plasticity		PID = 27.5 - FID = 0 No odor, no staining
51								
53								
55								
57								
59							-59	
61						**Clayey GRAVEL (GC)** Brown, fine to coarse gravel with coarse sand, wet	-61	PID = 23.5 - FID = 0 No odor, no staining
63						Boring completed at 61 feet bgs Groundwater not encountered Boring backfilled w/bentonite chips		
65								
67								
69								

BSK 567 W. Shaw Ave. Fresno, CA 93704 (559)-497-2880 (559) 497-2886 FAX	***Log of Boring SB-2*** Alameda Co. Transportation Corridor Soil Sampling	**Sheet 1 of 2**
		Job Number: E0704901F
		Elevation:
Driller: Soilprobe, Inc.		**Start Date:** November 6, 2007
Drill Method: GeoProbe 66DT		**Finish Date:** November 6, 2007
Sample Method: Direct Push		**Logged By:** J.Rohlfing
Borehole Diameter: 2.5"	**Water Level:** Not encountered	**Checked By:** M.Hutson

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
							0	Densely compacted AB
0						**Aggregate Base**		
2								
4								
6								
8							-9	
10						**Clayey SAND (SC)** Brown, medium to coarse grained with fine gravel, dry, dense		PID = 24.0 - FID = 0 No odor, no staining
12								
14								
16								
18							-19	
20						**Silty SAND (SM)** Brown, fine grained with fine to coarse gravel, dry to moist, dense		PID = 1.0 - FID = 0 No odor, no staining
22								
24								
26								
28							-29	
30						**Sandy GRAVEL (GW)** Brown, fine to coarse gravel with clay, moist, dense		PID = 19.5 - FID = 0 Odor, not discernable, no staining
32								
34								

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Log of Boring SB-2

Alameda Co. Transportation Corridor
Soil Sampling

Job Number: E0704901F

Elevation:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
37						**Sandy GRAVEL (GW)** Brown, fine to coarse gravel with clay, moist, dense		
39								
41						Grades without clay		PID = 19.0 - FID = 0 No odor, no staining
43								
45								
47								
49							-49	
51						**Clayey SAND (SC)** Brown, medium to coarse grained with fine to coarse gravel, moist to wet, dense	-51	PID = 24.0 - FID = 16.0 No odor, no staining
53						Boring completed at 51 feet bgs Groundwater not encountered Boring backfilled w/bentonite chips		
55								
57								
59								
61								
63								
65								
67								
69								

BSK 567 W. Shaw Ave. Fresno, CA 93704 (559)-497-2880 (559) 497-2886 FAX	***Log of Boring SB-3*** Alameda Co. Transportation Corridor Soil Sampling	Sheet 1 of 2
		Job Number: E0704901F
		Elevation:
Driller: Soilprobe, Inc.		**Start Date:** September 6, 2007
Drill Method: GeoProbe 66DT		**Finish Date:** September 6, 2007
Sample Method: Direct Push		**Logged By:** J.Rohlfing
Borehole Diameter: 2.5"	**Water Level:** Not encountered	**Checked By:** M.Hutson

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
							0	
0						**Aggregate Base**		
2								
4								
6								
8							-9	
10						**Clayey SAND (SC)** Brown, medium to coarse grained with gravel, dry to moist, dense		PID = 7.0 - FID = 0 No odor, no staining
12								
14								
16								
18							-19	
20						**Silty CLAY (CL)** Brown, moist, stiff, moderately plastic		PID = 3.0 - FID = 18.0 No odor, no staining
22								
24								
26								
28							-29	
30						**Sandy GRAVEL (GW)** Gray, fine to coarse gravel with silt, moist, dense		PID = 7.0 - FID = 6.0 No odor, no staining
32								
34								

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Log of Boring SB-3

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 2 of 2
Job Number: E0704901F
Elevation:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
37								
39							-39	
41						**Sandy CLAY (CL)** Brown with fine gravel, moist, stiff, low plasticity		PID = 19.0 - FID = 1.0 No odor, no staining 1" lense of decomposed granite
43								
45								
47								
49							-49	
51						**Clayey GRAVEL (GC)** Brown, some medium to coarse grained sand, moist, dense	-51	PID = 20.0 - FID = 2.0 No odor, no staining
53						Boring completed at 51 feet bgs Groundwater not encountered Boring backfilled w/bentonite chips		
55								
57								
59								
61								
63								
65								
67								
69								

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Log of Boring SB-4

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 1 of 2
Job Number: E0704901F
Elevation:

Driller: Soilprobe, Inc.
Start Date: September 6, 2007
Drill Method: GeoProbe 66DT
Finish Date: September 6, 2007
Sample Method: Direct Push
Logged By: J.Rohlfing
Borehole Diameter: 2.5"
Water Level: Not encountered
Checked By: M.Hutson

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
0							0	
0						**Aggregate Base**		
2								
4								
6								
8							-9	
10						**Silty CLAY (CL)** Brown, dry to moist, stiff, low plasticity		PID = 7.0 - FID = 0 No odor, no staining
12								
14								
16								
18								
20						Grades to moist, very stiff, moderate plasticity		PID = 12.0 - FID = 2.0 No odor, no staining
22								
24								
26								
28							-28	
28						**Clayey SAND (SC)** Olive, medium to coarse grained with fine gravel, moist to wet, dense		PID = 16.0 - FID = 2.0 Strong petroleum odor,
30								
32								
34								

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Log of Boring SB-4

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 2 of 2
Job Number: E0704901F
Elevation:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
37								
							-39	
39						**Sandy CLAY (CL)** Gray with fine gravel, moist, stiff, moderate plasticity		PID = 17.0 - FID = 1.0 No odor, no staining
41								
43						Grades to very stiff		
45								
47								
49						Grades with fine grained sand		
							-51	PID = 17.0 - FID = 1.0 No odor, no staining
51								
53						Boring completed at 51 feet bgs Groundwater not encountered Boring backfilled w/bentonite chips		
55								
57								
59								
61								
63								
65								
67								
69								

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Log of Boring SB-5

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 1 of 2
Job Number: E0704901F
Elevation:

Driller: Soilprobe, Inc.
Start Date: September 6, 2007
Drill Method: GeoProbe 66DT
Finish Date: September 6, 2007
Sample Method: Direct Push
Logged By: J.Rohlfing
Borehole Diameter: 2.5"
Water Level: Not encountered
Checked By: M.Hutson

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
0							0	
						Aggregate Base		
8							-9	
10						**Silty CLAY (CL)** Brown with fine to coarse gravel, dry to moist, stiff, low plasticity		PID = 2.0 - FID = 0 No odor, no staining
20						Grades to dark olive, moderate plasticity		PID = 67.0 - FID = 360 Strong petroleum odor, dark olive color
30						Grades with fine grained sand, moist, medium stiff, low plasticity		PID = 500 - FID = 41,700 (4.17%) Strong petroleum, odor, dark olive color
34								

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Log of Boring SB-5

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 2 of 2
Job Number: E0704901F
Elevation:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
37								
39								PID = 400 - FID = 5,200 Petroleum odor, olive, mottling
41								
43								
45								
47								
49						Grades to brown with fine grained sand and fine to coarse gravel, very stiff moderate plasticity		PID = 300 - FID = 3,500 Petroleum odor, no staining
51								
53								
55								
57								
59							-59	
						Clayey SAND (SC) Brown, medium to coarse grained with fine to coarse gravel, moist, some cementation	-61	PID = 95 - FID = 360 Slight petroleum odor, no staining
61						Boring completed at 61 feet bgs Groundwater not encountered Boring backfilled w/Bentonite chips		
63								
65								
67								
69								

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Log of Boring SB-6

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 1 of 2
Job Number: E0704901F
Elevation:

Driller: Soilprobe, Inc.
Start Date: September 7, 2007
Drill Method: GeoProbe 66DT
Finish Date: September 7, 2007
Sample Method: Direct Push
Logged By: J.Rohlfing
Borehole Diameter: 2.5"
Water Level: Not encountered
Checked By:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
							0	
0						**Aggregate Base**		
2								
4								
6								
8							-9	
10						**Sandy SILT (ML)** Dark brown with fine gravel, moist, soft		PID = 200 - FID = 350 No odor, no staining
12								
14								
16								
18							-19	
20						**Sandy CLAY (CL)** Brown, moist, very stiff, low plasticity		PID = 35 - FID = 20 No odor, no staining
22								
24								
26								
28								

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Log of Boring SB-6

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 2 of 2
Job Number: E0704901F
Elevation:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
							-29	
30						**Clayey SAND (SC)** Light brown to brown, fine to medium grained with fine gravel, moist, medium dense		PID = 1,500 FID = 22,000 (2.2%) Strong petroleum odor, no staining
32								
34								
36								
							-37.5	Boring refusal at 37.5' bgs
38						Boring terminated at 37.5 feet bgs Groundwater not encountered Boring backfilled w/Bentonite chips		
40								
42								
44								
46								
48								
50								
52								
54								
56								

BSK	567 W. Shaw Ave. Fresno, CA 93704 (559)-497-2880 (559) 497-2886 FAX	***Log of Boring SB-7*** Alameda Co. Transportation Corridor Soil Sampling	**Sheet 1 of 2** **Job Number:** E0704901F **Elevation:**

Driller: Soilprobe, Inc.		**Start Date:** September 7, 2007
Drill Method: GeoProbe 66DT		**Finish Date:** September 7, 2007
Sample Method: Direct Push		**Logged By:** J.Rohlfing
Borehole Diameter: 2.5"	**Water Level:** Not encountered	**Checked By:** M.Hutson

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
0							0	
0						**Aggregate Base**		
2								
4								
6								
8							-9	
10						**CLAY (CL)** Dark brown, with trace of fine grained sand and gravel, moist, soft, moderate plasticity		PID = 22 - FID = 0 No odor, no staining
12								
14								
16								
18							-19	
20						**Clayey SAND (SC)** Brown, fine grained, dry to moist, very dense		PID = 23 - FID = 8 No odor, no staining
22								
24								
26								
28							-29	
30						**Sandy CLAY (CL)** Olive, moist, stiff, moderate plasticity		PID = 25 - FID = 60 Petroleum odor, olive color
32								
34								

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Log of Boring SB-7

Alameda Co. Transportation Corridor
Soil Sampling

Sheet 2 of 2
Job Number: E0704901F
Elevation:

Depth (feet)	Sample Type	Blow Count (blows/ft.)	Dry Density (pcf)	Moisture (%)	Graphic Log	Materials Description	Elevation (feet)	Remarks
37								
							-39	
39						**Clayey GRAVEL (GC)**		
						Olive, fine to coarse gravel, moist to wet, medium dense		PID = 300 - FID 2,300
41								Petroleum odor, olive color
43								
45								
47								
							-49	
49						**CLAY (CL)**		
						Brown, moist, stiff, moderate plasticity		PID = 11 - FID = 20
							-51	No odor, no staining
51								
						Boring completed at 51 feet bgs		
53						Groundwater not encountered		
						Boring backfilled w/Bentonite chips		
55								
57								
59								
61								
63								
65								
67								
69								

APPENDIX D

Laboratory Analytical Results
And
Chain-of–Custody Records

BSK

BSK ANALYTICAL LABORATORIES

MEMO

To: Noelle Willbanks
Project Engineer

From: Glen Brown
Client Services Supervisor
Date: Jan 02, 2008

RE: Amended Data Pages for Report #2007110669:
"Alameda County Transportation Corridor

Noelle,

Per your request, the TPH-extractable Chromatograms for your project identified as "Alameda County Transportation Corridor" have been further reviewed against Jet fuel. The following observations and changes have been made:

1) The TPH fingerprint for Jet fuel and Diesel overlap, with the late eluting hydrocarbons in Jet fuel being common with the early eluting hydrocarbons in Diesel. The quantitations made for TPH-Jet fuel in the original report were quantitated against an incorrect hydrocarbon range. These quantitations have been amended to reflect only the portion of hydrocarbons within the Jet fuel range. The new data pages have been stamped amended and are contained in the accompanying amended report.
2) The amended data pages which show a TPH-Jet fuel finding now have a comment indicating that the chromatogram exhibits a TPH fingerprint inconsistent with our Jet fuel standard due to the lack of the early eluting constituents of the standard.
3) The TPH-extractable Chromatograms for the samples in question and our Jet fuel and Diesel standards have been included in the amended report as additional data to help clarify the identity of the hydrocarbons found in the soil samples.

Upon further review of the TPH fingerprints generated from the soil samples, there appears to be inconsistent hydrocarbon patterns versus the fresh Jet fuel standard. A portion of the material in the samples still elutes within the Jet fuel hydrocarbon range, thus a quantitation is made as per the method, however, the material in the samples exhibits a TPH fingerprint that is a broader range of higher boiling point hydrocarbons compared to Jet fuel standard.

I hope this additional information helps clarifies our analytical report. Should you have any questions or require additional information, please contact us at your convenience.

Glen Brown – Supervisor of Client Services
BSK Analytical Laboratories

BSK Analytical Laboratories
Engineers & Laboratories

1414 Stanislaus Street
Fresno, CA 93706
(559) 497-2888
Fax (559) 485-6935

BSK Submission Number: 2007110669

Noelle Willbanks
BSK Associates - Geotechnical
567 W Shaw, Suite B
Fresno, CA 93704

12/27/2007

AMENDED

Dear Noelle Willbanks,

Thank you for selecting BSK Analytical Laboratories for your analytical testing needs. We have prepared this report in response to your request for analytical services. Please find enclosed the following sections for your complete laboratory report, each uniquely paginated:

CASE NARRATIVE: An overview of the work performed.
CERTIFICATE OF ANALYSIS: Analytical results.
QUALITY CONTROL (QC) SUMMARY: QC supporting the results presented herein.
REPORT OF SAMPLE INTEGRITY
CHAIN OF CUSTODY FORM

Certification: BSK Analytical Laboratories certifies that the test results contained in this report meet all requirements of the NELAC Standards for applicable certified drinking water chemistry analyses under CA NELAP Certificate #04227CA, CA-ELAP Certificate #1180, and Nevada Certificate #CA79. For all other matrices and bacteriological analyses, this data package is in compliance with ELAP Standards for applicable certified analyses under CA-ELAP Certificate #1180. Any exceptions to applicable standards have been noted in the case narrative. Please note that certifications are applicable only to tests and/or analytes specified on each. Certification information may be obtained by contacting the laboratory or visiting our website at www.bsklabs.com. The results in this report pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from BSK Analytical Laboratories.

If additional clarification of any information is required, please contact your Client Services Representative, John Posten, at (800) 877-8310 or (559) 497-2888.

BSK ANALYTICAL LABORATORIES

John Posten
Client Services Representative

Maria C Manuel
Quality Control Reviewer

ACCREDITED IN ACCORDANCE WITH nelac

AMENDED

Case Narrative

BSK Submission Number: 2007110669

SAMPLE AND RECEIPT INFORMATION

The sample(s) was received, prepared, and analyzed within the method specified holding times unless otherwise noted on the Certificate of Analysis. Samples, when shipped, arrived within acceptable temperature requirements of 0° to 6° Celsius unless otherwise noted on the Report of Sample Integrity. Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.

QUALITY CONTROL

All analytical quality controls are within established method criteria except when noted in the Quality Control section or on the Certificate of Analysis. All positive results for EPA Methods 504.1, 502.2, and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed. QC samples may include analytes not requested in this submission.

RUN	ORDER	TEST	ANALYTE	COMMENT
142952	921091	EPA 6020A	Mercury (Hg)	MS and MSD recoveries were affected by the matrix.
142952	921091	EPA 6020	Antimony (Sb)	MS and MSD recoveries were affected by the matrix.
142951	921086	EPA 6020	Antimony (Sb)	MS and MSD recoveries were affected by the matrix.
144251	930128	EPA 8260B	Di-isopropyl Ether	This analyte was biased low in this run in both the reagent spikes and CCV. However, recoveries were within 10% of the LCL.
144299	930596	EPA 8260B	t-Amyl Methyl Ether	LCS recovery was out of the acceptance range, however the LCSD recovery was within the acceptance range, therefore the data were reported.
144309	930592	EPA 8260B	tert-Butyl Alcohol	LCS recovery was out of the acceptance range, however the LCSD recovery was within the acceptance range, therefore the data were reported.
144252	930137	EPA 8260B	Methyl-t-Butyl Ether	LCSD recovery was out of the acceptance range, however the LCS recovery was within the acceptance range, therefore the data were reported.
144299	930597	EPA 8260B	Methyl-t-Butyl Ether	LCSD recovery was out of the acceptance range, however the LCS recovery was within the acceptance range, therefore the data were reported.
144309	930592	EPA 8260B	Methyl-t-Butyl Ether	LCS recovery was out of the acceptance range, however the LCSD recovery was within the acceptance range, therefore the data were reported.
144251	930128	EPA 8260B	Ethyl t-Butyl Ether	LCS recovery was out of the acceptance range for one or more analytes. However, the LCSD recovery was within the acceptance range, therefore the data was reported.
142952	921091	EPA 6020	Barium (Ba)	MS and MSD recoveries were affected by the matrix.
142951	921087	EPA 6020	Barium (Ba)	MSD recovery was affected by the matrix.
142488	917931	SM 5520F	Hydrocarbon Oil & Grease	MSD recovery was affected by the matrix.
142917	920786	EPA 8015B	TPH as Jet Fuel	LCSD recovery was out of the acceptance range, however the LCS recovery was within the acceptance range, therefore the data were reported.
144251	930130	EPA 8260B		MS and MSD recoveries were affected by the matrix.
144252	930136	EPA 8260B		Recoveries for several analytes were low, but were within 10% of the LCL.
144252	930138	EPA 8260B		MS and MSD recoveries were affected by the matrix.
142714	919635	EPA 8021B		MSD recovery was affected by the matrix.

SAMPLE RESULT INFORMATION

Samples are analyzed as received (wet weight basis) unless noted here. The results relate only to the items tested. Any exceptions to be considered when evaluating these results are also listed here, if applicable. Results contained in this package shall not be reproduced, except in full, without written approval of BSK Analytical Laboratories.

ORDER	TEST	ANALYTE	COMMENT
			TPH as Jet Fuel amounts were recalculated on 12/27/2007 in order to correct a previous error. Previously, the TPHJ calculation was based on hydrocarbons found in the C8 - C28 range. The actual TPHJ range is C8 - C17.
917240	EPA 8151A	DCPAA	Surrogate recoveries are slightly above upper control limits.
917245	EPA 8151A	DCPAA	Surrogate recoveries are slightly above upper control limits.
917271	EPA 8015B	Tetracosane	Surrogate recovery value is invalid due to sample dilution requirement.
917272	EPA 8015B	Tetracosane	Surrogate recovery value is invalid due to sample dilution requirement.
917273	EPA 8015B	Tetracosane	Surrogate recovery value is invalid due to sample dilution requirement.
917273	EPA 8021B	Fluorobenzene	Surrogate recovery was affected by the matrix.
917274	EPA 8015B	Tetracosane	Surrogate recovery value is invalid due to sample dilution requirement.
917276	EPA 8021B	Fluorobenzene	Surrogate recovery was affected by the matrix.
917278	EPA 8015B	Tetracosane	Surrogate recovery value is invalid due to sample dilution requirement.
917278	EPA 8021B	Fluorobenzene	Surrogate recovery was affected by the matrix.
917278	EPA 8260B		Sample was diluted due to matrix interference.
917279	EPA 8015B	Tetracosane	Surrogate recovery value is invalid due to sample dilution requirement.
917279	EPA 8021B	Fluorobenzene	Surrogate recovery was affected by the matrix.
917282	EPA 8015B	Tetracosane	Surrogate recovery was affected by the matrix.

BSK Analytical Laboratories
Engineers & Laboratories

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(559) 497-2888
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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
BSK Associates - Geotechnical
567 W Shaw, Suite B
Fresno, CA 93704

BSK Submission #: 2007110669
BSK Sample ID #: 917238

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: BG-1
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1132
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**4.9**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**200**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**32**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**190**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**0.10**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**100**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

Report Authentication Code:

BSK Analytical Laboratories
Engineers & Laboratories

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
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567 W Shaw, Suite B
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BSK Submission #: 2007110669
BSK Sample ID #: 917239

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: RR-1
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1152
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**18**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**130**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**28**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**79**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**0.10**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917240

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: LS-1
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1209
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**9.5**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**170**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**36**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**160**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**0.24**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**120**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917241

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: RR-2
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1232
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**32**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**120**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**28**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**83**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917242

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: LS-2
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1252
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**62**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**95**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**28**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**120**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**0.26**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**100**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917243

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: RR-3
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1314
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**68**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**97**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**26**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**130**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**0.14**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

Report Authentication Code:

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BSK Submission #: 2007110669
BSK Sample ID #: 917244

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: LS-3
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1333
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**2.6**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**110**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**25**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**25**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**96**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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Certificate of Analysis

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BSK Submission #: 2007110669
BSK Sample ID #: 917245

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: BG-3
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1342
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**3.2**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**120**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**31**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**58**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**0.13**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**1.1**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**120**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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Certificate of Analysis

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BSK Submission #: 2007110669
BSK Sample ID #: 917246

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: BG-4
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1414
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**2.3**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**120**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**25**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**39**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**100**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

Report Authentication Code:

BSK Analytical Laboratories
Engineers & Laboratories

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
BSK Associates - Geotechnical
567 W Shaw, Suite B
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BSK Submission #: 2007110669
BSK Sample ID #: 917247

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: LS-4
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1426
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**3.9**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**130**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**27**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**49**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**0.14**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**110**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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NELAP Certificate #04227CA
ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917248

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: RR-4
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1451
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**18**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**110**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**26**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**33**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917249

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: RR-5
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1537
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**37**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**140**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**30**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**70**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917250

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: LS-5
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1553
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**19**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**100**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**30**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**47**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**100**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917251

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: RR-6
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1625
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**14**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**100**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**26**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**30**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

Report Authentication Code:

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BSK Submission #: 2007110669
BSK Sample ID #: 917252

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: LS-6
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1639
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**5.3**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**130**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**36**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**25**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**100**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

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BSK Submission #: 2007110669
BSK Sample ID #: 917253

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: RR-7
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1658
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**52**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Barium (Ba)	EPA 6020	**100**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Chromium - Total (Cr)	EPA 6020	**30**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Lead (Pb)	EPA 6020	**74**	mg/Kg	5.0	1	5.0	11/16/07	11/20/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/16/07	11/20/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/20/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/16/07	11/20/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

Report Authentication Code:

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BSK Submission #: 2007110669
BSK Sample ID #: 917254

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: LS-7
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1708
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**3.1**	mg/Kg	1.0	1	1.0	11/19/07	11/19/07
Barium (Ba)	EPA 6020	**110**	mg/Kg	5.0	1	5.0	11/19/07	11/19/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/19/07	11/19/07
Chromium - Total (Cr)	EPA 6020	**33**	mg/Kg	5.0	1	5.0	11/19/07	11/19/07
Lead (Pb)	EPA 6020	**12**	mg/Kg	5.0	1	5.0	11/19/07	11/19/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/19/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/19/07	11/19/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/19/07	11/19/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**83**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

Report Authentication Code:

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Certificate of Analysis

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BSK Submission #: 2007110669
BSK Sample ID #: 917255

Report Issue Date: 12/27/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: BG-7
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1717
Date Received: 11/08/2007

Inorganics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
Arsenic (As)	EPA 6020	**6.0**	mg/Kg	1.0	1	1.0	11/19/07	11/19/07
Barium (Ba)	EPA 6020	**120**	mg/Kg	5.0	1	5.0	11/19/07	11/19/07
Cadmium (Cd)	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/19/07	11/19/07
Chromium - Total (Cr)	EPA 6020	**36**	mg/Kg	5.0	1	5.0	11/19/07	11/19/07
Lead (Pb)	EPA 6020	**18**	mg/Kg	5.0	1	5.0	11/19/07	11/19/07
Mercury (Hg)	EPA 6020A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/19/07
Selenium (Se) - Total	EPA 6020	**ND**	mg/Kg	1.0	1	1.0	11/19/07	11/19/07
Silver (Ag)	EPA 6020	**ND**	mg/Kg	2	1	2.0	11/19/07	11/19/07

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
2,4,5-T	EPA 8151A	**ND**	mg/Kg	0.020	1	0.020	11/19/07	11/28/07
2,4,5-TP (Silvex)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07
2,4-D	EPA 8151A	**ND**	mg/Kg	0.040	1	0.040	11/19/07	11/28/07
2,4-DB	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dichloroprop	EPA 8151A	**ND**	mg/Kg	0.10	1	0.10	11/19/07	11/28/07
Dinoseb (DNBP)	EPA 8151A	**ND**	mg/Kg	0.010	1	0.010	11/19/07	11/28/07

Surrogate

DCPAA	EPA 8151A	**110**	% Rec	-	1	N/A	11/19/07	11/28/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.
MDC: Min Detectable Concentration

Report Authentication Code:

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
BSK Associates - Geotechnical
567 W Shaw, Suite B
Fresno, CA 93704

BSK Submission #: 2007110669
BSK Sample ID #: 917256

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-1-10
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 0905
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/07/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**91**	% Rec	-	2	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**91**	% Rec		2	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**98**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**94**	% Rec		1	N/A	12/07/07	12/07/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917257

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-1-30
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 0932
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/07/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**140**	% Rec	-	1	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**140**	% Rec		1	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**93**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**97**	% Rec		1	N/A	12/07/07	12/07/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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BSK Submission #: 2007110669
BSK Sample ID #: 917258

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: SB-1-60
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1040
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**99**	% Rec	-	2	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**99**	% Rec		2	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**100**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**100**	% Rec		1	N/A	12/10/07	12/10/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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BSK Submission #: 2007110669
BSK Sample ID #: 917259

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-2-10
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1115
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/07/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07

Surrogate

Tetracosane	EPA 8015B	**100**	% Rec	-	2	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**100**	% Rec		2	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**100**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**96**	% Rec		1	N/A	12/07/07	12/07/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917260

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-2-30
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1152
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Methyl-t-Butyl Ether	EPA 8260B	**6.1**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/07/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07

Surrogate

Tetracosane	EPA 8015B	**110**	% Rec	-	1	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**110**	% Rec		1	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**110**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**98**	% Rec		1	N/A	12/07/07	12/07/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917261

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-2-40
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1206
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/07/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**120**	% Rec	-	1	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**120**	% Rec		1	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**100**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**94**	% Rec		1	N/A	12/07/07	12/07/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
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567 W Shaw, Suite B
Fresno, CA 93704

BSK Submission #: 2007110669
BSK Sample ID #: 917262

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-2-50
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1230
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/07/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**140**	% Rec	-	2	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**140**	% Rec		2	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**110**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**97**	% Rec		1	N/A	12/07/07	12/07/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917263

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-3-10
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1345
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/14/07	11/19/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**130**	% Rec	-	2	N/A	11/14/07	11/19/07
Tetracosane	EPA 8015B	**130**	% Rec		2	N/A	11/14/07	11/19/07
Fluorobenzene	EPA 8021B	**93**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**100**	% Rec		1	N/A	12/10/07	12/10/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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BSK Submission #: 2007110669
BSK Sample ID #: 917264

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:

Sample Type: Solid
Sample Description: SB-3-30
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1415
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/07/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/07/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**120**	% Rec	-	1	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**120**	% Rec		1	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**93**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**94**	% Rec		1	N/A	12/07/07	12/07/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917265

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-3-50
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1449
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**120**	% Rec	-	1	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**120**	% Rec		1	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**88**	% Rec	-	1	N/A	11/12/07	11/13/07
Toluene-d8	EPA 8260B	**95**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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BSK Submission #: 2007110669
BSK Sample ID #: 917266

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: SB-4-10
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1526
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**93**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**84**	% Rec	-	1	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**84**	% Rec		1	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**78**	% Rec	-	1	N/A	11/12/07	11/13/07
Toluene-d8	EPA 8260B	**96**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917267

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-4-30
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1548
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/15/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/15/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**94**	% Rec	-	1	N/A	11/15/07	11/20/07
Tetracosane	EPA 8015B	**94**	% Rec		1	N/A	11/15/07	11/20/07
Fluorobenzene	EPA 8021B	**92**	% Rec	-	1	N/A	11/12/07	11/13/07
Toluene-d8	EPA 8260B	**99**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917268

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-4-40
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1613
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/15/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/15/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**98**	% Rec	-	2	N/A	11/15/07	11/20/07
Tetracosane	EPA 8015B	**98**	% Rec		2	N/A	11/15/07	11/20/07
Fluorobenzene	EPA 8021B	**97**	% Rec	-	1	N/A	11/12/07	11/13/07
Toluene-d8	EPA 8260B	**97**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
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BSK Submission #: 2007110669
BSK Sample ID #: 917269

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-4-50
Sample Comments:

Date Sampled: 11/06/2007
Time Sampled: 1627
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/15/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/15/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**100**	% Rec	-	2	N/A	11/15/07	11/20/07
Tetracosane	EPA 8015B	**100**	% Rec		2	N/A	11/15/07	11/20/07
Fluorobenzene	EPA 8021B	**100**	% Rec	-	1	N/A	11/12/07	11/13/07
Toluene-d8	EPA 8260B	**100**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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Certificate of Analysis

NELAP Certificate #04227CA
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BSK Submission #: 2007110669
BSK Sample ID #: 917270

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-5-10
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 0838
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/15/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	2	4.0	11/15/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**100**	% Rec	-	2	N/A	11/15/07	11/20/07
Tetracosane	EPA 8015B	**100**	% Rec		2	N/A	11/15/07	11/20/07
Fluorobenzene	EPA 8021B	**79**	% Rec	-	1	N/A	11/12/07	11/13/07
Toluene-d8	EPA 8260B	**97**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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BSK Submission #: 2007110669
BSK Sample ID #: 917271

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-5-20
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 0851
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**140**	mg/Kg	2	10	20	11/15/07	11/20/07
TPH as Gasoline	EPA 8015B	**1.5**	mg/Kg	1.0	1	1.0	11/18/07	11/18/07
TPH as Gasoline (C6-C10)	EPA 8015B	**8.5**	mg/Kg	1.0	1	1.0	11/13/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**92**	mg/Kg	2	10	20	11/15/07	11/20/07
Benzene	EPA 8021B	**0.39**	mg/Kg	0.0050	1	0.0050	11/13/07	11/13/07
Ethylbenzene	EPA 8021B	**0.028**	mg/Kg	0.0050	1	0.0050	11/13/07	11/13/07
Toluene	EPA 8021B	**0.059**	mg/Kg	0.0050	1	0.0050	11/13/07	11/13/07
Total Xylenes	EPA 8021B	**0.084**	mg/Kg	0.0050	1	0.0050	11/13/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**21**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**69**	µg/Kg	50	1	50	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**290**	mg/Kg	20	1	20	11/12/07	11/12/07

Surrogate

Tetracosane	EPA 8015B	**0**	% Rec	-	10	N/A	11/15/07	11/20/07
Tetracosane	EPA 8015B	**0**	% Rec		10	N/A	11/15/07	11/20/07
Fluorobenzene	EPA 8021B	**140**	% Rec	-	1	N/A	11/13/07	11/13/07
Toluene-d8	EPA 8260B	**120**	% Rec		1	N/A	12/10/07	12/10/07

LUFT Comments

TPH as Jet Fuel	Lower boiling point hydrocarbons decreased relative to standard

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917272

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: SB-5-30
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 0859
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**8100**	mg/Kg	2	800	1600	11/15/07	11/20/07
TPH as Gasoline	EPA 8015B	**860**	mg/Kg	1.0	500	500	11/16/07	11/16/07
TPH as Gasoline (C6-C10)	EPA 8015B	**170**	mg/Kg	1.0	5	5.0	11/12/07	11/13/07
TPH as Jet Fuel	EPA 8015B	**6300**	mg/Kg	2	800	1600	11/15/07	11/20/07
Benzene	EPA 8021B	**37**	mg/Kg	0.0050	500	2.5	11/16/07	11/16/07
Ethylbenzene	EPA 8021B	**0.38**	mg/Kg	0.0050	5	0.025	11/12/07	11/13/07
Toluene	EPA 8021B	**1.2**	mg/Kg	0.0050	5	0.025	11/12/07	11/13/07
Total Xylenes	EPA 8021B	**1.2**	mg/Kg	0.0050	5	0.025	11/12/07	11/13/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	6.25	31	12/11/07	12/11/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	6.25	31	12/11/07	12/11/07
Methyl-t-Butyl Ether	EPA 8260B	**260**	µg/Kg	5.0	6.25	31	12/11/07	12/11/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	6.25	31	12/11/07	12/11/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	6.25	310	12/11/07	12/11/07
Hydrocarbon Oil & Grease	SM 5520F	**11000**	mg/Kg	20	100	2000	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**0**	% Rec	-	800	N/A	11/15/07	11/20/07
Tetracosane	EPA 8015B	**0**	% Rec		800	N/A	11/15/07	11/20/07
Fluorobenzene	EPA 8021B	**130**	% Rec	-	5	N/A	11/12/07	11/13/07
Toluene-d8	EPA 8260B	**86**	% Rec		6.25	N/A	12/11/07	12/11/07

LUFT Comments

TPH as Jet Fuel	Lower boiling point hydrocarbons decreased relative to standard

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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Certificate of Analysis

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BSK Submission #: 2007110669
BSK Sample ID #: 917273

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-5-40
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 0915
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**1300**	mg/Kg	2	50	100	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**8.9**	mg/Kg	1.0	5	5.0	11/18/07	11/18/07
TPH as Gasoline (C6-C10)	EPA 8015B	**28**	mg/Kg	1.0	5	5.0	11/15/07	11/15/07
TPH as Jet Fuel	EPA 8015B	**1400**	mg/Kg	2	50	100	11/17/07	11/20/07
Benzene	EPA 8021B	**0.69**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Ethylbenzene	EPA 8021B	**0.50**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Toluene	EPA 8021B	**0.11**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Total Xylenes	EPA 8021B	**0.46**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1.25	6.2	12/11/07	12/11/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1.25	6.2	12/11/07	12/11/07
Methyl-t-Butyl Ether	EPA 8260B	**52**	µg/Kg	5.0	1.25	6.2	12/11/07	12/11/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1.25	6.2	12/11/07	12/11/07
tert-Butyl Alcohol	EPA 8260B	**69**	µg/Kg	50	1.25	62	12/11/07	12/11/07
Hydrocarbon Oil & Grease	SM 5520F	**2400**	mg/Kg	20	10	200	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**0**	% Rec	-	50	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**0**	% Rec		50	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**150**	% Rec	-	5	N/A	11/15/07	11/15/07
Toluene-d8	EPA 8260B	**95**	% Rec		1.25	N/A	12/11/07	12/11/07

LUFT Comments

TPH as Jet Fuel	Lower boiling point hydrocarbons decreased relative to standard

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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Certificate of Analysis

NELAP Certificate #04227CA
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BSK Submission #: 2007110669
BSK Sample ID #: 917274

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: SB-5-50
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 0932
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**1700**	mg/Kg	2	50	100	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**8.6**	mg/Kg	1.0	5	5.0	11/18/07	11/18/07
TPH as Gasoline (C6-C10)	EPA 8015B	**52**	mg/Kg	1.0	5	5.0	11/15/07	11/15/07
TPH as Jet Fuel	EPA 8015B	**1300**	mg/Kg	2	50	100	11/17/07	11/20/07
Benzene	EPA 8021B	**2.4**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Ethylbenzene	EPA 8021B	**1.2**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Toluene	EPA 8021B	**0.55**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Total Xylenes	EPA 8021B	**1.0**	mg/Kg	0.0050	5	0.025	11/15/07	11/15/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	2	10	12/11/07	12/11/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	2	10	12/11/07	12/11/07
Methyl-t-Butyl Ether	EPA 8260B	**81**	µg/Kg	5.0	2	10	12/11/07	12/11/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	2	10	12/11/07	12/11/07
tert-Butyl Alcohol	EPA 8260B	**130**	µg/Kg	50	2	100	12/11/07	12/11/07
Hydrocarbon Oil & Grease	SM 5520F	**3400**	mg/Kg	20	10	200	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**0**	% Rec	-	50	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**0**	% Rec		50	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**130**	% Rec	-	5	N/A	11/15/07	11/15/07
Toluene-d8	EPA 8260B	**96**	% Rec		2	N/A	12/11/07	12/11/07

LUFT Comments

TPH as Jet Fuel	Lower boiling point hydrocarbons decreased relative to standard

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917275

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: SB-5-60
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1011
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/15/07	11/15/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/15/07	11/15/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**7.1**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**120**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/12/07	11/12/07
Surrogate								
Tetracosane	EPA 8015B	**140**	% Rec	-	1	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**140**	% Rec		1	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**91**	% Rec	-	1	N/A	11/15/07	11/15/07
Toluene-d8	EPA 8260B	**97**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

BSK Analytical Laboratories
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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917276

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-6-10
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1109
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/15/07	11/15/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/15/07	11/15/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/13/07	11/13/07

Surrogate

Tetracosane	EPA 8015B	**63**	% Rec	-	1	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**63**	% Rec		1	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**56**	% Rec	-	1	N/A	11/15/07	11/15/07
Toluene-d8	EPA 8260B	**99**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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Certificate of Analysis

NELAP Certificate #04227CA
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BSK Submission #: 2007110669
BSK Sample ID #: 917277

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-6-20
Sample Comments:

Date Sampled: 11/05/2007
Time Sampled: 1120
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/12/07	11/12/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/20/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/12/07	11/12/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**6.6**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/13/07	11/13/07

Surrogate

Tetracosane	EPA 8015B	**96**	% Rec	-	1	N/A	11/17/07	11/20/07
Tetracosane	EPA 8015B	**96**	% Rec		1	N/A	11/17/07	11/20/07
Fluorobenzene	EPA 8021B	**95**	% Rec	-	1	N/A	11/12/07	11/12/07
Toluene-d8	EPA 8260B	**100**	% Rec		1	N/A	12/07/07	12/08/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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Certificate of Analysis

NELAP Certificate #04227CA
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BSK Submission #: 2007110669
BSK Sample ID #: 917278

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-6-30
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1130
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**1100**	mg/Kg	2	50	100	11/17/07	11/21/07
TPH as Gasoline	EPA 8015B	**67**	mg/Kg	1.0	50	50	11/18/07	11/18/07
TPH as Gasoline (C6-C10)	EPA 8015B	**380**	mg/Kg	1.0	50	50	11/15/07	11/15/07
TPH as Jet Fuel	EPA 8015B	**1100**	mg/Kg	2	50	100	11/17/07	11/21/07
Benzene	EPA 8021B	**1.4**	mg/Kg	0.0050	50	0.25	11/15/07	11/15/07
Ethylbenzene	EPA 8021B	**4.8**	mg/Kg	0.0050	50	0.25	11/15/07	11/15/07
Toluene	EPA 8021B	**1.2**	mg/Kg	0.0050	50	0.25	11/15/07	11/15/07
Total Xylenes	EPA 8021B	**21**	mg/Kg	0.0050	50	0.25	11/15/07	11/15/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	50	250	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	50	250	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	50	250	12/10/07	12/10/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	50	250	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	50	2500	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**2400**	mg/Kg	20	10	200	11/13/07	11/13/07

Surrogate

Tetracosane	EPA 8015B	**0**	% Rec	-	50	N/A	11/17/07	11/21/07
Tetracosane	EPA 8015B	**0**	% Rec		50	N/A	11/17/07	11/21/07
Fluorobenzene	EPA 8021B	**52**	% Rec	-	50	N/A	11/15/07	11/15/07
Toluene-d8	EPA 8260B	**98**	% Rec		50	N/A	12/10/07	12/10/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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BSK Submission #: 2007110669
BSK Sample ID #: 917279

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-7-10
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1249
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**82**	mg/Kg	2	10	20	11/17/07	11/21/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/15/07	11/15/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/15/07	11/15/07
TPH as Jet Fuel	EPA 8015B	**27**	mg/Kg	2	10	20	11/17/07	11/21/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/15/07	11/15/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/07/07	12/08/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/07/07	12/08/07
Hydrocarbon Oil & Grease	SM 5520F	**52**	mg/Kg	20	1	20	11/13/07	11/13/07
Surrogate								
Tetracosane	EPA 8015B	**1900**	% Rec	-	10	N/A	11/17/07	11/21/07
Tetracosane	EPA 8015B	**1900**	% Rec		10	N/A	11/17/07	11/21/07
Fluorobenzene	EPA 8021B	**50**	% Rec	-	1	N/A	11/15/07	11/15/07
Toluene-d8	EPA 8260B	**98**	% Rec		1	N/A	12/07/07	12/08/07

LUFT Comments

TPH as Jet Fuel	Lower boiling point hydrocarbons decreased relative to standard
Tetracosane	Fuel fingerprint interferes with surrogate quantitation

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917280

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-7-20
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1259
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/21/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Jet Fuel	EPA 8015B	**2.2**	mg/Kg	2	1	2.0	11/17/07	11/21/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/13/07	11/13/07

Surrogate

Tetracosane	EPA 8015B	**120**	% Rec	-	1	N/A	11/17/07	11/21/07
Tetracosane	EPA 8015B	**120**	% Rec		1	N/A	11/17/07	11/21/07
Fluorobenzene	EPA 8021B	**93**	% Rec	-	1	N/A	11/16/07	11/16/07
Toluene-d8	EPA 8260B	**97**	% Rec		1	N/A	12/10/07	12/10/07

LUFT Comments

TPH as Jet Fuel	Higher boiling point hydrocarbons decreased relative to standard

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

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BSK Submission #: 2007110669
BSK Sample ID #: 917281

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-7-30
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1317
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/21/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/21/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/13/07	11/13/07
Surrogate								
Tetracosane	EPA 8015B	**100**	% Rec	-	1	N/A	11/17/07	11/21/07
Tetracosane	EPA 8015B	**100**	% Rec		1	N/A	11/17/07	11/21/07
Fluorobenzene	EPA 8021B	**97**	% Rec	-	1	N/A	11/16/07	11/16/07
Toluene-d8	EPA 8260B	**99**	% Rec		1	N/A	12/10/07	12/10/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

BSK Analytical Laboratories
Engineers & Laboratories

1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

Amended Page

Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
BSK Associates - Geotechnical
567 W Shaw, Suite B
Fresno, CA 93704

BSK Submission #: 2007110669
BSK Sample ID #: 917282

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor

Submission Comments:
Sample Type: Solid
Sample Description: SB-7-40
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1342
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**58**	mg/Kg	2	1	2.0	11/17/07	11/21/07
TPH as Gasoline	EPA 8015B	**2.9**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Gasoline (C6-C10)	EPA 8015B	**4.7**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Jet Fuel	EPA 8015B	**39**	mg/Kg	2	1	2.0	11/17/07	11/21/07
Benzene	EPA 8021B	**0.21**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Ethylbenzene	EPA 8021B	**0.015**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Toluene	EPA 8021B	**0.057**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**ND**	µg/Kg	50	1	50	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**250**	mg/Kg	20	1	20	11/13/07	11/13/07
Surrogate								
Tetracosane	EPA 8015B	**0**	% Rec	-	1	N/A	11/17/07	11/21/07
Tetracosane	EPA 8015B	**0**	% Rec		1	N/A	11/17/07	11/21/07
Fluorobenzene	EPA 8021B	**93**	% Rec	-	1	N/A	11/16/07	11/16/07
Toluene-d8	EPA 8260B	**95**	% Rec		1	N/A	12/10/07	12/10/07

LUFT Comments

TPH as Jet Fuel	Lower boiling point hydrocarbons decreased relative to standard
Tetracosane	Fuel fingerprint interferes with surrogate quantitation

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

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Certificate of Analysis

NELAP Certificate #04227CA
ELAP Certificate #1180

Noelle Willbanks
BSK Associates - Geotechnical
567 W Shaw, Suite B
Fresno, CA 93704

BSK Submission #: 2007110669
BSK Sample ID #: 917283

Report Issue Date: 12/31/2007

Project ID: E0704901F
Project Desc: Alameda County Transportation Corridor
Submission Comments:
Sample Type: Solid
Sample Description: SB-7-50
Sample Comments:

Date Sampled: 11/07/2007
Time Sampled: 1359
Date Received: 11/08/2007

Organics

Analyte	Method	Result	Units	PQL	Dilution	DLR	Prep Date/Time	Analysis Date/Time
TPH as Diesel (C10-C28)	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/21/07
TPH as Gasoline	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Gasoline (C6-C10)	EPA 8015B	**ND**	mg/Kg	1.0	1	1.0	11/16/07	11/16/07
TPH as Jet Fuel	EPA 8015B	**ND**	mg/Kg	2	1	2.0	11/17/07	11/21/07
Benzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Ethylbenzene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Toluene	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Total Xylenes	EPA 8021B	**ND**	mg/Kg	0.0050	1	0.0050	11/16/07	11/16/07
Di-isopropyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Ethyl t-Butyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
Methyl-t-Butyl Ether	EPA 8260B	**170**	µg/Kg	5.0	5	25	12/11/07	12/11/07
t-Amyl Methyl Ether	EPA 8260B	**ND**	µg/Kg	5.0	1	5.0	12/10/07	12/10/07
tert-Butyl Alcohol	EPA 8260B	**130**	µg/Kg	50	1	50	12/10/07	12/10/07
Hydrocarbon Oil & Grease	SM 5520F	**ND**	mg/Kg	20	1	20	11/13/07	11/13/07

Surrogate

Tetracosane	EPA 8015B	**120**	% Rec	-	1	N/A	11/17/07	11/21/07
Tetracosane	EPA 8015B	**120**	% Rec		1	N/A	11/17/07	11/21/07
Fluorobenzene	EPA 8021B	**100**	% Rec	-	1	N/A	11/16/07	11/16/07
Toluene-d8	EPA 8260B	**97**	% Rec		1	N/A	12/10/07	12/10/07

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%Rec: Percent Recovered (surrogates)

PQL: Practical Quantitation Limit
DLR: Detection Limit for Reporting : PQL x Dilution
ND: None Detected at DLR
pCi/L: Picocurie per Liter

H: Analyzed outside of hold time
P: Preliminary result
S: Suspect result. See Case Narrative for comments.
E: Analysis performed by External laboratory. See External Laboratory Report attachments.

Report Authentication Code:

Total Petroleum Hydrocarbons as JP8

CCV1_JP8 500ppm -ows20511
Raw File: X:\GC5\2007116\GC5AZ07116.005.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 1
Dilution Factor: 1

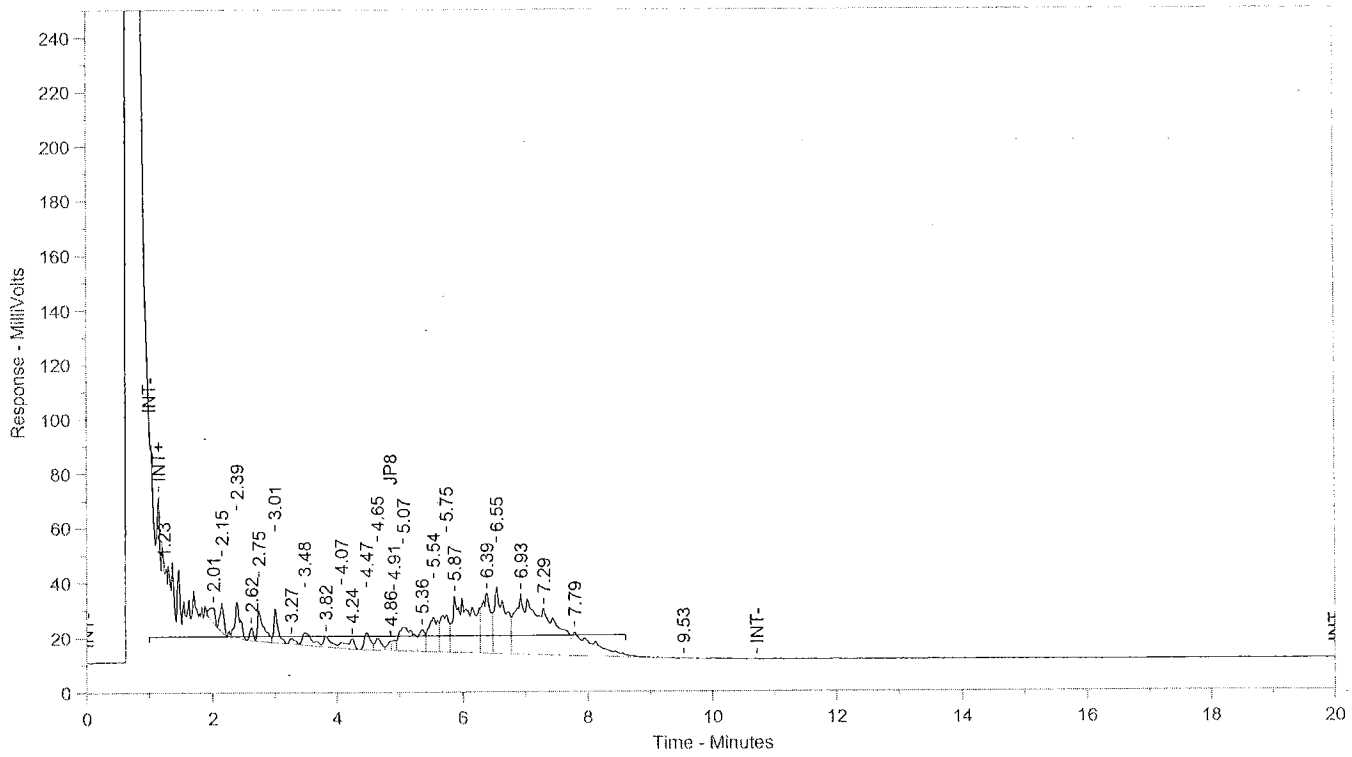
Analysis Date: 11/20/2007 15:11:47

Print Date: 12/21/2007 10:09:05

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 2,979,665

JP8 Amount = 451.51

Total Area=2,981,072

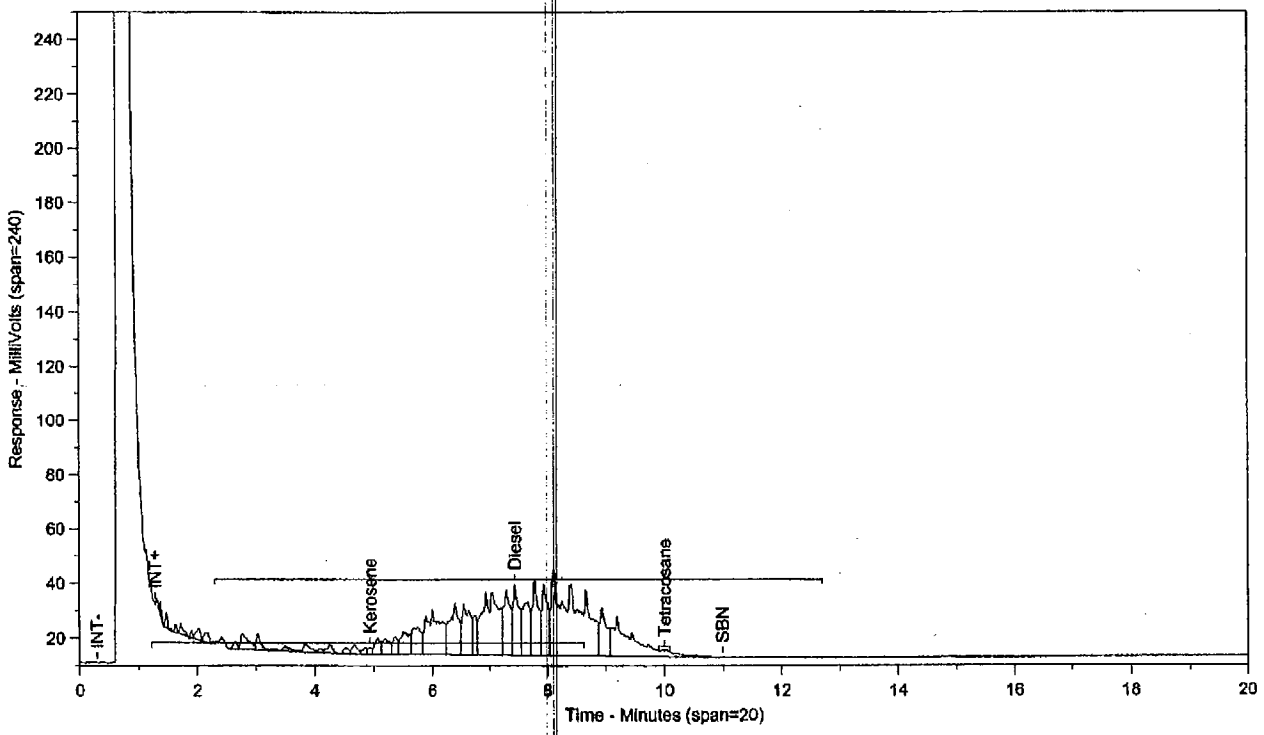
BSK Analytical Laboratories

EPA 8015B TPH-Diesel - GC 5

CCV1_Diesel 500ppm -ows20650
Sample Amount: 1
Dilution Factor: 1

Operator: MKK
Analysis Start: 11/20/2007 14:38:34

X:\GC5\2007116\GC5AZ07116.004.RAW
X:\GC5\2007116\DieselMid116.met
X:\GC5\2007116\DieselCurve116.cal
Detector: FID



Diesel Area= 3901065
Diesel Amount= 470.32 ppm

Kerosene Area= 3706192
Kerosene Amount= 176.93 ppm

Oil Area= ERR
Oil Amount= ERR ppm

Total Area= 4248124
Total Hydrocarbon Response=4248124

Total Petroleum Hydrocarbons as JP8

917266 : 1
Raw File: X:\GC5\2007116\GC5AZ07116.014.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 2

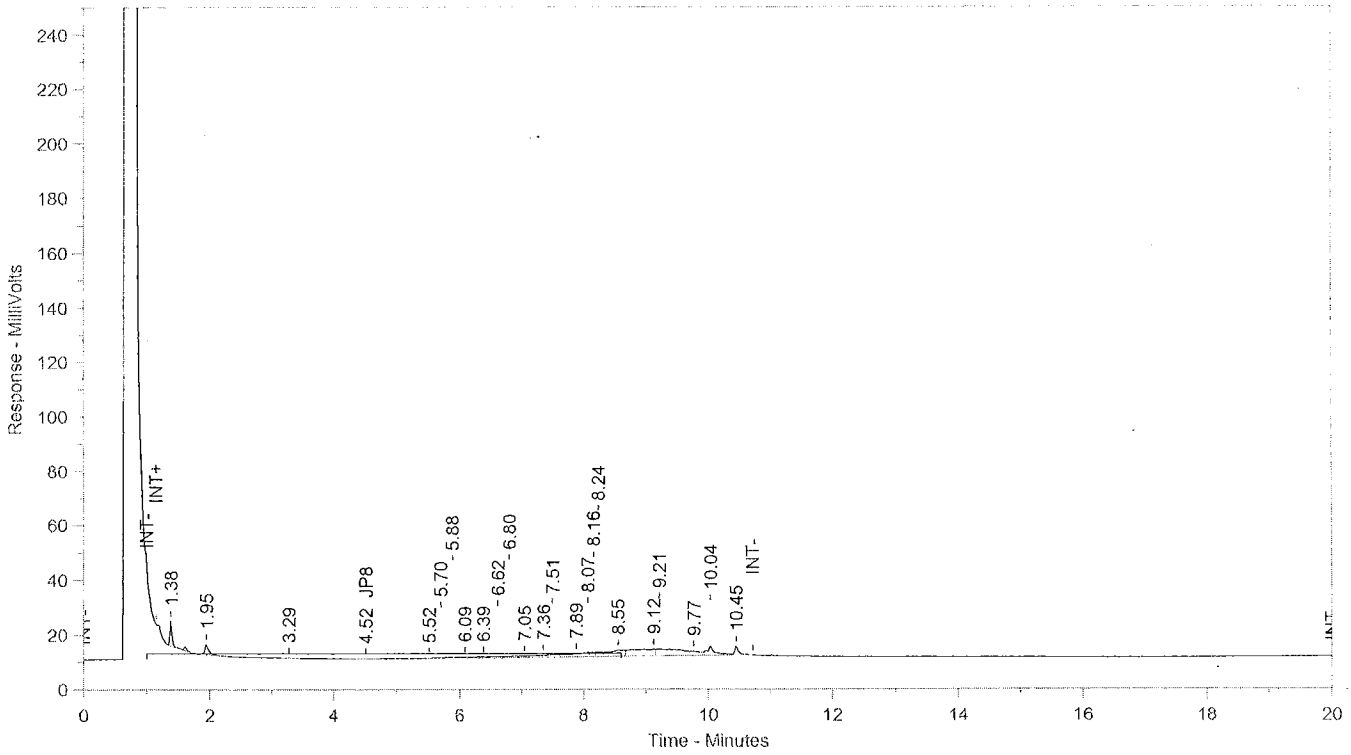
Analysis Date: 11/20/2007 20:13:09

Print Date: 12/21/2007 10:09:37

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 200,078

JP8 Amount = 1.52

Total Area=398,061

Total Petroleum Hydrocarbons as JP8

917271 : 1 df10
Raw File: X:\GC5\2007115\GC5AZ07115.047.RAW
Method File: X:\GC5\2007115\JP8115.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 20

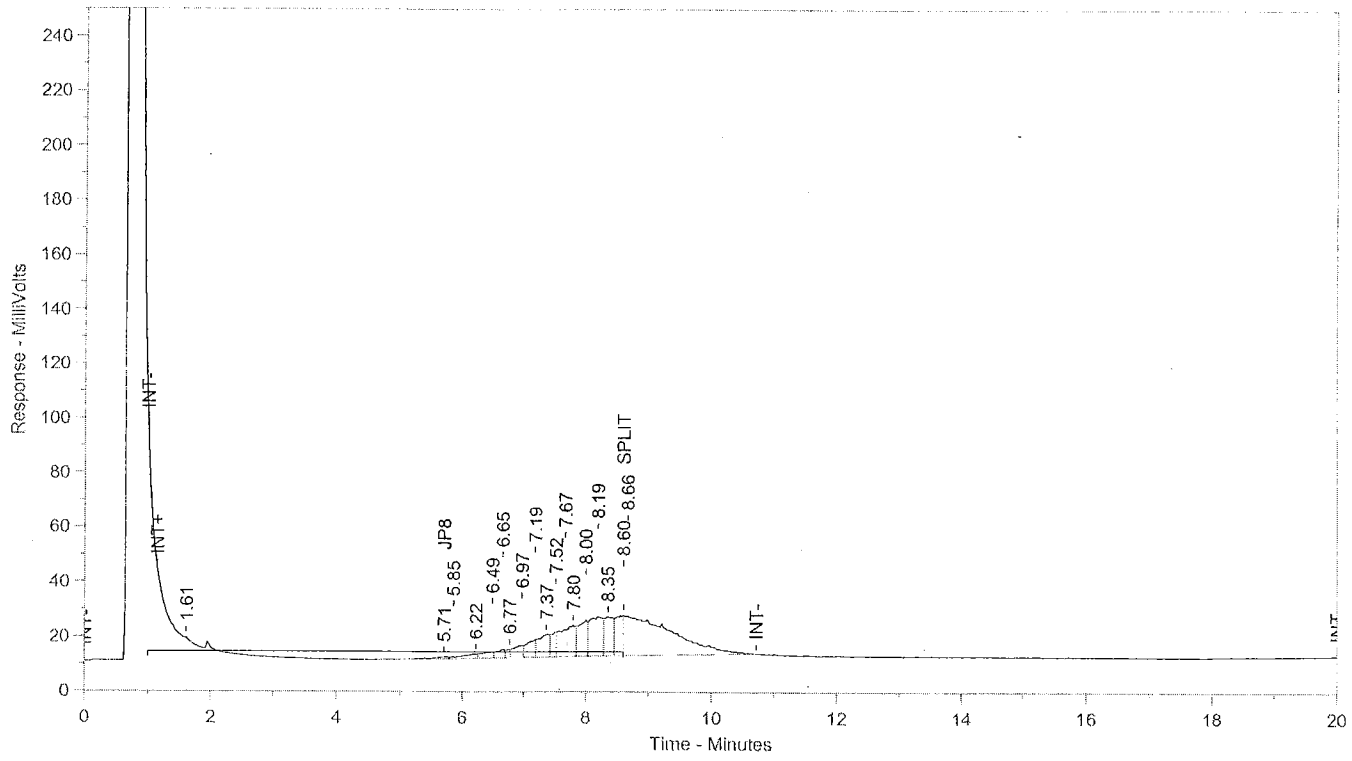
Analysis Date: 11/20/2007 10:03:27

Print Date: 12/21/2007 11:21:58

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 1,211,742

JP8 Amount = 91.81

Total Area=2,003,092

12.27.07

Total Petroleum Hydrocarbons as JP8

917272 : 1 df100
Raw File: X:\GC5\2007115\GC5AZ07115.048.RAW
Method File: X:\GC5\2007115\JP8115.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 10
Dilution Factor: 200

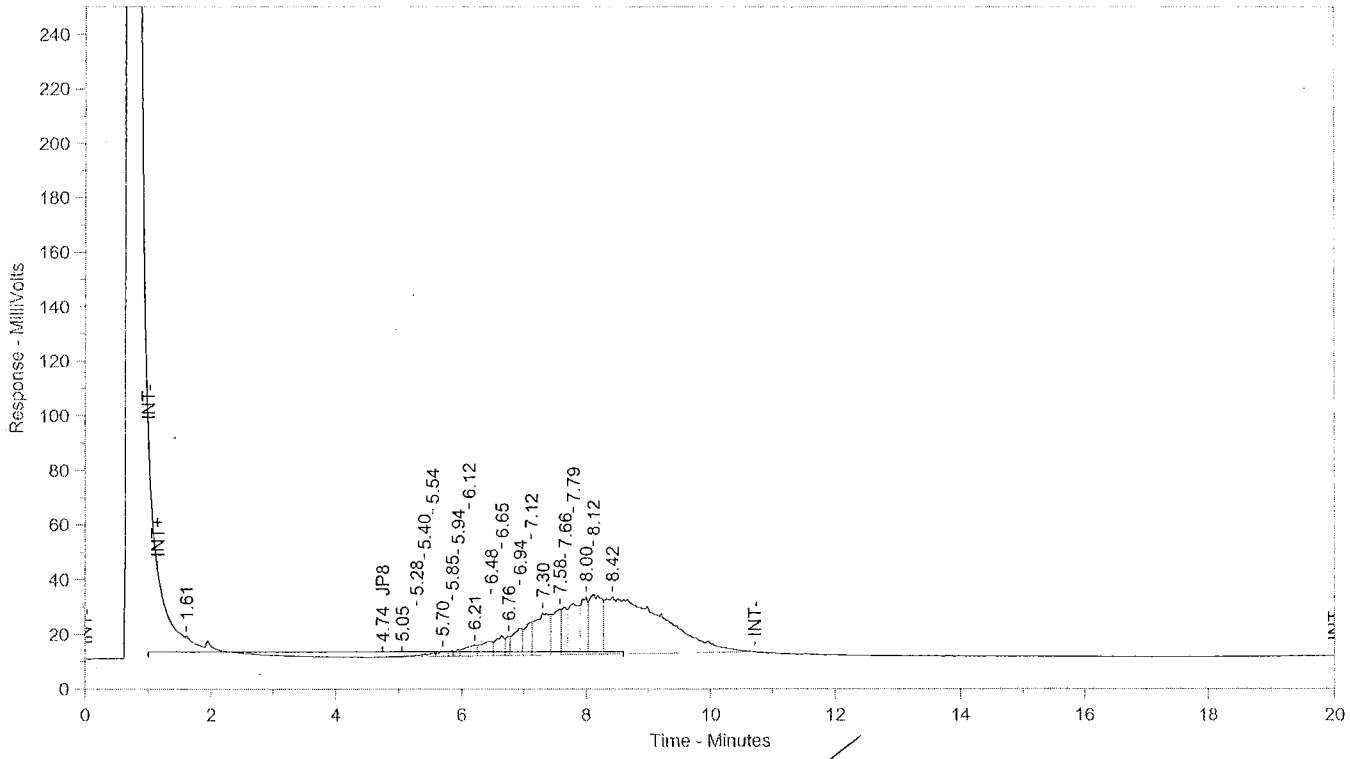
Analysis Date: 11/20/2007 10:37:09

Print Date: 12/21/2007 11:22:24

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 3,101,575

JP8 Amount = 9399.88

Total Area=3,101,575

Impact peak split
12.21.07

Total Petroleum Hydrocarbons as JP8

917273 : 1 df50
Raw File: X:\GC5\2007116\GC5AZ07116.015.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 100

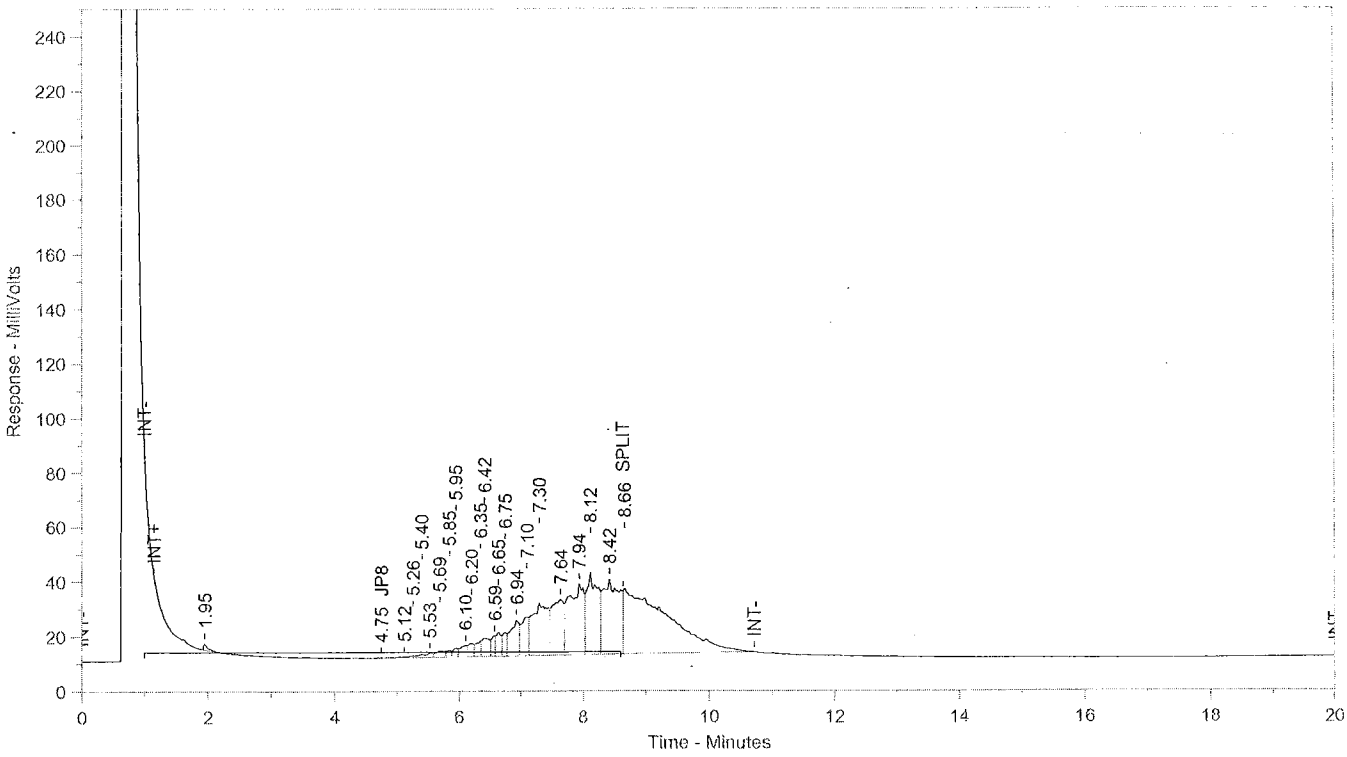
Analysis Date: 11/20/2007 20:46:49

Print Date: 12/21/2007 10:39:27

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 2,527,598

Total Area=3,695,001

JP8 Amount = 957.52

Insert panel split K 12/21/07

Total Petroleum Hydrocarbons as JP8

917274 : 1 df50
Raw File: X:\GC5\2007116\GC5AZ07116.016.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 100

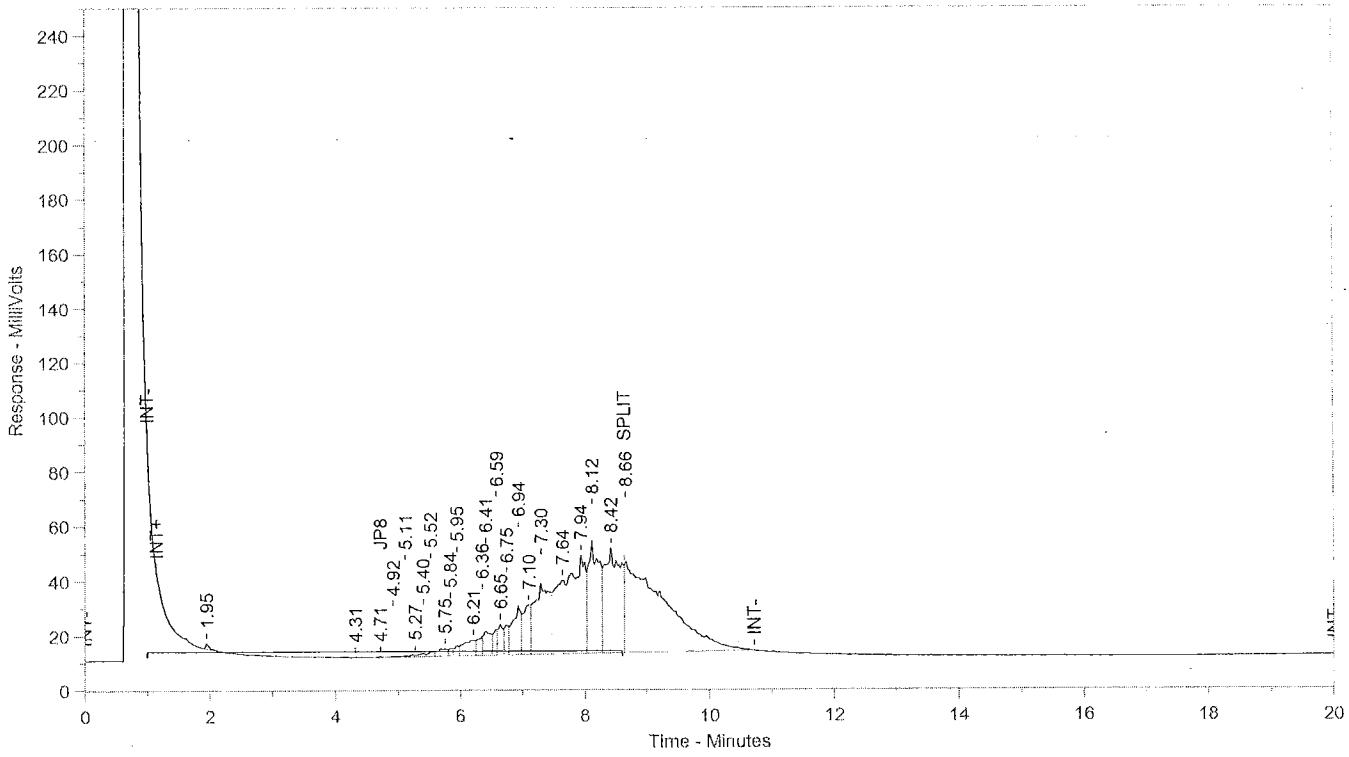
Analysis Date: 11/20/2007 21:20:40

Print Date: 12/21/2007 10:40:44

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 3,351,737

Total Area=4,866,431

JP8 Amount = 1269.73

Insert peak split F 12/21/07

Total Petroleum Hydrocarbons as JP8

917276 : 1
Raw File: X:\GC5\2007116\GC5AZ07116.018.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 2

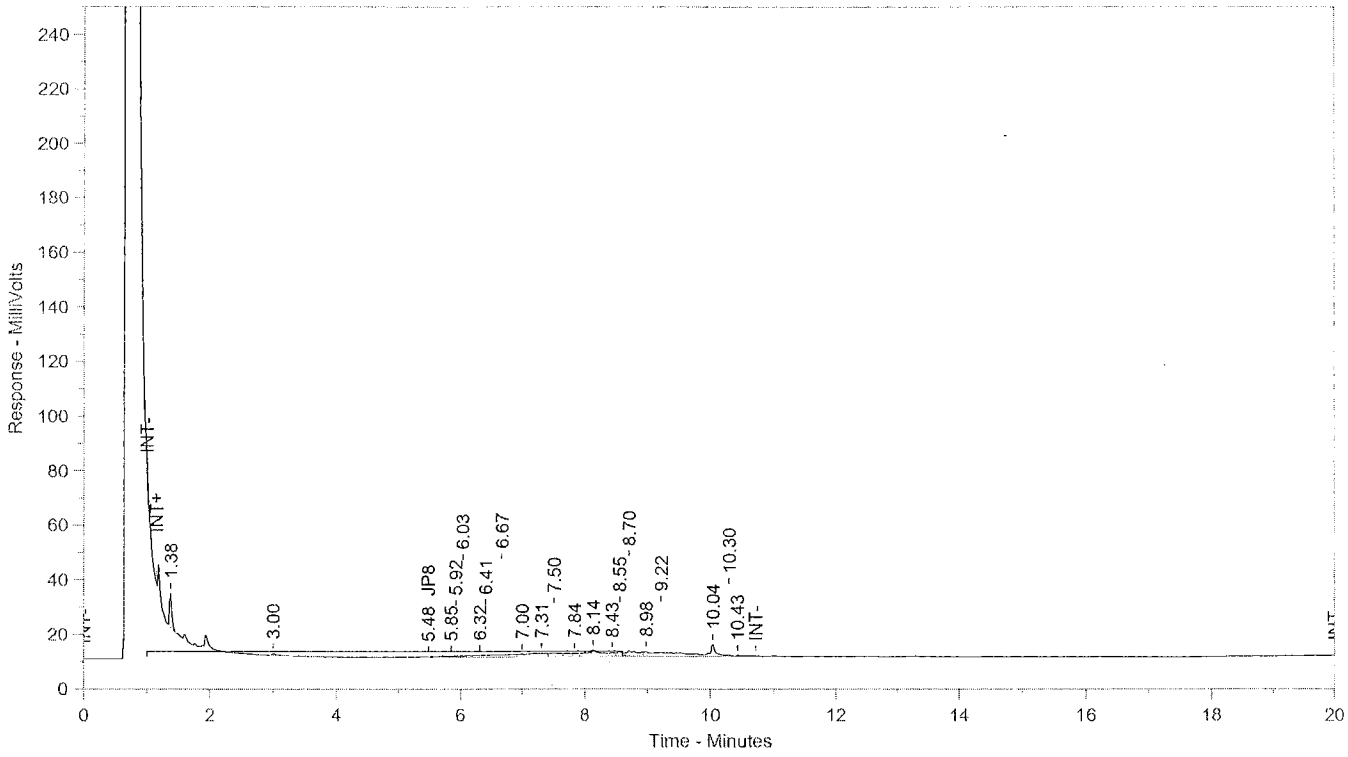
Analysis Date: 11/20/2007 22:27:28

Print Date: 12/21/2007 10:11:33

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 190,260

JP8 Amount = 1.44

Total Area=314,637

Total Petroleum Hydrocarbons as JP8

917278 : 1 df50
Raw File: X:\GC5\2007116\GC5AZ07116.024.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 100

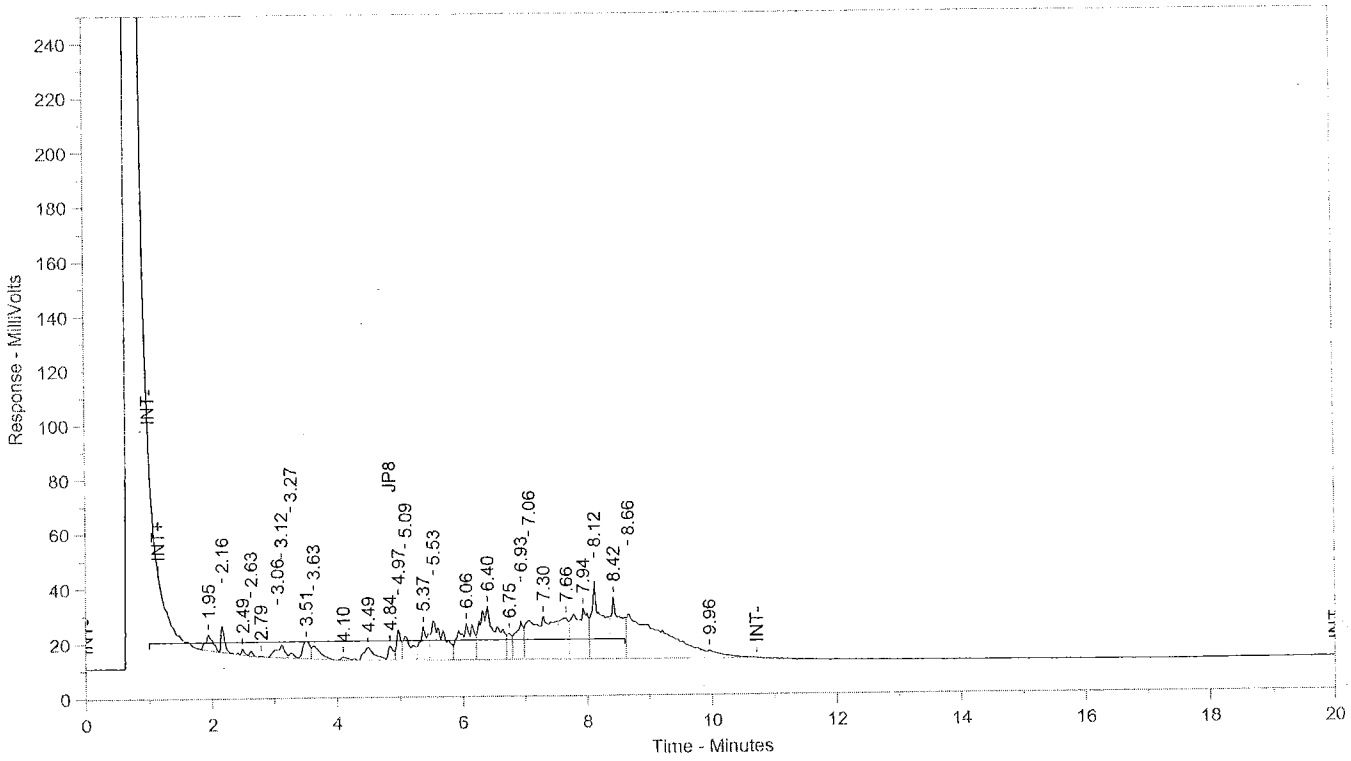
Analysis Date: 11/21/2007 01:47:39

Print Date: 12/21/2007 10:12:31

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 3,028,431

Total Area=3,750,943

JP8 Amount = 1147.25

Total Petroleum Hydrocarbons as JP8

917279 : 1
Raw File: X:\GC5\2007116\GC5AZ07116.030.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 20
Dilution Factor: 20

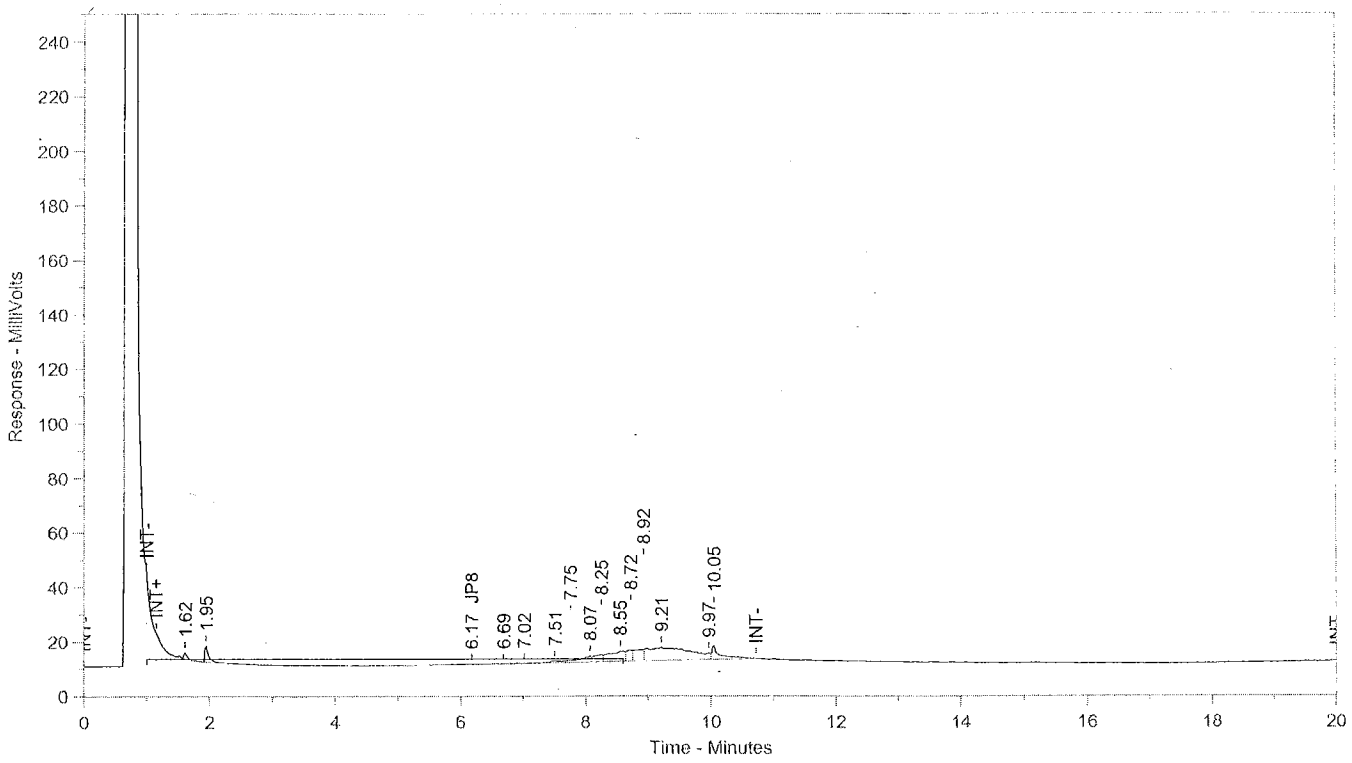
Analysis Date: 11/21/2007 10:14:37

Print Date: 12/21/2007 10:13:58

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 175,716

JP8 Amount = 26.63

Total Area=531,291

Total Petroleum Hydrocarbons as JP8

917280 : 1
Raw File: X:\GC5\2007116\GC5AZ07116.026.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 2

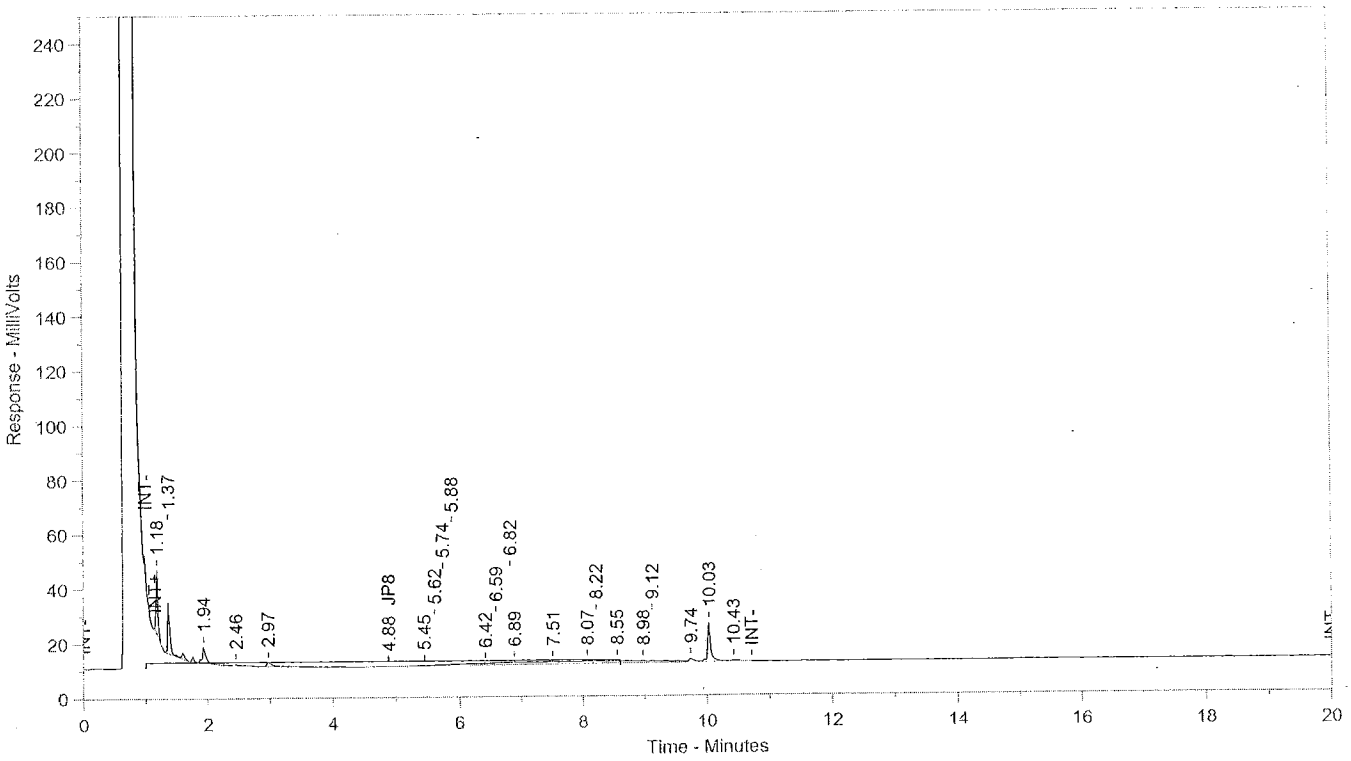
Analysis Date: 11/21/2007 02:54:44

Print Date: 12/21/2007 10:14:54

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 284,921

JP8 Amount = 2.16

Total Area=374,351

Total Petroleum Hydrocarbons as JP8

917282 : 1
Raw File: X:\GC5\2007116\GC5AZ07116.028.RAW
Method File: X:\GC5\2007116\JP8116.MET
Format File: X:\GC5\JP8.FMT

Sample Amount: 40
Dilution Factor: 2

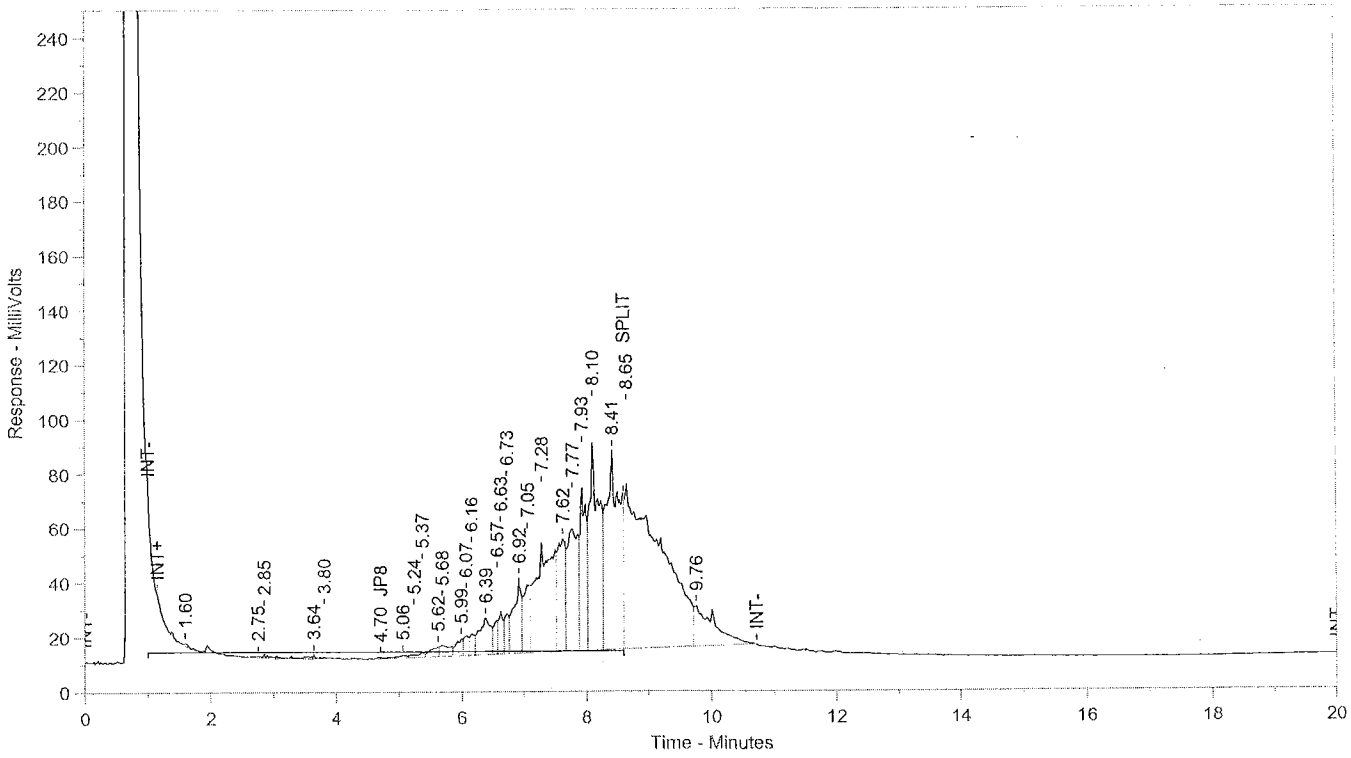
Analysis Date: 11/21/2007 09:07:47

Print Date: 12/21/2007 10:42:54

Operator: MKK
Instrument: Varian GC#5

Injector: 240C; 2.0 µl injected
Column: Rtx-1; 100% dimethylpolysiloxane;
30m length; 0.53mm ID; 0.25µm FT
Oven Profile: 60°C/4.5min@35°C/min-->
230°C/8.0min@20°C/min-->300°C/5.0min
Run Time: 25.85 min.
Detector: 365°C; FID

Range = 11
Attenuation = 8



JP8 Area= 5,130,420

Total Area=7,905,680

JP8 Amount = 38.87

Insert peak split
12.21.21

BSK Analytical Laboratories
Engineers & Laboratories

1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142487

Analyst Initials: **ANTONIOR**

Method Number: **5520F**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Hydrocarbon Oil & Grease	LCS	N/A	82	mg/Kg	81		100	ND	130	70	11/12/07	*Acceptable*
Hydrocarbon Oil & Grease	LCSD	N/A	81	mg/Kg	80	1.3	100	ND	130	70	11/12/07	*Acceptable*
Hydrocarbon Oil & Grease	MS	917256	78	mg/Kg	78		100	ND	130	70	11/12/07	*Acceptable*
Hydrocarbon Oil & Grease	MSD	917256	78	mg/Kg	78	0.0	100	ND	130	70	11/12/07	*Acceptable*
Hydrocarbon Oil & Grease	RBLK	N/A	ND	mg/Kg	< 20				20	N/A	11/12/07	*Acceptable*

StarLims Run 142487 includes the following BSK Sample ID# :

917256 917257 917258 917259 917260 917261 917262 917263 917264 917265 917922 917923 917924 917925 917926

BSK StarLims Run #: 142488

Analyst Initials: **ANTONIOR**

Method Number: **5520F**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Hydrocarbon Oil & Grease	LCS	N/A	77	mg/Kg	77		100	ND	130	70	11/12/07	*Acceptable*
Hydrocarbon Oil & Grease	LCSD	N/A	80	mg/Kg	79	3	100	ND	130	70	11/12/07	*Acceptable*
Hydrocarbon Oil & Grease	MS	917266	220	mg/Kg	124		100	93	130	70	11/12/07	*Acceptable*
Hydrocarbon Oil & Grease	MSD	917266	150	mg/Kg	56	36	100	93	130	70	11/12/07	*OOS-Low*
Hydrocarbon Oil & Grease	RBLK	N/A	ND	mg/Kg	< 20				20	N/A	11/12/07	*Acceptable*

Run	Test	Analyte	Comment
142488	5520F	HydroO_G	MSD recovery was affected by the matrix.

StarLims Run 142488 includes the following BSK Sample ID# :

917266 917267 917268 917269 917270 917271 917272 917273 917274 917275 917927 917928 917929 917930 917931

BSK StarLims Run #: 142544

Analyst Initials: **ANTONIOR**

Method Number: **5520F**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Hydrocarbon Oil & Grease	LCS	N/A	82	mg/Kg	81		100	ND	130	70	11/13/07	*Acceptable*
Hydrocarbon Oil & Grease	LCSD	N/A	81	mg/Kg	80	1.3	100	ND	130	70	11/13/07	*Acceptable*
Hydrocarbon Oil & Grease	MS	917277	82	mg/Kg	81		100	ND	130	70	11/13/07	*Acceptable*
Hydrocarbon Oil & Grease	MSD	917277	81	mg/Kg	80	1.3	100	ND	130	70	11/13/07	*Acceptable*
Hydrocarbon Oil & Grease	RBLK	N/A	ND	mg/Kg	< 20				20	N/A	11/13/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
Engineers & Laboratories
1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

QC Summary Report

12/31/2007

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142544
Analyst Initials: **ANTONIOR**
Method Number: **5520F**

StarLims Run 142544 includes the following BSK Sample ID# :

917276 917277 917278 917279 917280 917281 917282 917283 918235 918236 918237 918238 918239

BSK StarLims Run #: 142564
Analyst Initials: **KATIEH**
Method Number: **BTEX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Benzene	LCS	N/A	0.088	mg/Kg	88		0.1	ND	130	70	11/12/07	*Acceptable*
Ethylbenzene	LCS	N/A	0.089	mg/Kg	89		0.1	ND	130	70	11/12/07	*Acceptable*
Toluene	LCS	N/A	0.085	mg/Kg	85		0.1	ND	130	70	11/12/07	*Acceptable*
Total Xylenes	LCS	N/A	0.26	mg/Kg	87		0.3	ND	130	70	11/12/07	*Acceptable*
Benzene	LCSD	N/A	0.088	mg/Kg	88	0.0	0.1	ND	130	70	11/12/07	*Acceptable*
Ethylbenzene	LCSD	N/A	0.089	mg/Kg	89	0.0	0.1	ND	130	70	11/12/07	*Acceptable*
Toluene	LCSD	N/A	0.085	mg/Kg	85	0.0	0.1	ND	130	70	11/12/07	*Acceptable*
Total Xylenes	LCSD	N/A	0.26	mg/Kg	86	0.38	0.3	ND	130	70	11/12/07	*Acceptable*
Benzene	MS	917256	0.086	mg/Kg	86		0.1	ND	130	70	11/12/07	*Acceptable*
Ethylbenzene	MS	917256	0.085	mg/Kg	85		0.1	ND	130	70	11/12/07	*Acceptable*
Toluene	MS	917256	0.083	mg/Kg	83		0.1	ND	130	70	11/12/07	*Acceptable*
Total Xylenes	MS	917256	0.25	mg/Kg	83		0.3	ND	130	70	11/12/07	*Acceptable*
Benzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/12/07	*Acceptable*
Ethylbenzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/12/07	*Acceptable*
Toluene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/12/07	*Acceptable*
Total Xylenes	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/12/07	*Acceptable*
TPH as Gasoline (C6-C10)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/12/07	*Acceptable*

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Fluorobenzene	LCS	N/A	110	% Rec	110	130	70	11/12/07	*Acceptable*
Fluorobenzene	LCSD	N/A	120	% Rec	110	130	70	11/12/07	*Acceptable*
Fluorobenzene	MS	917256	110	% Rec	98	130	70	11/12/07	*Acceptable*
Fluorobenzene	RBLK	N/A	110	% Rec		N/A	N/A	11/12/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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(559) 497-2888
Fax (559) 485-6935

QC Summary Report

12/31/2007

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : **Alameda County Transportation Corridor**

StarLims Run 142564 includes the following BSK Sample ID# :

917256 917257 917258 917259 917260 917261 917262 917263 917264 917277 918381 918382 918383 920687

BSK StarLims Run #: 142565
Analyst Initials: **KATIEH**
Method Number: **BTEX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Benzene	LCS	N/A	0.087	mg/Kg	87		0.1	ND	130	70	11/13/07	*Acceptable*
Ethylbenzene	LCS	N/A	0.087	mg/Kg	87		0.1	ND	130	70	11/13/07	*Acceptable*
Toluene	LCS	N/A	0.084	mg/Kg	84		0.1	ND	130	70	11/13/07	*Acceptable*
Total Xylenes	LCS	N/A	0.26	mg/Kg	85		0.3	ND	130	70	11/13/07	*Acceptable*
Benzene	LCSD	N/A	0.086	mg/Kg	86	1.1	0.1	ND	130	70	11/13/07	*Acceptable*
Ethylbenzene	LCSD	N/A	0.087	mg/Kg	87	0.0	0.1	ND	130	70	11/13/07	*Acceptable*
Toluene	LCSD	N/A	0.084	mg/Kg	84	0.0	0.1	ND	130	70	11/13/07	*Acceptable*
Total Xylenes	LCSD	N/A	0.26	mg/Kg	85	0.38	0.3	ND	130	70	11/13/07	*Acceptable*
Benzene	MS	917265	0.084	mg/Kg	84		0.1	ND	130	70	11/13/07	*Acceptable*
Ethylbenzene	MS	917265	0.085	mg/Kg	85		0.1	ND	130	70	11/13/07	*Acceptable*
Toluene	MS	917265	0.083	mg/Kg	83		0.1	ND	130	70	11/13/07	*Acceptable*
Total Xylenes	MS	917265	0.25	mg/Kg	83		0.3	ND	130	70	11/13/07	*Acceptable*
Benzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07	*Acceptable*
Ethylbenzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07	*Acceptable*
Toluene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07	*Acceptable*
Total Xylenes	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07	*Acceptable*
TPH as Gasoline (C6-C10)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/13/07	*Acceptable*

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Fluorobenzene	LCS	N/A	110	% Rec	98	130	70	11/13/07	*Acceptable*
Fluorobenzene	LCSD	N/A	110	% Rec	98	130	70	11/13/07	*Acceptable*
Fluorobenzene	MS	917265	110	% Rec	88	130	70	11/13/07	*Acceptable*
Fluorobenzene	RBLK	N/A	98	% Rec		N/A	N/A	11/13/07	*Acceptable*

StarLims Run 142565 includes the following BSK Sample ID# :

917265 917266 917267 917268 917269 917270 917272 918385 918386 918387 920688

BSK StarLims Run #: 142714
Analyst Initials: **JENNIFERD**
Method Number: **BTEX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142714

Analyst Initials: **JENNIFERD** Method Number: **BTEX_SS**

Benzene	LCS	N/A	0.087	mg/Kg	87		0.1	ND	130	70	11/13/07 *Acceptable*
Ethylbenzene	LCS	N/A	0.089	mg/Kg	89		0.1	ND	130	70	11/13/07 *Acceptable*
Toluene	LCS	N/A	0.087	mg/Kg	87		0.1	ND	130	70	11/13/07 *Acceptable*
Total Xylenes	LCS	N/A	0.26	mg/Kg	87		0.3	ND	130	70	11/13/07 *Acceptable*
Benzene	LCSD	N/A	0.085	mg/Kg	85	2.3	0.1	ND	130	70	11/13/07 *Acceptable*
Ethylbenzene	LCSD	N/A	0.083	mg/Kg	83	7	0.1	ND	130	70	11/13/07 *Acceptable*
Toluene	LCSD	N/A	0.083	mg/Kg	83	4.8	0.1	ND	130	70	11/13/07 *Acceptable*
Total Xylenes	LCSD	N/A	0.25	mg/Kg	82	5.4	0.3	ND	130	70	11/13/07 *Acceptable*
Benzene	MS	917667	0.054	mg/Kg	54		0.1	ND	130	70	11/13/07 *OOS-Low*
Ethylbenzene	MS	917667	0.041	mg/Kg	41		0.1	ND	130	70	11/13/07 *OOS-Low*
Toluene	MS	917667	0.046	mg/Kg	46		0.1	ND	130	70	11/13/07 *OOS-Low*
Total Xylenes	MS	917667	0.12	mg/Kg	38		0.3	ND	130	70	11/13/07 *OOS-Low*
Benzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07 *Acceptable*
Ethylbenzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07 *Acceptable*
Toluene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07 *Acceptable*
Total Xylenes	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/13/07 *Acceptable*

Run	Test	Analyte	Comment
142714	BTEX_SS		MSD recovery was affected by the matrix.

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date
Fluorobenzene	LCS	N/A	110	% Rec	110	130	70	11/13/07 *Acceptable*
Fluorobenzene	LCSD	N/A	110	% Rec	110	130	70	11/13/07 *Acceptable*
Fluorobenzene	MS	917667	64	% Rec	62	130	70	11/13/07 *OOS-Low*
Fluorobenzene	RBLK	N/A	110	% Rec		N/A	N/A	11/13/07 *Acceptable*

StarLims Run 142714 includes the following BSK Sample ID# :

917271 917667 917668 917669 917671 917672 917674 917675 917676 919632 919633 919634 919635

BSK StarLims Run #: 142830

Analyst Initials: **KATIEH** Method Number: **BTEX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date
Benzene	LCS	N/A	0.087	mg/Kg	87		0.1	ND	130	70	11/15/07 *Acceptable*
Ethylbenzene	LCS	N/A	0.092	mg/Kg	92		0.1	ND	130	70	11/15/07 *Acceptable*
Toluene	LCS	N/A	0.091	mg/Kg	91		0.1	ND	130	70	11/15/07 *Acceptable*
Total Xylenes	LCS	N/A	0.27	mg/Kg	91		0.3	ND	130	70	11/15/07 *Acceptable*
Benzene	LCSD	N/A	0.089	mg/Kg	89	2.2	0.1	ND	130	70	11/15/07 *Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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QC Summary Report

12/31/2007

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142830

Analyst Initials: **KATIEH**

Method Number: **BTEX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Ethylbenzene	LCSD	N/A	0.096	mg/Kg	96	4.2	0.1	ND	130	70	11/15/07	*Acceptable*
Toluene	LCSD	N/A	0.095	mg/Kg	95	4.3	0.1	ND	130	70	11/15/07	*Acceptable*
Total Xylenes	LCSD	N/A	0.29	mg/Kg	95	4.7	0.3	ND	130	70	11/15/07	*Acceptable*
Benzene	MS	917275	0.088	mg/Kg	88		0.1	ND	130	70	11/15/07	*Acceptable*
Ethylbenzene	MS	917275	0.088	mg/Kg	88		0.1	ND	130	70	11/15/07	*Acceptable*
Toluene	MS	917275	0.085	mg/Kg	85		0.1	ND	130	70	11/15/07	*Acceptable*
Total Xylenes	MS	917275	0.26	mg/Kg	85		0.3	ND	130	70	11/15/07	*Acceptable*
Benzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/15/07	*Acceptable*
Ethylbenzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/15/07	*Acceptable*
Toluene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/15/07	*Acceptable*
Total Xylenes	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/15/07	*Acceptable*
TPH as Gasoline (C6-C10)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/15/07	*Acceptable*

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Fluorobenzene	LCS	N/A	91	% Rec	94	130	70	11/15/07	*Acceptable*
Fluorobenzene	LCSD	N/A	93	% Rec	94	130	70	11/15/07	*Acceptable*
Fluorobenzene	MS	917275	89	% Rec	91	130	70	11/15/07	*Acceptable*
Fluorobenzene	RBLK	N/A	94	% Rec		N/A	N/A	11/15/07	*Acceptable*

StarLims Run 142830 includes the following BSK Sample ID# :

917273 917274 917275 917276 917278 917279 918775 918776 920531 920532 920533 920689

BSK StarLims Run #: 142835

Analyst Initials: **KATIEH**

Method Number: **BTEX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Benzene	LCS	N/A	0.087	mg/Kg	87		0.1	ND	130	70	11/16/07	*Acceptable*
Ethylbenzene	LCS	N/A	0.093	mg/Kg	93		0.1	ND	130	70	11/16/07	*Acceptable*
Toluene	LCS	N/A	0.089	mg/Kg	89		0.1	ND	130	70	11/16/07	*Acceptable*
Total Xylenes	LCS	N/A	0.28	mg/Kg	92		0.3	ND	130	70	11/16/07	*Acceptable*
Benzene	LCSD	N/A	0.086	mg/Kg	86	1.1	0.1	ND	130	70	11/16/07	*Acceptable*
Ethylbenzene	LCSD	N/A	0.090	mg/Kg	90	3.2	0.1	ND	130	70	11/16/07	*Acceptable*
Toluene	LCSD	N/A	0.087	mg/Kg	87	2.2	0.1	ND	130	70	11/16/07	*Acceptable*
Total Xylenes	LCSD	N/A	0.27	mg/Kg	89	4	0.3	ND	130	70	11/16/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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Fresno, California 93706
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QC Summary Report

12/31/2007

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142835

Analyst Initials: **KATIEH**

Method Number: **AVGAS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Aviation Gas	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/16/07	*Acceptable*
Benzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/16/07	*Acceptable*
Ethylbenzene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/16/07	*Acceptable*
Toluene	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/16/07	*Acceptable*
Total Xylenes	RBLK	N/A	ND	mg/Kg	< 0.0050				0.0050	N/A	11/16/07	*Acceptable*
TPH as Gasoline (C6-C10)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/16/07	*Acceptable*

Surrogate Results

Analyte	QC Type		Surr. Result				UCL	LCL	Date	
Fluorobenzene	LCS	N/A	120	% Rec		110	130	70	11/16/07	*Acceptable*
Fluorobenzene	LCSD	N/A	110	% Rec		110	130	70	11/16/07	*Acceptable*
Fluorobenzene	MS	919426	100	% Rec		96			11/16/07	
Fluorobenzene	RBLK	N/A	110	% Rec			N/A	N/A	11/16/07	*Acceptable*

StarLims Run 142835 includes the following BSK Sample ID# :

917280 917281 917282 917283 919426 919430 919436 919439 920043 920047 920563 920564 920565 920671

BSK StarLims Run #: 142917

Analyst Initials: **MICHAELK**

Method Number: **TPHD_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
TPH as Diesel (C10-C28)	LCS	N/A	22	mg/Kg	87		25	ND	189	45	11/19/07	*Acceptable*
TPH as Jet Fuel	LCS	N/A	14	mg/Kg	58		25	ND	189	45	11/19/07	*Acceptable*
TPH as Diesel (C10-C28)	LCSD	N/A	25	mg/Kg	100	13	25	ND	189	45	11/19/07	*Acceptable*
TPH as Jet Fuel	LCSD	N/A	11	mg/Kg	44	26	25	ND	189	45	11/19/07	*OOS-Low*
TPH as Diesel (C10-C28)	MS	918775	23	mg/Kg	92		25	ND	189	45	11/19/07	*Acceptable*
TPH as Diesel (C10-C28)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/19/07	*Acceptable*
TPH as Jet Fuel	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/19/07	*Acceptable*

Run	Test	Analyte	Comment
142917	TPHJ_SS	TPHJetFuel	LCSD recovery was out of the acceptance range, however the LCS recovery was within the acceptance range, therefore the data were reported.

Surrogate Results

Analyte	QC Type		Surr. Result				UCL	LCL	Date	
Tetracosane	LCS	N/A	130	% Rec		100	189	45	11/19/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
Engineers & Laboratories
1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142917

Analyst Initials: **MICHAELK**

Method Number: **TPHD_SS**

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Tetracosane	LCSD	N/A	160	% Rec	100	189	45	11/19/07	*Acceptable*
Tetracosane	MS	918775	140	% Rec	140	189	45	11/19/07	*Acceptable*
Tetracosane	RBLK	N/A	100	% Rec		N/A	N/A	11/19/07	*Acceptable*

StarLims Run 142917 includes the following BSK Sample ID# :

917256 917257 917258 917259 917260 917261 917262 917263 918775 918776 920784 920785 920786 920787

BSK StarLims Run #: 142933

Analyst Initials: **MICHAELK**

Method Number: **TPHD_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
TPH as Diesel (C10-C28)	LCS	N/A	23	mg/Kg	91		25	ND	189	45	11/20/07	*Acceptable*
TPH as Diesel (C10-C28)	LCSD	N/A	24	mg/Kg	97	6	25	ND	189	45	11/20/07	*Acceptable*
TPH as Diesel (C10-C28)	MS	917267	24	mg/Kg	95		25	ND	189	45	11/20/07	*Acceptable*
TPH as Diesel (C10-C28)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/20/07	*Acceptable*
TPH as Jet Fuel	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/20/07	*Acceptable*

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Tetracosane	LCS	N/A	130	% Rec	96	189	45	11/20/07	*Acceptable*
Tetracosane	LCSD	N/A	140	% Rec	96	189	45	11/20/07	*Acceptable*
Tetracosane	MS	917267	130	% Rec	94	189	45	11/20/07	*Acceptable*
Tetracosane	RBLK	N/A	96	% Rec		N/A	N/A	11/20/07	*Acceptable*

StarLims Run 142933 includes the following BSK Sample ID# :

917267 917268 917269 917270 917271 917272 919426 919430 919436 919439 920864 920865 920866 920867

BSK StarLims Run #: 142951

Analyst Initials: **MARGARETS**

Method Number: **SB_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Antimony (Sb)	LCS	N/A	22	mg/Kg	86		25	ND	125	75	11/19/07	*Acceptable*
Arsenic (As)	LCS	N/A	18	mg/Kg	87		20	ND	125	75	11/19/07	*Acceptable*
Barium (Ba)	LCS	N/A	89	mg/Kg	88		100	ND	125	75	11/19/07	*Acceptable*
Beryllium (Be)	LCS	N/A	23	mg/Kg	93		25	ND	125	75	11/19/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
Engineers & Laboratories
1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142951

Analyst Initials: **MARGARETS**

Method Number: **CD_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Cadmium (Cd)	LCS	N/A	23	mg/Kg	90		25	ND	125	75	11/19/07	*Acceptable*
Chromium - Total (Cr)	LCS	N/A	87	mg/Kg	86		100	ND	125	75	11/19/07	*Acceptable*
Cobalt (Co)	LCS	N/A	87	mg/Kg	87		100	ND	125	75	11/19/07	*Acceptable*
Copper (Cu)	LCS	N/A	91	mg/Kg	91		100	ND	125	75	11/19/07	*Acceptable*
Lead (Pb)	LCS	N/A	180	mg/Kg	90		200	ND	125	75	11/19/07	*Acceptable*
Mercury (Hg)	LCS	N/A	1.8	mg/Kg	88		2	ND	125	75	11/19/07	*Acceptable*
Molybdenum (Mo)	LCS	N/A	92	mg/Kg	92		100	ND	125	75	11/19/07	*Acceptable*
Nickel (Ni)	LCS	N/A	88	mg/Kg	87		100	ND	125	75	11/19/07	*Acceptable*
Selenium (Se) - Total	LCS	N/A	17	mg/Kg	87		20	ND	125	75	11/19/07	*Acceptable*
Silver (Ag)	LCS	N/A	42	mg/Kg	83		50	ND	125	75	11/19/07	*Acceptable*
Thallium (Tl)	LCS	N/A	43	mg/Kg	86		50	ND	125	75	11/19/07	*Acceptable*
Vanadium (V)	LCS	N/A	87	mg/Kg	87		100	ND	125	75	11/19/07	*Acceptable*
Zinc (Zn)	LCS	N/A	92	mg/Kg	92		100	ND	125	75	11/19/07	*Acceptable*
Antimony (Sb)	LCSD	N/A	20	mg/Kg	79	9	25	ND	125	75	11/19/07	*Acceptable*
Arsenic (As)	LCSD	N/A	16	mg/Kg	79	9.7	20	ND	125	75	11/19/07	*Acceptable*
Barium (Ba)	LCSD	N/A	82	mg/Kg	81	8	100	ND	125	75	11/19/07	*Acceptable*
Beryllium (Be)	LCSD	N/A	21	mg/Kg	84	9.7	25	ND	125	75	11/19/07	*Acceptable*
Cadmium (Cd)	LCSD	N/A	21	mg/Kg	82	8.9	25	ND	125	75	11/19/07	*Acceptable*
Chromium - Total (Cr)	LCSD	N/A	80	mg/Kg	79	8.1	100	ND	125	75	11/19/07	*Acceptable*
Cobalt (Co)	LCSD	N/A	79	mg/Kg	79	9.2	100	ND	125	75	11/19/07	*Acceptable*
Copper (Cu)	LCSD	N/A	84	mg/Kg	84	7.7	100	ND	125	75	11/19/07	*Acceptable*
Lead (Pb)	LCSD	N/A	170	mg/Kg	85	5.8	200	ND	125	75	11/19/07	*Acceptable*
Mercury (Hg)	LCSD	N/A	1.6	mg/Kg	80	9.6	2	ND	125	75	11/19/07	*Acceptable*
Molybdenum (Mo)	LCSD	N/A	86	mg/Kg	86	6	100	ND	125	75	11/19/07	*Acceptable*
Nickel (Ni)	LCSD	N/A	81	mg/Kg	81	8	100	ND	125	75	11/19/07	*Acceptable*
Selenium (Se) - Total	LCSD	N/A	16	mg/Kg	79	9	20	ND	125	75	11/19/07	*Acceptable*
Silver (Ag)	LCSD	N/A	38	mg/Kg	75	10	50	ND	125	75	11/19/07	*Acceptable*
Thallium (Tl)	LCSD	N/A	40	mg/Kg	79	7.6	50	ND	125	75	11/19/07	*Acceptable*
Vanadium (V)	LCSD	N/A	82	mg/Kg	81	6.3	100	ND	125	75	11/19/07	*Acceptable*
Zinc (Zn)	LCSD	N/A	82	mg/Kg	82	11	100	ND	125	75	11/19/07	*Acceptable*
Antimony (Sb)	MS	920631	ND	mg/Kg	34		25	ND	125	75	11/19/07	*OOS-Low*
Arsenic (As)	MS	920631	23	mg/Kg	85		20	5.7	125	75	11/19/07	*Acceptable*
Barium (Ba)	MS	920631	340	mg/Kg	120		100	220	125	75	11/19/07	*Acceptable*
Beryllium (Be)	MS	920631	26	mg/Kg	105		25	ND	125	75	11/19/07	*Acceptable*
Cadmium (Cd)	MS	920631	26	mg/Kg	99		25	ND	125	75	11/19/07	*Acceptable*
Chromium - Total (Cr)	MS	920631	110	mg/Kg	96		100	12	125	75	11/19/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
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LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
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MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
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Fax (559) 485-6935

ACCREDITED IN ACCORDANCE WITH nelac

QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142951

Analyst Initials: **MARGARETS**

Method Number: **CO_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Cobalt (Co)	MS	920631	97	mg/Kg	93		100	ND	125	75	11/19/07	*Acceptable*
Copper (Cu)	MS	920631	120	mg/Kg	103		100	13	125	75	11/19/07	*Acceptable*
Lead (Pb)	MS	920631	200	mg/Kg	100		200	ND	125	75	11/19/07	*Acceptable*
Mercury (Hg)	MS	920631	2.0	mg/Kg	99		2	ND	125	75	11/19/07	*Acceptable*
Molybdenum (Mo)	MS	920631	100	mg/Kg	98		100	ND	125	75	11/19/07	*Acceptable*
Nickel (Ni)	MS	920631	110	mg/Kg	91		100	17	125	75	11/19/07	*Acceptable*
Selenium (Se) - Total	MS	920631	19	mg/Kg	93		20	ND	125	75	11/19/07	*Acceptable*
Silver (Ag)	MS	920631	43	mg/Kg	86		50	ND	125	75	11/19/07	*Acceptable*
Thallium (Tl)	MS	920631	47	mg/Kg	94		50	ND	125	75	11/19/07	*Acceptable*
Vanadium (V)	MS	920631	120	mg/Kg	100		100	19	125	75	11/19/07	*Acceptable*
Zinc (Zn)	MS	920631	140	mg/Kg	86		100	50	125	75	11/19/07	*Acceptable*
Antimony (Sb)	MSD	920631	ND	mg/Kg	26	26	25	ND	125	75	11/19/07	*OOS-Low*
Arsenic (As)	MSD	920631	22	mg/Kg	81	3.3	20	5.7	125	75	11/19/07	*Acceptable*
Barium (Ba)	MSD	920631	300	mg/Kg	74	14	100	220	125	75	11/19/07	*OOS-Low*
Beryllium (Be)	MSD	920631	24	mg/Kg	96	8.3	25	ND	125	75	11/19/07	*Acceptable*
Cadmium (Cd)	MSD	920631	24	mg/Kg	93	6.2	25	ND	125	75	11/19/07	*Acceptable*
Chromium - Total (Cr)	MSD	920631	100	mg/Kg	89	6.6	100	12	125	75	11/19/07	*Acceptable*
Cobalt (Co)	MSD	920631	89	mg/Kg	86	8.3	100	ND	125	75	11/19/07	*Acceptable*
Copper (Cu)	MSD	920631	100	mg/Kg	89	12	100	13	125	75	11/19/07	*Acceptable*
Lead (Pb)	MSD	920631	190	mg/Kg	92	8.1	200	ND	125	75	11/19/07	*Acceptable*
Mercury (Hg)	MSD	920631	1.9	mg/Kg	92	7.6	2	ND	125	75	11/19/07	*Acceptable*
Molybdenum (Mo)	MSD	920631	94	mg/Kg	90	7.7	100	ND	125	75	11/19/07	*Acceptable*
Nickel (Ni)	MSD	920631	100	mg/Kg	87	4.1	100	17	125	75	11/19/07	*Acceptable*
Selenium (Se) - Total	MSD	920631	17	mg/Kg	82	11	20	ND	125	75	11/19/07	*Acceptable*
Silver (Ag)	MSD	920631	41	mg/Kg	82	4.6	50	ND	125	75	11/19/07	*Acceptable*
Thallium (Tl)	MSD	920631	43	mg/Kg	85	10	50	ND	125	75	11/19/07	*Acceptable*
Vanadium (V)	MSD	920631	110	mg/Kg	90	8.8	100	19	125	75	11/19/07	*Acceptable*
Zinc (Zn)	MSD	920631	130	mg/Kg	82	3	100	50	125	75	11/19/07	*Acceptable*
Antimony (Sb)	RBLK	N/A	ND	mg/Kg	< 10				10	N/A	11/19/07	*Acceptable*
Arsenic (As)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/19/07	*Acceptable*
Barium (Ba)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*
Beryllium (Be)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/19/07	*Acceptable*
Cadmium (Cd)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/19/07	*Acceptable*
Chromium - Total (Cr)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*
Cobalt (Co)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*
Copper (Cu)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
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LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142951

Analyst Initials: **MARGARETS**

Method Number: **PB_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Lead (Pb)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*
Mercury (Hg)	RBLK	N/A	ND	mg/Kg	< 0.10				0.10	N/A	11/19/07	*Acceptable*
Molybdenum (Mo)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*
Nickel (Ni)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*
Selenium (Se) - Total	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/19/07	*Acceptable*
Silver (Ag)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/19/07	*Acceptable*
Thallium (Tl)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/19/07	*Acceptable*
Vanadium (V)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/19/07	*Acceptable*
Zinc (Zn)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/19/07	*Acceptable*

Run	Test	Analyte	Comment
142951	SB_MS_35	Antimony	MS and MSD recoveries were affected by the matrix.
142951	BA_MS_35	Barium	MSD recovery was affected by the matrix.

StarLims Run 142951 includes the following BSK Sample ID# :

917254 917255 917505 917508 920631 920632 920633 921083 921084 921085 921086 921087

BSK StarLims Run #: 142952

Analyst Initials: **MARGARETS**

Method Number: **SB_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Antimony (Sb)	LCS	N/A	26	mg/Kg	104		25	ND	125	75	11/20/07	*Acceptable*
Arsenic (As)	LCS	N/A	21	mg/Kg	105		20	ND	125	75	11/20/07	*Acceptable*
Barium (Ba)	LCS	N/A	100	mg/Kg	103		100	ND	125	75	11/20/07	*Acceptable*
Beryllium (Be)	LCS	N/A	28	mg/Kg	110		25	ND	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	LCS	N/A	26	mg/Kg	103		25	ND	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	LCS	N/A	98	mg/Kg	97		100	ND	125	75	11/20/07	*Acceptable*
Cobalt (Co)	LCS	N/A	96	mg/Kg	96		100	ND	125	75	11/20/07	*Acceptable*
Copper (Cu)	LCS	N/A	100	mg/Kg	101		100	ND	125	75	11/20/07	*Acceptable*
Lead (Pb)	LCS	N/A	220	mg/Kg	111		200	ND	125	75	11/20/07	*Acceptable*
Mercury (Hg)	LCS	N/A	2.2	mg/Kg	110		2	ND	125	75	11/20/07	*Acceptable*
Molybdenum (Mo)	LCS	N/A	110	mg/Kg	106		100	ND	125	75	11/20/07	*Acceptable*
Nickel (Ni)	LCS	N/A	98	mg/Kg	97		100	ND	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	LCS	N/A	20	mg/Kg	101		20	ND	125	75	11/20/07	*Acceptable*
Silver (Ag)	LCS	N/A	48	mg/Kg	95		50	ND	125	75	11/20/07	*Acceptable*
Thallium (Tl)	LCS	N/A	54	mg/Kg	107		50	ND	125	75	11/20/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
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RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142952

Analyst Initials: **MARGARETS**

Method Number: **V_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Vanadium (V)	LCS	N/A	98	mg/Kg	97		100	ND	125	75	11/20/07	*Acceptable*
Zinc (Zn)	LCS	N/A	100	mg/Kg	104		100	ND	125	75	11/20/07	*Acceptable*
Antimony (Sb)	LCSD	N/A	24	mg/Kg	95	8.4	25	ND	125	75	11/20/07	*Acceptable*
Arsenic (As)	LCSD	N/A	19	mg/Kg	96	9.4	20	ND	125	75	11/20/07	*Acceptable*
Barium (Ba)	LCSD	N/A	91	mg/Kg	91	12	100	ND	125	75	11/20/07	*Acceptable*
Beryllium (Be)	LCSD	N/A	27	mg/Kg	107	3	25	ND	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	LCSD	N/A	23	mg/Kg	92	11	25	ND	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	LCSD	N/A	93	mg/Kg	92	5.1	100	ND	125	75	11/20/07	*Acceptable*
Cobalt (Co)	LCSD	N/A	93	mg/Kg	93	3.1	100	ND	125	75	11/20/07	*Acceptable*
Copper (Cu)	LCSD	N/A	95	mg/Kg	94	6.8	100	ND	125	75	11/20/07	*Acceptable*
Lead (Pb)	LCSD	N/A	200	mg/Kg	99	10	200	ND	125	75	11/20/07	*Acceptable*
Mercury (Hg)	LCSD	N/A	1.9	mg/Kg	96	13	2	ND	125	75	11/20/07	*Acceptable*
Molybdenum (Mo)	LCSD	N/A	100	mg/Kg	101	4.9	100	ND	125	75	11/20/07	*Acceptable*
Nickel (Ni)	LCSD	N/A	91	mg/Kg	90	7.3	100	ND	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	LCSD	N/A	19	mg/Kg	95	6.1	20	ND	125	75	11/20/07	*Acceptable*
Silver (Ag)	LCSD	N/A	43	mg/Kg	85	10	50	ND	125	75	11/20/07	*Acceptable*
Thallium (Tl)	LCSD	N/A	48	mg/Kg	95	11	50	ND	125	75	11/20/07	*Acceptable*
Vanadium (V)	LCSD	N/A	94	mg/Kg	93	4	100	ND	125	75	11/20/07	*Acceptable*
Zinc (Zn)	LCSD	N/A	97	mg/Kg	96	7.6	100	ND	125	75	11/20/07	*Acceptable*
Antimony (Sb)	MS	915965	14	mg/Kg	56		25	ND	125	75	11/20/07	*OOS-Low*
Arsenic (As)	MS	915965	22	mg/Kg	94		20	3.1	125	75	11/20/07	*Acceptable*
Barium (Ba)	MS	915965	680	mg/Kg	309		100	370	125	75	11/20/07	*OOS-High*
Beryllium (Be)	MS	915965	26	mg/Kg	101		25	ND	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	MS	915965	26	mg/Kg	96		25	1.9	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	MS	915965	100	mg/Kg	89		100	11	125	75	11/20/07	*Acceptable*
Cobalt (Co)	MS	915965	92	mg/Kg	88		100	ND	125	75	11/20/07	*Acceptable*
Copper (Cu)	MS	915965	120	mg/Kg	86		100	34	125	75	11/20/07	*Acceptable*
Lead (Pb)	MS	915965	200	mg/Kg	96		200	ND	125	75	11/20/07	*Acceptable*
Mercury (Hg)	MS	915965	2.0	mg/Kg	0.58		2	ND	125	75	11/20/07	*OOS-Low*
Molybdenum (Mo)	MS	915965	100	mg/Kg	94		100	10	125	75	11/20/07	*Acceptable*
Nickel (Ni)	MS	915965	110	mg/Kg	88		100	20	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	MS	915965	20	mg/Kg	91		20	1.3	125	75	11/20/07	*Acceptable*
Silver (Ag)	MS	915965	40	mg/Kg	79		50	ND	125	75	11/20/07	*Acceptable*
Thallium (Tl)	MS	915965	46	mg/Kg	91		50	ND	125	75	11/20/07	*Acceptable*
Vanadium (V)	MS	915965	120	mg/Kg	96		100	22	125	75	11/20/07	*Acceptable*
Zinc (Zn)	MS	915965	130	mg/Kg	93		100	34	125	75	11/20/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
Engineers & Laboratories
1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142952

Analyst Initials: **MARGARETS**

Method Number: **SB_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Antimony (Sb)	MSD	915965	12	mg/Kg	46	18	25	ND	125	75	11/20/07	*OOS-Low*
Arsenic (As)	MSD	915965	23	mg/Kg	99	4.4	20	3.1	125	75	11/20/07	*Acceptable*
Barium (Ba)	MSD	915965	710	mg/Kg	343	5	100	370	125	75	11/20/07	*OOS-High*
Beryllium (Be)	MSD	915965	27	mg/Kg	107	5.3	25	ND	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	MSD	915965	27	mg/Kg	100	4	25	1.9	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	MSD	915965	110	mg/Kg	96	6.9	100	11	125	75	11/20/07	*Acceptable*
Cobalt (Co)	MSD	915965	94	mg/Kg	90	2.1	100	ND	125	75	11/20/07	*Acceptable*
Copper (Cu)	MSD	915965	140	mg/Kg	106	15	100	34	125	75	11/20/07	*Acceptable*
Lead (Pb)	MSD	915965	200	mg/Kg	98	2	200	ND	125	75	11/20/07	*Acceptable*
Mercury (Hg)	MSD	915965	2.0	mg/Kg	0.57	3	2	ND	125	75	11/20/07	*OOS-Low*
Molybdenum (Mo)	MSD	915965	110	mg/Kg	101	6.6	100	10	125	75	11/20/07	*Acceptable*
Nickel (Ni)	MSD	915965	120	mg/Kg	95	6.2	100	20	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	MSD	915965	20	mg/Kg	93	2.1	20	1.3	125	75	11/20/07	*Acceptable*
Silver (Ag)	MSD	915965	40	mg/Kg	80	1	50	ND	125	75	11/20/07	*Acceptable*
Thallium (Tl)	MSD	915965	46	mg/Kg	92	1	50	ND	125	75	11/20/07	*Acceptable*
Vanadium (V)	MSD	915965	120	mg/Kg	100	3.3	100	22	125	75	11/20/07	*Acceptable*
Zinc (Zn)	MSD	915965	140	mg/Kg	103	7.6	100	34	125	75	11/20/07	*Acceptable*
Antimony (Sb)	RBLK	N/A	ND	mg/Kg	< 10				10	N/A	11/20/07	*Acceptable*
Arsenic (As)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Barium (Ba)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Beryllium (Be)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Cadmium (Cd)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Chromium - Total (Cr)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Cobalt (Co)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Copper (Cu)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Lead (Pb)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Mercury (Hg)	RBLK	N/A	ND	mg/Kg	< 0.10				0.10	N/A	11/20/07	*Acceptable*
Molybdenum (Mo)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Nickel (Ni)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Selenium (Se) - Total	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Silver (Ag)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/20/07	*Acceptable*
Thallium (Tl)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/20/07	*Acceptable*
Vanadium (V)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Zinc (Zn)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 142952

Analyst Initials: **MARGARETS**

Method Number: **ZN_MS_35**

Run	Test	Analyte	Comment
142952	BA_MS_35	Barium	MS and MSD recoveries were affected by the matrix.
142952	HG_MS_35	Mercury	MS and MSD recoveries were affected by the matrix.
142952	SB_MS_35	Antimony	MS and MSD recoveries were affected by the matrix.

StarLims Run 142952 includes the following BSK Sample ID# :

915965 917238 917239 917240 917241 917242 917243 921088 921089 921090 921091 921092

BSK StarLims Run #: 142991

Analyst Initials: **MICHAELK**

Method Number: **TPHD_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
TPH as Diesel (C10-C28)	LCS	N/A	23	mg/Kg	90		25	ND	189	45	11/20/07	*Acceptable*
TPH as Diesel (C10-C28)	LCSD	N/A	24	mg/Kg	97	7.3	25	ND	189	45	11/20/07	*Acceptable*
TPH as Diesel (C10-C28)	MS	917264	20	mg/Kg	80		25	ND	189	45	11/20/07	*Acceptable*
TPH as Diesel (C10-C28)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/20/07	*Acceptable*
	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/21/07	*Acceptable*
TPH as Jet Fuel	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/20/07	*Acceptable*
	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/21/07	*Acceptable*

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Tetracosane	LCS	N/A	140	% Rec	130	189	45	11/20/07	*Acceptable*
Tetracosane	LCSD	N/A	160	% Rec	130	189	45	11/20/07	*Acceptable*
Tetracosane	MS	917264	150	% Rec	120	189	45	11/20/07	*Acceptable*
Tetracosane	RBLK	N/A	130	% Rec		N/A	N/A	11/20/07	*Acceptable*
	RBLK	N/A	120	% Rec		N/A	N/A	11/21/07	*Acceptable*

StarLims Run 142991 includes the following BSK Sample ID# :

917264 917265 917266 917273 917274 917275 917276 917277 917278 917279 917280 917281 917282 917283 920043 920047
921332 921333 921334 921335 921336

BSK StarLims Run #: 143017

Analyst Initials: **MARGARETS**

Method Number: **AS_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Arsenic (As)	LCS	N/A	18	mg/Kg	90		20	ND	125	75	11/20/07	*Acceptable*

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RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 143017

Analyst Initials: **MARGARETS**

Method Number: **BA_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Barium (Ba)	LCS	N/A	88	mg/Kg	88		100	ND	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	LCS	N/A	22	mg/Kg	89		25	ND	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	LCS	N/A	86	mg/Kg	85		100	ND	125	75	11/20/07	*Acceptable*
Lead (Pb)	LCS	N/A	190	mg/Kg	95		200	ND	125	75	11/20/07	*Acceptable*
Mercury (Hg)	LCS	N/A	1.8	mg/Kg	91		2	ND	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	LCS	N/A	18	mg/Kg	89		20	ND	125	75	11/20/07	*Acceptable*
Silver (Ag)	LCS	N/A	42	mg/Kg	84		50	ND	125	75	11/20/07	*Acceptable*
Arsenic (As)	LCSD	N/A	17	mg/Kg	87	4.2	20	ND	125	75	11/20/07	*Acceptable*
Barium (Ba)	LCSD	N/A	88	mg/Kg	87	0.62	100	ND	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	LCSD	N/A	23	mg/Kg	90	1.9	25	ND	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	LCSD	N/A	85	mg/Kg	84	1.1	100	ND	125	75	11/20/07	*Acceptable*
Lead (Pb)	LCSD	N/A	180	mg/Kg	90	4.9	200	ND	125	75	11/20/07	*Acceptable*
Mercury (Hg)	LCSD	N/A	1.8	mg/Kg	90	1	2	ND	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	LCSD	N/A	17	mg/Kg	86	2.8	20	ND	125	75	11/20/07	*Acceptable*
Silver (Ag)	LCSD	N/A	41	mg/Kg	82	1.7	50	ND	125	75	11/20/07	*Acceptable*
Arsenic (As)	MS	917244	19	mg/Kg	82		20	2.6	125	75	11/20/07	*Acceptable*
Barium (Ba)	MS	917244	220	mg/Kg	107		100	110	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	MS	917244	24	mg/Kg	96		25	ND	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	MS	917244	120	mg/Kg	93		100	25	125	75	11/20/07	*Acceptable*
Lead (Pb)	MS	917244	220	mg/Kg	94		200	25	125	75	11/20/07	*Acceptable*
Mercury (Hg)	MS	917244	1.9	mg/Kg	89		2	ND	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	MS	917244	16	mg/Kg	75		20	ND	125	75	11/20/07	*Acceptable*
Silver (Ag)	MS	917244	42	mg/Kg	84		50	ND	125	75	11/20/07	*Acceptable*
Arsenic (As)	MSD	917244	18	mg/Kg	78	3.8	20	2.6	125	75	11/20/07	*Acceptable*
Barium (Ba)	MSD	917244	190	mg/Kg	79	13	100	110	125	75	11/20/07	*Acceptable*
Cadmium (Cd)	MSD	917244	23	mg/Kg	91	4.9	25	ND	125	75	11/20/07	*Acceptable*
Chromium - Total (Cr)	MSD	917244	110	mg/Kg	87	5.2	100	25	125	75	11/20/07	*Acceptable*
Lead (Pb)	MSD	917244	210	mg/Kg	91	3.3	200	25	125	75	11/20/07	*Acceptable*
Mercury (Hg)	MSD	917244	1.9	mg/Kg	92	3.7	2	ND	125	75	11/20/07	*Acceptable*
Selenium (Se) - Total	MSD	917244	15	mg/Kg	75	0.78	20	ND	125	75	11/20/07	*Acceptable*
Silver (Ag)	MSD	917244	39	mg/Kg	78	7.9	50	ND	125	75	11/20/07	*Acceptable*
Arsenic (As)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Barium (Ba)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Cadmium (Cd)	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Chromium - Total (Cr)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*
Lead (Pb)	RBLK	N/A	ND	mg/Kg	< 5.0				5.0	N/A	11/20/07	*Acceptable*

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RPD: Relative Percent Difference
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LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

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OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 143017

Analyst Initials: **MARGARETS**

Method Number: **HG_MS_35**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Mercury (Hg)	RBLK	N/A	ND	mg/Kg	< 0.10				0.10	N/A	11/20/07	*Acceptable*
Selenium (Se) - Total	RBLK	N/A	ND	mg/Kg	< 1.0				1.0	N/A	11/20/07	*Acceptable*
Silver (Ag)	RBLK	N/A	ND	mg/Kg	< 2.0				2.0	N/A	11/20/07	*Acceptable*

StarLims Run 143017 includes the following BSK Sample ID# :

917244 917245 917246 917247 917248 917249 917250 917251 917252 917253 921620 921621 921622 921623 921624

BSK StarLims Run #: 143556

Analyst Initials: **RACHELM**

Method Number: **8151_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
2,4,5-T	LCS	N/A	0.060	mg/Kg	100		0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	LCS	N/A	0.030	mg/Kg	100		0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	LCS	N/A	0.16	mg/Kg	133		0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	LCS	N/A	0.34	mg/Kg	113		0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	LCS	N/A	0.30	mg/Kg	100		0.3	ND	138	43	11/28/07	*Acceptable*
Dinoseb (DNBP)	LCS	N/A	0.030	mg/Kg	100		0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	LCSD	N/A	0.060	mg/Kg	100	0.0	0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	LCSD	N/A	0.040	mg/Kg	133	28	0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	LCSD	N/A	0.16	mg/Kg	133	0.0	0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	LCSD	N/A	0.42	mg/Kg	140	21	0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	LCSD	N/A	0.35	mg/Kg	116	15	0.3	ND	138	43	11/28/07	*Acceptable*
Dinoseb (DNBP)	LCSD	N/A	0.030	mg/Kg	100	0.0	0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	LDUP	917254	ND	mg/Kg	N/A			ND	25	N/A	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	LDUP	917254	ND	mg/Kg	N/A			ND	32	N/A	11/28/07	*Acceptable*
2,4-D	LDUP	917254	ND	mg/Kg	N/A			ND	26	N/A	11/28/07	*Acceptable*
2,4-DB	LDUP	917254	ND	mg/Kg	N/A			ND	29	N/A	11/28/07	*Acceptable*
Dichloroprop	LDUP	917254	ND	mg/Kg	N/A			ND	30	N/A	11/28/07	*Acceptable*
Dinoseb (DNBP)	LDUP	917254	ND	mg/Kg	N/A			ND	53	N/A	11/28/07	*Acceptable*
2,4,5-T	MS	917244	0.050	mg/Kg	83		0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	MS	917244	0.030	mg/Kg	100		0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	MS	917244	0.14	mg/Kg	116		0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	MS	917244	0.32	mg/Kg	106		0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	MS	917244	0.30	mg/Kg	100		0.3	ND	138	43	11/28/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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Fresno, California 93706
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Fax (559) 485-6935

QC Summary Report

12/31/2007

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 143556

Analyst Initials: **RACHELM**

Method Number: **8151_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Dinoseb (DNBP)	MS	917244	0.030	mg/Kg	100		0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	MSD	917244	0.050	mg/Kg	83	0.0	0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	MSD	917244	0.030	mg/Kg	100	0.0	0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	MSD	917244	0.090	mg/Kg	75	43	0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	MSD	917244	0.32	mg/Kg	106	0.0	0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	MSD	917244	0.32	mg/Kg	106	6.4	0.3	ND	138	43	11/28/07	*Acceptable*
Dinoseb (DNBP)	MSD	917244	0.030	mg/Kg	100	0.0	0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	RBLK	N/A	ND	mg/Kg	< 0.020				0.020	N/A	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	RBLK	N/A	ND	mg/Kg	< 0.010				0.010	N/A	11/28/07	*Acceptable*
2,4-D	RBLK	N/A	ND	mg/Kg	< 0.040				0.040	N/A	11/28/07	*Acceptable*
2,4-DB	RBLK	N/A	ND	mg/Kg	< 0.10				0.10	N/A	11/28/07	*Acceptable*
Dichloroprop	RBLK	N/A	ND	mg/Kg	< 0.10				0.10	N/A	11/28/07	*Acceptable*
Dinoseb (DNBP)	RBLK	N/A	ND	mg/Kg	< 0.010				0.010	N/A	11/28/07	*Acceptable*

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
DCPAA	LCS	N/A	120	% Rec	120	113	32	11/28/07	*OOS-High*
DCPAA	LCSD	N/A	120	% Rec	120	113	32	11/28/07	*OOS-High*
DCPAA	LDUP	917254	92	% Rec	83	113	32	11/28/07	*Acceptable*
DCPAA	MS	917244	130	% Rec	96	113	32	11/28/07	*OOS-High*
DCPAA	MSD	917244	120	% Rec	96	113	32	11/28/07	*OOS-High*
DCPAA	RBLK	N/A	120	% Rec		N/A	N/A	11/28/07	*OOS-High*

StarLims Run 143556 includes the following BSK Sample ID# :

917238 917240 917242 917244 917245 917246 917247 917250 917252 917254 925384 925385 925393 925394 925395 925396

BSK StarLims Run #: 143557

Analyst Initials: **RACHELM**

Method Number: **8151_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
2,4,5-T	LCS	N/A	0.060	mg/Kg	100		0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	LCS	N/A	0.030	mg/Kg	100		0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	LCS	N/A	0.10	mg/Kg	83		0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	LCS	N/A	0.37	mg/Kg	123		0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	LCS	N/A	0.31	mg/Kg	103		0.3	ND	138	43	11/28/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
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Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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Fax (559) 485-6935

ACCREDITED IN ACCORDANCE WITH nelac

QC Summary Report 12/31/2007

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 143557

Analyst Initials: **RACHELM**

Method Number: **8151_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Dinoseb (DNBP)	LCS	N/A	0.030	mg/Kg	100		0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	LCSD	N/A	0.050	mg/Kg	83	18	0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	LCSD	N/A	0.030	mg/Kg	100	0.0	0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	LCSD	N/A	0.090	mg/Kg	75	10	0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	LCSD	N/A	0.32	mg/Kg	106	14	0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	LCSD	N/A	0.30	mg/Kg	100	3.2	0.3	ND	138	43	11/28/07	*Acceptable*
Dinoseb (DNBP)	LCSD	N/A	0.020	mg/Kg	66	40	0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	LDUP	918909	ND	mg/Kg	N/A			ND	25	N/A	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	LDUP	918909	ND	mg/Kg	N/A			ND	32	N/A	11/28/07	*Acceptable*
2,4-D	LDUP	918909	ND	mg/Kg	N/A			ND	26	N/A	11/28/07	*Acceptable*
2,4-DB	LDUP	918909	ND	mg/Kg	N/A			ND	29	N/A	11/28/07	*Acceptable*
Dichloroprop	LDUP	918909	ND	mg/Kg	N/A			ND	30	N/A	11/28/07	*Acceptable*
Dinoseb (DNBP)	LDUP	918909	ND	mg/Kg	N/A			ND	53	N/A	11/28/07	*Acceptable*
2,4,5-T	MS	917255	0.040	mg/Kg	66		0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	MS	917255	0.020	mg/Kg	66		0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	MS	917255	0.080	mg/Kg	66		0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	MS	917255	0.26	mg/Kg	86		0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	MS	917255	0.22	mg/Kg	73		0.3	ND	138	43	11/28/07	*Acceptable*
Dinoseb (DNBP)	MS	917255	0.020	mg/Kg	66		0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	MSD	917255	0.050	mg/Kg	83	22	0.06	ND	150	17	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	MSD	917255	0.020	mg/Kg	66	0.0	0.03	ND	134	34	11/28/07	*Acceptable*
2,4-D	MSD	917255	0.11	mg/Kg	91	31	0.12	ND	146	16	11/28/07	*Acceptable*
2,4-DB	MSD	917255	0.30	mg/Kg	100	14	0.3	ND	160	6	11/28/07	*Acceptable*
Dichloroprop	MSD	917255	0.24	mg/Kg	80	8.7	0.3	ND	138	43	11/28/07	*Acceptable*
Dinoseb (DNBP)	MSD	917255	0.020	mg/Kg	66	0.0	0.03	ND	180	18	11/28/07	*Acceptable*
2,4,5-T	RBLK	N/A	ND	mg/Kg	< 0.020				0.020	N/A	11/28/07	*Acceptable*
2,4,5-TP (Silvex)	RBLK	N/A	ND	mg/Kg	< 0.010				0.010	N/A	11/28/07	*Acceptable*
2,4-D	RBLK	N/A	ND	mg/Kg	< 0.040				0.040	N/A	11/28/07	*Acceptable*
2,4-DB	RBLK	N/A	ND	mg/Kg	< 0.10				0.10	N/A	11/28/07	*Acceptable*
Dichloroprop	RBLK	N/A	ND	mg/Kg	< 0.10				0.10	N/A	11/28/07	*Acceptable*
Dinoseb (DNBP)	RBLK	N/A	ND	mg/Kg	< 0.010				0.010	N/A	11/28/07	*Acceptable*

Surrogate Results

Analyte	QC Type	Surr. Result	UCL	LCL	Date

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
Engineers & Laboratories

1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

ACCREDITED IN ACCORDANCE WITH nelac

QC Summary Report

12/31/2007

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 143557

Analyst Initials: **RACHELM**

Method Number: **8151_SS**

Surrogate Results

Analyte	QC Type		Surr. Result		UCL	LCL	Date	
DCPAA	LCS	N/A	140	% Rec	150	113	32	11/28/07 *OOS-High*
DCPAA	LCSD	N/A	110	% Rec	150	113	32	11/28/07 *Acceptable*
DCPAA	LDUP	918909	88	% Rec	100	113	32	11/28/07 *Acceptable*
DCPAA	MS	917255	92	% Rec	110	113	32	11/28/07 *Acceptable*
DCPAA	MSD	917255	92	% Rec	110	113	32	11/28/07 *Acceptable*
DCPAA	RBLK	N/A	150	% Rec	N/A	N/A		11/28/07 *OOS-High*

StarLims Run 143557 includes the following BSK Sample ID# :

917255 918909 925386 925387 925397 925398 925399 925400

BSK StarLims Run #: 144251

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
1,2-Dibromoethane	LCS	N/A	18	µg/Kg	92		20.0	ND	135	80	12/07/07	*Acceptable*
1,2-Dichloroethane	LCS	N/A	18	µg/Kg	89		20.0	ND	140	80	12/07/07	*Acceptable*
Di-isopropyl Ether	LCS	N/A	15	µg/Kg	74		20.0	ND	140	80	12/07/07	*OOS-Low*
Ethyl t-Butyl Ether	LCS	N/A	16	µg/Kg	78		20.0	ND	140	80	12/07/07	*OOS-Low*
Methyl-t-Butyl Ether	LCS	N/A	18	µg/Kg	90		20.0	ND	150	85	12/07/07	*Acceptable*
t-Amyl Methyl Ether	LCS	N/A	17	µg/Kg	85		20.0	ND	150	85	12/07/07	*Acceptable*
tert-Butyl Alcohol	LCS	N/A	150	µg/Kg	76		200	ND	150	75	12/07/07	*Acceptable*
1,2-Dibromoethane	LCSD	N/A	18	µg/Kg	91	1.4	20.0	ND	135	80	12/07/07	*Acceptable*
1,2-Dichloroethane	LCSD	N/A	18	µg/Kg	92	2.9	20.0	ND	140	80	12/07/07	*Acceptable*
Di-isopropyl Ether	LCSD	N/A	16	µg/Kg	78	5.2	20.0	ND	140	80	12/07/07	*OOS-Low*
Ethyl t-Butyl Ether	LCSD	N/A	16	µg/Kg	81	3.7	20.0	ND	140	80	12/07/07	*Acceptable*
Methyl-t-Butyl Ether	LCSD	N/A	19	µg/Kg	94	4.3	20.0	ND	150	85	12/07/07	*Acceptable*
t-Amyl Methyl Ether	LCSD	N/A	17	µg/Kg	87	1.6	20.0	ND	150	85	12/07/07	*Acceptable*
tert-Butyl Alcohol	LCSD	N/A	150	µg/Kg	76	0.81	200	ND	150	75	12/07/07	*Acceptable*
1,2-Dibromoethane	MS	917256	18	µg/Kg	89		20.0		150	85	12/07/07	*Acceptable*
1,2-Dichloroethane	MS	917256	17	µg/Kg	85		20.0		145	85	12/07/07	*Acceptable*
Di-isopropyl Ether	MS	917256	14	µg/Kg	69		20.0	ND	150	80	12/07/07	*OOS-Low*
Ethyl t-Butyl Ether	MS	917256	14	µg/Kg	72		20.0	ND	150	85	12/07/07	*OOS-Low*
Methyl-t-Butyl Ether	MS	917256	19	µg/Kg	78		20.0	ND	150	85	12/07/07	*OOS-Low*
t-Amyl Methyl Ether	MS	917256	16	µg/Kg	81		20.0	ND	150	85	12/07/07	*OOS-Low*
tert-Butyl Alcohol	MS	917256	130	µg/Kg	66		200	ND	150	70	12/07/07	*OOS-Low*
1,2-Dibromoethane	MSD	917256	18	µg/Kg	90	1.2	20.0		150	85	12/07/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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(559) 497-2888
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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 144251

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
1,2-Dichloroethane	MSD	917256	17	µg/Kg	87	2	20.0		145	85	12/07/07	*Acceptable*
Di-isopropyl Ether	MSD	917256	14	µg/Kg	72	5	20.0	ND	150	80	12/07/07	*OOS-Low*
Ethyl t-Butyl Ether	MSD	917256	15	µg/Kg	75	4	20.0	ND	150	85	12/07/07	*OOS-Low*
Methyl-t-Butyl Ether	MSD	917256	19	µg/Kg	77	0.31	20.0	ND	150	85	12/07/07	*OOS-Low*
t-Amyl Methyl Ether	MSD	917256	17	µg/Kg	83	2.8	20.0	ND	150	85	12/07/07	*OOS-Low*
tert-Butyl Alcohol	MSD	917256	140	µg/Kg	68	3.1	200	ND	150	70	12/07/07	*OOS-Low*
1,2-Dibromoethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/07/07	*Acceptable*
1,2-Dichloroethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/07/07	*Acceptable*
Di-isopropyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/07/07	*Acceptable*
Ethyl t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/07/07	*Acceptable*
Methyl-t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/07/07	*Acceptable*
t-Amyl Methyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/07/07	*Acceptable*
tert-Butyl Alcohol	RBLK	N/A	ND	µg/Kg	< 50				50	N/A	12/07/07	*Acceptable*

Run	Test	Analyte	Comment
144251	8260OX_SS	DiIsoPropEth	This analyte was biased low in this run in both the reagent spikes and CCV. However, recoveries were within 10% of the LCL.
144251	8260OX_SS	ETBE	LCS recovery was out of the acceptance range for one or more analytes. However, the LCSD recovery was within the acceptance range, therefore the data was reported.
144251	8260OX_SS		MS and MSD recoveries were affected by the matrix.

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Toluene-d8	LCS	N/A	94	% Rec	96	120	80	12/07/07	*Acceptable*
Toluene-d8	LCSD	N/A	92	% Rec	96	120	80	12/07/07	*Acceptable*
Toluene-d8	MS	917256	96	% Rec	94	120	80	12/07/07	*Acceptable*
Toluene-d8	MSD	917256	98	% Rec	94	120	80	12/07/07	*Acceptable*
Toluene-d8	RBLK	N/A	96	% Rec		N/A	N/A	12/07/07	*Acceptable*

StarLims Run 144251 includes the following BSK Sample ID# :

917256 917257 917259 917260 917261 917262 917264 917265 930124 930128 930129 930130 930131

BSK StarLims Run #: 144252

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
1,2-Dibromoethane	LCS	N/A	18	µg/Kg	91		20.0	ND	135	80	12/08/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
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QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 144252

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
1,2-Dichloroethane	LCS	N/A	17	µg/Kg	83		20.0	ND	140	80	12/08/07	*Acceptable*
Di-isopropyl Ether	LCS	N/A	14	µg/Kg	72		20.0	ND	140	80	12/08/07	*OOS-Low*
Ethyl t-Butyl Ether	LCS	N/A	15	µg/Kg	74		20.0	ND	140	80	12/08/07	*OOS-Low*
Methyl-t-Butyl Ether	LCS	N/A	18	µg/Kg	88		20.0	ND	150	85	12/08/07	*Acceptable*
t-Amyl Methyl Ether	LCS	N/A	16	µg/Kg	80		20.0	ND	150	85	12/08/07	*OOS-Low*
tert-Butyl Alcohol	LCS	N/A	170	µg/Kg	84		200	ND	150	75	12/08/07	*Acceptable*
1,2-Dibromoethane	LCSD	N/A	18	µg/Kg	91	0.55	20.0	ND	135	80	12/08/07	*Acceptable*
1,2-Dichloroethane	LCSD	N/A	16	µg/Kg	82	1.7	20.0	ND	140	80	12/08/07	*Acceptable*
Di-isopropyl Ether	LCSD	N/A	14	µg/Kg	69	4.6	20.0	ND	140	80	12/08/07	*OOS-Low*
Ethyl t-Butyl Ether	LCSD	N/A	14	µg/Kg	72	3.1	20.0	ND	140	80	12/08/07	*OOS-Low*
Methyl-t-Butyl Ether	LCSD	N/A	17	µg/Kg	83	5	20.0	ND	150	85	12/08/07	*OOS-Low*
t-Amyl Methyl Ether	LCSD	N/A	16	µg/Kg	79	1.4	20.0	ND	150	85	12/08/07	*OOS-Low*
tert-Butyl Alcohol	LCSD	N/A	170	µg/Kg	83	1	200	ND	150	75	12/08/07	*Acceptable*
1,2-Dibromoethane	MS	917266	18	µg/Kg	89		20.0		150	85	12/08/07	*Acceptable*
1,2-Dichloroethane	MS	917266	17	µg/Kg	83		20.0		145	85	12/08/07	*OOS-Low*
Di-isopropyl Ether	MS	917266	14	µg/Kg	72		20.0	ND	150	80	12/08/07	*OOS-Low*
Ethyl t-Butyl Ether	MS	917266	15	µg/Kg	74		20.0	ND	150	85	12/08/07	*OOS-Low*
Methyl-t-Butyl Ether	MS	917266	18	µg/Kg	75		20.0	ND	150	85	12/08/07	*OOS-Low*
t-Amyl Methyl Ether	MS	917266	16	µg/Kg	82		20.0	ND	150	85	12/08/07	*OOS-Low*
tert-Butyl Alcohol	MS	917266	140	µg/Kg	68		200	ND	150	70	12/08/07	*OOS-Low*
1,2-Dibromoethane	MSD	917266	16	µg/Kg	82	8	20.0		150	85	12/08/07	*OOS-Low*
1,2-Dichloroethane	MSD	917266	16	µg/Kg	82	0.24	20.0		145	85	12/08/07	*OOS-Low*
Di-isopropyl Ether	MSD	917266	15	µg/Kg	73	1.3	20.0	ND	150	80	12/08/07	*OOS-Low*
Ethyl t-Butyl Ether	MSD	917266	15	µg/Kg	76	3	20.0	ND	150	85	12/08/07	*OOS-Low*
Methyl-t-Butyl Ether	MSD	917266	18	µg/Kg	76	1.6	20.0	ND	150	85	12/08/07	*OOS-Low*
t-Amyl Methyl Ether	MSD	917266	16	µg/Kg	81	1.7	20.0	ND	150	85	12/08/07	*OOS-Low*
tert-Butyl Alcohol	MSD	917266	140	µg/Kg	70	2.2	200	ND	150	70	12/08/07	*Acceptable*
1,2-Dibromoethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/08/07	*Acceptable*
1,2-Dichloroethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/08/07	*Acceptable*
Di-isopropyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/08/07	*Acceptable*
Ethyl t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/08/07	*Acceptable*
Methyl-t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/08/07	*Acceptable*
t-Amyl Methyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/08/07	*Acceptable*
tert-Butyl Alcohol	RBLK	N/A	ND	µg/Kg	< 50				50	N/A	12/08/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
Engineers & Laboratories
1414 Stanislaus Street
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(559) 497-2888
Fax (559) 485-6935

QC Summary Report 12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 144252

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Run	Test	Analyte
144252	8260OX_SS	MTBE
144252	8260OX_SS	
144252	8260OX_SS	

Comment
LCSD recovery was out of the acceptance range, however the LCS recovery was within the acceptance range, therefore the data were reported.
Recoveries for several analytes were low, but were within 10% of the LCL.
MS and MSD recoveries were affected by the matrix.

Surrogate Results

Analyte	QC Type					UCL	LCL	Date	
Toluene-d8	LCS	N/A	99	% Rec	97	120	80	12/08/07	*Acceptable*
Toluene-d8	LCSD	N/A	97	% Rec	97	120	80	12/08/07	*Acceptable*
Toluene-d8	MS	917266	98	% Rec	96	120	80	12/08/07	*Acceptable*
Toluene-d8	MSD	917266	96	% Rec	96	120	80	12/08/07	*Acceptable*
Toluene-d8	RBLK	N/A	97	% Rec		N/A	N/A	12/08/07	*Acceptable*

StarLims Run 144252 includes the following BSK Sample ID# :

917266 917267 917268 917269 917270 917275 917276 917277 917279 930135 930136 930137 930138 930139

BSK StarLims Run #: 144299

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
1,2-Dibromoethane	LCS	N/A	19	µg/Kg	93		20.0	ND	135	80	12/10/07	*Acceptable*
1,2-Dichloroethane	LCS	N/A	17	µg/Kg	86		20.0	ND	140	80	12/10/07	*Acceptable*
Di-isopropyl Ether	LCS	N/A	19	µg/Kg	95		20.0	ND	140	80	12/10/07	*Acceptable*
Ethyl t-Butyl Ether	LCS	N/A	18	µg/Kg	91		20.0	ND	140	80	12/10/07	*Acceptable*
Methyl-t-Butyl Ether	LCS	N/A	18	µg/Kg	91		20.0	ND	150	85	12/10/07	*Acceptable*
t-Amyl Methyl Ether	LCS	N/A	17	µg/Kg	84		20.0	ND	150	85	12/10/07	*OOS-Low*
tert-Butyl Alcohol	LCS	N/A	160	µg/Kg	82		200	ND	150	75	12/10/07	*Acceptable*
1,2-Dibromoethane	LCSD	N/A	19	µg/Kg	95	2.4	20.0	ND	135	80	12/10/07	*Acceptable*
1,2-Dichloroethane	LCSD	N/A	18	µg/Kg	90	5	20.0	ND	140	80	12/10/07	*Acceptable*
Di-isopropyl Ether	LCSD	N/A	19	µg/Kg	93	2	20.0	ND	140	80	12/10/07	*Acceptable*
Ethyl t-Butyl Ether	LCSD	N/A	19	µg/Kg	93	2	20.0	ND	140	80	12/10/07	*Acceptable*
Methyl-t-Butyl Ether	LCSD	N/A	34	µg/Kg	170	60	20.0	ND	150	85	12/10/07	*OOS-High*
t-Amyl Methyl Ether	LCSD	N/A	18	µg/Kg	91	7.8	20.0	ND	150	85	12/10/07	*Acceptable*
tert-Butyl Alcohol	LCSD	N/A	170	µg/Kg	85	3.8	200	ND	150	75	12/10/07	*Acceptable*
1,2-Dibromoethane	MS	917280	18	µg/Kg	92		20.0		150	85	12/10/07	*Acceptable*
1,2-Dichloroethane	MS	917280	17	µg/Kg	86		20.0		145	85	12/10/07	*Acceptable*
Di-isopropyl Ether	MS	917280	19	µg/Kg	93		20.0	ND	150	80	12/10/07	*Acceptable*
Ethyl t-Butyl Ether	MS	917280	18	µg/Kg	91		20.0	ND	150	85	12/10/07	*Acceptable*

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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Fax (559) 485-6935

QC Summary Report

12/31/2007

NELAP Certificate #04227CA
ELAP Certificate #1180

BSK Submission : **2007110669**
Client : **BSK Associates - Geotechnical**
Date Submitted : **11/08/2007**
Project ID : **E0704901F**

Project Desc : **Alameda County Transportation Corridor**

BSK StarLims Run #: 144299

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
Methyl-t-Butyl Ether	MS	917280	18	µg/Kg	91		20.0	ND	150	85	12/10/07	*Acceptable*
t-Amyl Methyl Ether	MS	917280	18	µg/Kg	89		20.0	ND	150	85	12/10/07	*Acceptable*
tert-Butyl Alcohol	MS	917280	160	µg/Kg	81		200	ND	150	70	12/10/07	*Acceptable*
1,2-Dibromoethane	MSD	917280	18	µg/Kg	91	0.49	20.0		150	85	12/10/07	*Acceptable*
1,2-Dichloroethane	MSD	917280	17	µg/Kg	86	0.11	20.0		145	85	12/10/07	*Acceptable*
Di-isopropyl Ether	MSD	917280	19	µg/Kg	94	1.9	20.0	ND	150	80	12/10/07	*Acceptable*
Ethyl t-Butyl Ether	MSD	917280	18	µg/Kg	92	2	20.0	ND	150	85	12/10/07	*Acceptable*
Methyl-t-Butyl Ether	MSD	917280	18	µg/Kg	89	1.1	20.0	ND	150	85	12/10/07	*Acceptable*
t-Amyl Methyl Ether	MSD	917280	18	µg/Kg	87	2	20.0	ND	150	85	12/10/07	*Acceptable*
tert-Butyl Alcohol	MSD	917280	150	µg/Kg	77	5.6	200	ND	150	70	12/10/07	*Acceptable*
1,2-Dibromoethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/10/07	*Acceptable*
1,2-Dichloroethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/10/07	*Acceptable*
Di-isopropyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/10/07	*Acceptable*
Ethyl t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/10/07	*Acceptable*
Methyl-t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/10/07	*Acceptable*
t-Amyl Methyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/10/07	*Acceptable*
tert-Butyl Alcohol	RBLK	N/A	ND	µg/Kg	< 50				50	N/A	12/10/07	*Acceptable*

Run	Test	Analyte	Comment
144299	8260OX_SS	MTBE	LCSD recovery was out of the acceptance range, however the LCS recovery was within the acceptance range, therefore the data were reported.
144299	8260OX_SS	TAME	LCS recovery was out of the acceptance range, however the LCSD recovery was within the acceptance range, therefore the data were reported.

Surrogate Results

Analyte	QC Type		Surr. Result			UCL	LCL	Date	
Toluene-d8	LCS	N/A	100	% Rec	100	120	80	12/10/07	*Acceptable*
Toluene-d8	LCSD	N/A	98	% Rec	100	120	80	12/10/07	*Acceptable*
Toluene-d8	MS	917280	100	% Rec	97	120	80	12/10/07	*Acceptable*
Toluene-d8	MSD	917280	100	% Rec	97	120	80	12/10/07	*Acceptable*
Toluene-d8	RBLK	N/A	100	% Rec		N/A	N/A	12/10/07	*Acceptable*

StarLims Run 144299 includes the following BSK Sample ID# :

917258 917263 917271 917278 917280 917281 917282 917283 930502 930596 930597 930598 930599

BSK StarLims Run #: 144309

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

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Engineers & Laboratories
1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

QC Summary Report

12/31/2007

BSK Submission : 2007110669
Client : BSK Associates - Geotechnical
Date Submitted : 11/08/2007
Project ID : E0704901F

NELAP Certificate #04227CA
ELAP Certificate #1180

Project Desc : Alameda County Transportation Corridor

BSK StarLims Run #: 144309

Analyst Initials: **CHERYLC**

Method Number: **8260OX_SS**

Analyte Results

Analyte	QC Type	Matrix Spike ID	Result	Units	% Rec or RPD	Spike RPD	Spk Conc	Matrix Conc	UCL	LCL	Date	
1,2-Dibromoethane	LCS	N/A	20	µg/Kg	97		20.0	ND	135	80	12/11/07	*Acceptable*
1,2-Dichloroethane	LCS	N/A	18	µg/Kg	89		20.0	ND	140	80	12/11/07	*Acceptable*
Di-isopropyl Ether	LCS	N/A	19	µg/Kg	93		20.0	ND	140	80	12/11/07	*Acceptable*
Ethyl t-Butyl Ether	LCS	N/A	19	µg/Kg	94		20.0	ND	140	80	12/11/07	*Acceptable*
Methyl-t-Butyl Ether	LCS	N/A	35	µg/Kg	174		20.0	ND	150	85	12/11/07	*OOS-High*
t-Amyl Methyl Ether	LCS	N/A	19	µg/Kg	93		20.0	ND	150	85	12/11/07	*Acceptable*
tert-Butyl Alcohol	LCS	N/A	150	µg/Kg	73		200	ND	150	75	12/11/07	*OOS-Low*
1,2-Dibromoethane	LCSD	N/A	19	µg/Kg	94	3	20.0	ND	135	80	12/11/07	*Acceptable*
1,2-Dichloroethane	LCSD	N/A	18	µg/Kg	87	1.8	20.0	ND	140	80	12/11/07	*Acceptable*
Di-isopropyl Ether	LCSD	N/A	19	µg/Kg	96	2.7	20.0	ND	140	80	12/11/07	*Acceptable*
Ethyl t-Butyl Ether	LCSD	N/A	19	µg/Kg	94	0.31	20.0	ND	140	80	12/11/07	*Acceptable*
Methyl-t-Butyl Ether	LCSD	N/A	19	µg/Kg	95	58	20.0	ND	150	85	12/11/07	*Acceptable*
t-Amyl Methyl Ether	LCSD	N/A	18	µg/Kg	89	4.3	20.0	ND	150	85	12/11/07	*Acceptable*
tert-Butyl Alcohol	LCSD	N/A	170	µg/Kg	85	14	200	ND	150	75	12/11/07	*Acceptable*
1,2-Dibromoethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/11/07	*Acceptable*
1,2-Dichloroethane	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/11/07	*Acceptable*
Di-isopropyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/11/07	*Acceptable*
Ethyl t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/11/07	*Acceptable*
Methyl-t-Butyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/11/07	*Acceptable*
t-Amyl Methyl Ether	RBLK	N/A	ND	µg/Kg	< 5.0				5.0	N/A	12/11/07	*Acceptable*
tert-Butyl Alcohol	RBLK	N/A	ND	µg/Kg	< 50				50	N/A	12/11/07	*Acceptable*

Run	Test	Analyte	Comment
144309	8260OX_SS	MTBE	LCS recovery was out of the acceptance range, however the LCSD recovery was within the acceptance range, therefore the data were reported.
144309	8260OX_SS	TBA	LCS recovery was out of the acceptance range, however the LCSD recovery was within the acceptance range, therefore the data were reported.

Surrogate Results

Analyte	QC Type				Surr. Result		UCL	LCL	Date	
Toluene-d8	LCS	N/A	97	% Rec		98	120	80	12/11/07	*Acceptable*
Toluene-d8	LCSD	N/A	98	% Rec		98	120	80	12/11/07	*Acceptable*
Toluene-d8	RBLK	N/A	98	% Rec			N/A	N/A	12/11/07	*Acceptable*

StarLims Run 144309 includes the following BSK Sample ID# :

917272 917273 917274 930591 930592 930593

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

BSK Analytical Laboratories
Engineers & Laboratories

1414 Stanislaus Street
Fresno, California 93706
(559) 497-2888
Fax (559) 485-6935

ACCREDITED IN ACCORDANCE WITH nelac

QC Summary Report 12/31/2007

Approved by: Maria C Hamel

%Rec: Percent Recovered
RPD: Relative Percent Difference
UCL: Upper Control Limit
LCL: Lower Control Limit
LCS: Laboratory Control Sample
LCSD: Laboratory Control Sample Duplicate
LDUP: Laboratory Sample Duplicate

Parent Sample: Sample used as background matrix for MS/MSD
OOS-High: QC Result Above UCL
OOS-Low: QC Result Below LCL
MS: Matrix Spike
MSD: Matrix Spike Duplicate
RBLK: Reagent (Method) Blank
Surrogate results for QC standards are not evaluated for acceptability (due to definition of a surrogate standard

118090

BSK ANALYTICAL LABORATORIES

1414 STANISLAUS ST., FRESNO, CA 93706
(559) 497-2888 • FAX (559) 497-2893 • www.bsklabs.com

2007110669 11/08/2007
BSK G TAT: Standard
118090

* Required Fields

Temp ______

Client/Company Name *:	Report Attention* :	Phone* :	Fax* :
BSK-G	NOELLE WILLBANKS	497-2880	497-2886
		Email : nwillbanks@bskinc.com	

Address* City* State* Zip*

Carbon Copies: (Circle One) CDHS Fresno Co EPA Merced Co Tulare Co Other:

Project Information: ALAMEDA COUNTY TRANSPORTATION CORRIDOR

PO# E07.049.01F Quote#

How would you like your completed results sent? ☒ E-Mail ☐ Fax ☐ EDD ☐ Mail Only-

REGULATORY COMPLIANCE
Electronic Data Transfer: Y N
System No.*

Sampler Name Printed / Signature*: JONATHAN ROHLFING / [signature]

QC Request: (STD) Level II

Result Request **Surcharge: (STD) 5Day** 2Day** 1 Day**

Matrix Types: RSW= Raw Surface Water CFW= Chlorinated Finished Water CWW= Chlorinated Waste Water BW= Bottled Water RGW = Raw Ground Water FW = Finished Water WW = Waste Water SW = Storm Water DW = Drinking Water SO = Solid

ANALYSIS REQUESTED — 1/6

Sample #	Bills	Date Sampled	Time Sampled	Sample Description/Location	Matrix	Comments / Station Code	RCRA 8 METALS by 6020	CHLORINATED HERBICIDES by 8151A						
1		~~11-6-07~~ 11-7-07	1132	BG-1	SO	917238	X	X						
2		↓	1152	RR-1	↓	39	X							
3			1209	LS-1		40	X	X						
4			1232	RR-2		41	X							
5			1252	LS-2		42	X	X						
6			1314	RR-3		43	X							
7			1333	LS-3		44	X	X						
8			1342	BG-3		45	X	X						
9			1414	BG-4		46	X	X						
10			1426	LS-4		47	X	X						
11		↓	1451	RR-4	↓	48	X		See pg. 2 *					

Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company
[signature] JONATHAN ROHLFING	BSK ENV.	11-8-07	1725		
Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company

Shipping Method: [illegible]

118090

BSK ANALYTICAL LABORATORIES

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(559) 497-2888 · FAX (559) 497-2893 · www.bsklabs.com

2007110669 11/08/2007
BSK G
118090
TAT: Standard

* Required Fields

Temp _____

Client/Company Name *:	Report Attention* :	Phone* :	Fax* :
BSK-G	NOELLE WILLBANKS	497-2880	497-2886
		Email :	

Address* City* State* Zip*

Project Information: ALAMEDA COUNTY TRANSPORTATION CORRIDOR

PO# E07.049.01F
Quote#

Carbon Copies: (Circle One)
CDHS Fresno Co EPA
Merced Co Tulare Co
Other:

How would you like your completed results sent? ☒ E-Mail ☐ Fax ☐ EDD ☐ Mail Only-

Sampler Name Printed / Signature*: JONATHAN ROHLFING

QC Request: (STD) Level II

Result Request **Surcharge: (STD) 5Day** 2Day** 1 Day**

REGULATORY COMPLIANCE
Electronic Data Transfer: Y N
System No.*

Matrix Types: RSW= Raw Surface Water CFW= Chlorinated Finished Water CWW= Chlorinated Waste Water BW= Bottled Water RGW = Raw Ground Water FW = Finished Water WW = Waste Water SW = Storm Water DW = Drinking Water SO = Solid

Sample #	Sample Date	Sample Time	Sample Description/Location	Matrix	Comments: Starting Code	RCRA 8 Metals by 6020	Chlorinated Herbicides by 8151A							2/6
12	11-5-07 ~~11-6-07~~	1537	RR-5	SO	917249	X								
13		1553	LS-5		50	X	X							
14		1625	RR-6		51	X								
15		1639	LS-6		52	X	X							
16		1658	RR-7		53	X								
17		1708	LS-7		54	X	X							
18		1717	BG-7		55	X	X							

* Report amended to include chromatograms and because TPH Jet fuel was recalculated to correct an error in reference to the carbon chain 12/31/07 JP

Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company
JONATHAN ROHLFING	BSK ENV.	11-8-07	1725		
Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company

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118090

BSK ANALYTICAL LABORATORIES

1414 STANISLAUS ST., FRESNO, CA 93706
(559) 497-2888 • FAX (559) 497-2893 • www.bsklabs.com

2007110669 11/08/2007
BSK G TAT: Standard
118090

* Required Fields

Temp ______

Client/Company Name *:	Report Attention* :	Phone* :	Fax* :
BSK-G	NOELLE WILLBANKS	497-2880	497-2886
		Email : nwillbanks@bskinc.com	

Address*	City*	State*	Zip*

Carbon Copies: (Circle One) CDHS Fresno Co EPA Merced Co Tulare Co Other:

Project Information: ALAMEDA COUNTY TRANSPORTATION CORRIDOR

PO# E07.049.01F
Quote#

How would you like your completed results sent? ☒ E-Mail ☐ Fax ☐ EDD ☐ Mail Only-

REGULATORY COMPLIANCE
Electronic Data Transfer: Y N
System No.*

Sampler Name Printed / Signature*: JONATHAN ROHLFING [signature]

QC Request: (STD) Level II

Result Request **Surcharge: (STD) 5Day** 2Day** 1 Day**

Matrix Types: RSW= Raw Surface Water CFW= Chlorinated Finished Water CWW= Chlorinated Waste Water BW= Bottled Water RGW = Raw Ground Water FW = Finished Water WW = Waste Water SW = Storm Water DW = Drinking Water SO = Solid

ANALYSIS REQUESTED: 3/6

Sample #	# Btls	Date Sampled	Time Sampled	Sample Description/Location	Matrix	Comments / Station Code	TRPH by 5520 CF	TPHg, BTEX, Fuel Oxygenates by 8021	TPHg, TPHmotor oil, TPHdiesel, TPHjet fuel 8015B						
19		11-6-07	0905	SB-1-10	SO	0417256	X	X	X						
20		↓	0932	SB-1-30	↓	57	X	X	X						
21			1040	SB-1-60		58	X	X	X						
22			1115	SB-2-10		59	X	X	X						
23			1152	SB-2-30		60	X	X	X						
24			1206	SB-2-40		61	X	X	X						
25			1230	SB-2-50		62	X	X	X						
26			1345	SB-3-10		63	X	X	X						
27			1415	SB-3-30		64	X	X	X						
28			1449	SB-3-50		65	X	X	X		See pg. 2*				
29		↓	1526	SB-4-10		↓ 66	X	X	X						

Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company
[signature] JONATHAN ROHLFING	BSK ENV.	11-8-07	1725		
Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company

Received for Lab by (Signature and Printed Name) [signature] [illegible]
Shipping Method [illegible]

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2007110669 11/08/2007
BSK G TAT: Standard
118090

* Required Fields

Temp _____

Client/Company Name *:	Report Attention* :	Phone* : / Fax* :
BSK-G	NoELLE WILLBANKS	497-2880 / 497-2886
		Email : nwillbanks@bskinc.com

Address* City* State* Zip*

Carbon Copies: (Circle One)
CDHS Fresno Co EPA
Merced Co Tulare Co
Other:

Project Information: ALAMEDA COUNTY TRANSPORTATION CORRIDOR

PO# E07.049.01F
Quote#

How would you like your completed results sent? ☒ E-Mail ☐ Fax ☐ EDD ☐ Mail Only

REGULATORY COMPLIANCE
Electronic Data Transfer: Y N
System No.*

Sampler Name Printed / Signature*: JONATHAN ROHLFING

QC Request: (STD) Level II

Result Request **Surcharge: (STD) 5Day** 2Day** 1Day**

Matrix Types: RSW= Raw Surface Water CFW= Chlorinated Finished Water CWW= Chlorinated Waste Water BW= Bottled Water RGW = Raw Ground Water FW = Finished Water WW = Waste Water SW = Storm Water DW = Drinking Water SO = Solid

Sample #	Lab Use	Sampled Date	Sampled Time	Sample Description/Location		Matrix	Container/Comments/Station Code	TRPH by 5520 CF	TPHg, BTEX, fuel ox. by 8021	TPHd, TPHmotor fuel, TPHjetfuel, 8015B					4/6
30		11-6-07	1548	SB-4-30	917267	SO		X	X	X					
31		↓	1613	SB-4-40	68			X	X	X					
32		↓	1627	SB-4-50	69			X	X	X					
33		11-7-07	0838	SB-5-10	70			X	X	X					
34		↓	0851	SB-5-20	71			X	X	X					
35			0859	SB-5-30	72		* FIELD READINGS NOTED	X	X	X					
36			0915	SB-5-40	73		* FIELD READINGS NOTED	X	X	X					
37			0932	SB-5-50	74		* FIELD READINGS NOTED	X	X	X					
38			1011	SB-5-60	75			X	X	X					
39			1109	SB-6-10	76			X	X	X	see	pg	2		
40		↓	1120	SB-6-20	78	↓		X	X	X					

Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company
JONATHAN ROHLFING	BSK ENV.	11-8-07	1725		
Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company

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2007110669 11/08/2007
BSK G TAT: Standard
118090

* Required Fields

Temp ______

Client/Company Name *:	Report Attention* :	Phone* : 497-2880 Fax* : 497-2886
BSK-G	NOELLE WILLBANKS	Email : nwillbanks@bskinc.com

Address* City* State* Zip*

Carbon Copies: (Circle One)
CDHS Fresno Co EPA
Merced Co Tulare Co
Other:

Project Information: ALAMEDA COUNTY TRANSPORTATION CORRIDOR
PO# E07049.01F
Quote#

How would you like your completed results sent? ☒ E-Mail ☐ Fax ☐ EDD ☐ Mail Only-

REGULATORY COMPLIANCE
Electronic Data Transfer: Y N
System No.*

Sampler Name Printed / Signature*: JONATHAN ROHLFING / [signature]

QC Request: (STD) Level II

Result Request **Surcharge: (STD) 5Day** 2Day** 1 Day**

Matrix Types: RSW= Raw Surface Water CFW= Chlorinated Finished Water CWW= Chlorinated Waste Water BW= Bottled Water RGW = Raw Ground Water FW = Finished Water WW = Waste Water SW = Storm Water DW = Drinking Water SO = Solid

ANALYSIS REQUESTED

Sample #	Sampled Date	Sampled Time	Sample Description/Location		Matrix	Comments / Station Code	TRPH by 5520CF	TPHg, BTEX, Fuel Oxygenates by 8021	TPHd, TPHmineral oil, TPHjet fuel by 8015B						5/6
[illegible]	11-7-07	1130	SB-6-30	917278	SO	* FIELD READINGS NOTED	X	X	X						
[illegible]	↓	1249	SB-7-10	79	↓		X	X	X						
[illegible]	↓	1259	SB-7-20	80	↓		X	X	X						
[illegible]	↓	1317	SB-7-30	81	↓		X	X	X						
[illegible]	↓	1342	SB-7-40	82	↓	* FIELD READINGS NOTED	X	X	X						
[illegible]	↓	1359	SB-7-50	83	↓		X	X	X						
						See pg. 2A									

Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company
[signature] JONATHAN ROHLFING	BSK ENV.	11-8-07	1725		

Sampling Method [illegible]

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2007110669 11/08/2007
BSK G TAT: Standard
118090

* Required Fields

Temp _____

Client/Company Name *:	Report Attention* :	Phone* : / Fax* :
BSK - G	NOELLE WILLBANKS	497-2880 / 497-2886
		Email : nwillbanks@bskinc.com

Address* City* State* Zip*

Project Information: ALAMEDA COUNTY TRANSPORTATION CORRIDOR

PO# E07.049.01F Quote#

How would you like your completed results sent? ☒ E-Mail ☐ Fax ☐ EDD ☐ Mail Only

Sampler Name Printed / Signature*: JONATHAN ROHLFING

QC Request: (STD) Level II

Result Request **Surcharge: (STD) 5Day** 2Day** 1 Day**

Carbon Copies: (Circle One)
CDHS Fresno Co EPA
Merced Co Tulare Co
Other:

REGULATORY COMPLIANCE
Electronic Data Transfer: Y N
System No.*

Matrix Types: RSW= Raw Surface Water CFW= Chlorinated Finished Water CWW= Chlorinated Waste Water BW= Bottled Water RGW = Raw Ground Water FW = Finished Water WW = Waste Water SW = Storm Water DW = Drinking Water SO = Solid

ANALYSIS REQUESTED

Sample ID	Sample* Date	Sample* Time	Sample Description/Location*	Matrix*	Containers/Station Code	TRPH by 5520 CF	TPHg, BTEX, fuel ox. & MTBE, 8021	TPHd, TPHmotor oil, TPHjet fuel, 8015B		HOLD				6/6	
	11-6-07	0920	SB-1-20	SO	917284					X					
		0948	SB-1-40		85					X					
		1010	SB-1-50		86					X					
		1135	SB-2-20		87					X					
		1400	SB-3-20		88					X					
		1433	SB-3-40		89					X					
		1538	SB-4-20		90					X					
					See pg. 2 ★										

Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company
JONATHAN ROHLFING	BSK ENV.	11-8-07	1725		
Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company
Relinquished by : (Signature and Printed Name)	Company	Date	Time	Received by (Signature and Print Name)	Company

Shipment Method: