Appendix IS-7

Site Investigation Report

Transmittal #: **C0882-OTH-01720**

DATE: August 18, 2015

FROM: M. Barbour, Executive Officer
Highway Project Management

LETTER OF TRANSMITTAL

Metro

TO:	**Mr. Stephen W. Clark, Esq.** The J. Paul Getty Trust **1200 Getty Center Drive, Suite 400** **Los Angeles, CA 90049**
ATTENTION:	**Mr. Johan Uyttewaal, Project Manager**
CONTRACT / TITLE:	C0882 / I-405 Sepulveda Pass Widening Project
REFERENCE:	**Site Investigation**
SUBJECT:	Final Site Investigation Report

NOTES:

- ☐ FOR YOUR RECORDS
- ☐ PLEASE PROCESS
- ☐ SIGN & RETURN (1 Original)
- X DOCUMENTS ENCLOSED

Attached is the Final Site Investigation Report for your Records.

SIGNED:

M. Barbour, Executive Officer
Highway Project Management

SITE INVESTIGATION REPORT

GETTY CENTER TRANSFER PARCELS

LOS ANGELES COUNTY, CALIFORNIA
LOCATION: LA-405, PM 28.8/39.0

PROJECT NUMBER: 0700000107
EA NUMBER: 07-120301
CONTRACT NO. 07A3322
TASK ORDER NO. 23

STANTEC PROJECT NO.: 185832023

Submitted to:
California Department of Transportation, District 7
100 South Main Street
Los Angeles, California 90012

Submitted by:
Stantec Consulting Services Inc.
25864-F Business Center Drive
Redlands, California 92374

Prepared by:

Kristy Edblad
Senior Engineer, P.E.

Reviewed by:

Anne E. Perez
Associate Geologist

Approved by:

Kevin Miskin, P,E. C48458
Principal Engineer

Submitted: August 5, 2015

EXECUTIVE SUMMARY

At the request of the California Department of Transportation (Caltrans) District 7, a site investigation (SI) was conducted to evaluate the potential presence of certain hazardous constituents of concern in soils on four parcels along Interstate 405 (I-405) near the Getty Center in Los Angeles County, California. Soil investigations were performed at the following four areas which comprise the Study Area: North Canyon (Staging) Parcel, North-North Canyon (Debris) Parcel, the Southbound (SB) Strip Parcel, and the Northbound (NB) Strip Parcel.

A total of 59 borings were advanced. The number of borings deviated from the original scope of work which called for 62 borings, due to encountered field conditions. The number of borings was modified as follows:

- One soil boring (1278-119), also called "BG-1", was identified by a Getty representative to not be on the Getty Property and was removed from the scope of work.
- Three borings (1278-124 through 1278-126), in the SB Strip Parcel, were removed from the scope of work due to inaccessibility with no relocation options.
- Six of the seven borings (1278-156 through 1278-161), at the NB Strip Parcel, were removed from the scope of work due to a conflict with the landscaping conducted by Getty's Contactor.
- Seven borings (1278-163 through 1278-169) were added to this task order in the NB Strip Parcel by Caltrans.

In addition to the above modifications, six borings (1278-127, 1278-128, and 1278-131 through 1278-134) were relocated because the originally planned locations were inaccessible.

Soil samples were collected at surface to 0.5 feet (surface) below ground surface (bgs), one to 1.5 feet bgs (1.5-foot) and 3.5 to 4.0 feet bgs (3.5-foot), unless refusal was encountered prior to reaching the target depth. Field personnel made three attempts at each boring location to reach the desired sampling depth. Step-out attempts were made within a two-foot area from the original boring location. Step-out attempts were made at several boring locations due to refusal to advancement in the original borehole.

Based on the findings of the investigations, the following are concluded for each of the four areas of investigation:

<u>North Canyon (Staging) Parcel</u>

- Detected concentrations of total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) did not exceed United States Environmental

Protection Agency (USEPA) Region 9 Regional Screening Levels (RSLs) for commercial/industrial exposure.

- Detected concentrations of total lead were reported at concentrations below 50 milligrams per kilogram (mg/kg), below the USEPA commercial/industrial RSL and below the California Department of Toxic Substances Control-modified Screening Level (DTSC-SL) for industrial soil.
- Asbestos was not detected in any of the samples tested.

The soil sample analytical results reported constituents of concern levels substantially lower than the DTSC-SL for industrial soils, USEPA health screening levels (RSLs) or within the range of expected urban background levels. As such, the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant health risk or at concentrations above hazardous waste thresholds. No further investigation is recommended for this parcel.

North-North Canyon (Debris) Parcel

- Detected concentrations of TPH, VOCs, semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs) did not exceed USEPA commercial/industrial RSLs.
- Detected concentrations of total lead were reported at concentrations below 50 mg/kg, below the USEPA commercial/industrial RSL and below the DTSC-SL for industrial soil.
- Title 22 metals did not exceed USEPA commercial/industrial RSLs with the exception of arsenic (3.0 mg/kg). One sample (1278-114-0) reported arsenic at 40 mg/kg which exceeds the DTSC upper limit for background of 12 mg/kg. The reported detection at 40 mg/kg is a statistical outlier at the 10 percent significance level. Excluding the statistical outlier, the remaining detected concentrations are below the DTSC upper limit for background of 12 mg/kg in the Los Angeles area (DTSC 2008).
- Asbestos was not detected in any of the samples tested.

The soil sample analytical results reported concentrations of constituents of concern substantially lower than the DTSC-SL for industrial soils, USEPA health screening levels (RSLs) or within the range of expected urban background levels, with the exception of one arsenic outlier. As such, the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant incremental increase in health risk or at concentrations above hazardous waste thresholds. No further investigation is recommended for this parcel.

SB Strip Parcel

- Detected concentrations of TPH, VOCs, and chlorinated herbicides did not exceed USEPA commercial/industrial RSLs.

- Detected concentrations of total lead were reported at concentrations below USEPA commercial/industrial RSL and below the California total threshold limit concentration (TTLC) of 1,000 mg/kg. One sample (1278-146-1.5 at 430 mg/kg) was reported at a concentration above the DTSC-SL of 320 mg/kg for industrial soil.
- Title 22 metals did not exceed USEPA commercial/industrial RSLs with the exception of arsenic. Three samples reported arsenic above the DTSC upper limit for background of 12 mg/kg (1278-146-0 at 14 mg/kg, 1278-146-1.5 at 19 mg/kg, and 1278-147-1.5 at 18 mg/kg). The UCL95 was calculated to be 6.4 mg/kg, which is below the DTSC upper limit for background in the Los Angeles area (DTSC 2008).

With exception to one lead sample reporting a concentration greater than the DTSC-SL for industrial soil, the soil sample analytical results reported concentrations of constituents of concern substantially lower than the USEPA health screening levels (RSLs) or within the range of expected urban background levels. As such, the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant incremental increase in health risk or at concentrations above hazardous waste thresholds. No further investigation is recommended for this parcel.

NB Strip Parcel

- Detected concentrations of TPH, VOCs, and chlorinated herbicides did not exceed USEPA commercial/industrial RSLs.
- Title 22 metals did not exceed USEPA commercial/industrial RSLs with the exception of arsenic and total lead. Arsenic concentrations were detected above the USEPA commercial/industrial RSL, but were below the DTSC upper limit for background of 12 mg/kg (DTSC 2008).
- Lead concentrations exceeded the DTSC-SL, USEPA commercial/industrial RSL and the California total threshold limit concentration in one sample (1278-165-0 at 2,500 mg/kg); however, the reported detection is a statistical outlier (Appendix G). Excluding the outlier, the total lead UCL95 was calculated to be 214 mg/kg (which is below the DTSC-SL for industrial soils).

The soil sample analytical results reported concentrations of constituents of concern substantially lower than the DTSC-SL for industrial soils, USEPA health screening levels (RSLs) or within the range of expected urban background levels with the exception of total lead. The UCL95 for total lead is below the DTSC-SL for industrial soils and the nonresidential RSL. Arsenic was reported below the DTSC upper limit of background for the Los Angeles area. Based on these results the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant incremental increase in health risk to nonresidential receptors. No further investigation is recommended for this parcel at this time.

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1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

At the request of the California Department of Transportation (Caltrans) District 7, a site investigation (SI) was conducted to evaluate the potential presence of certain hazardous constituents of concern in soils at four parcels along Interstate 405 (I-405) near the Getty Center in Los Angeles County, California.

Soil investigations were performed at the following four parcels (see Figures 1 through 8):

1. North Canyon (Staging) Parcel;
2. North-North Canyon (Debris) Parcel;
3. The Southbound (SB) Strip Parcel along I-405 immediately outside of barrier/retaining wall between Church Lane and Getty Center Drive (stations 1753+47 to 1806+60); and
4. The Northbound (NB) Strip Parcel along I-405 immediately outside of retaining wall (stations 1802+00 to 1812+00, which was expanded to station 1795+00 to the south and station 1824+50 to the north).

The work was conducted pursuant to the provisions in Agreement 07A3322, and with Stantec's proposal dated February 12, 2015 attached to the Task Order No. 23. Caltrans issued the notice to proceed on February 13, 2015.

1.2 PURPOSE AND OBJECTIVES

The objective of the SI is to assess potential hazardous material concentrations in support of hazardous waste clearance and land parcel transactions between the State and the Getty Center.

1.3 BACKGROUND

In a 2011 agreement between Caltrans, LA County Metro and the Getty Center, Caltrans was tasked to conduct a site investigation on specific land parcels to support land transactions between Getty Center and the State. The first draft work plan was prepared by URS Corporation (URS) dated January 2, 2014. Following discussions between the State and Getty Center, URS submitted revised sample location maps in February 2015, which formed the basis of the Task Order 23 scope of work between Caltrans and its environmental consultant, Stantec Consulting Services Inc. (Stantec). The final work plan prepared by URS was dated March 25, 2014.

As the Site Investigation being carried out, Stantec crews ran into a variety of field conditions which required adjustments to the scope of work. Stantec reported the field situations, and Caltrans and Getty's staff worked together in addressing these changes. For details, see Section 4.3 "Deviations from Task Order Scope of Work".

2.0 STUDY AREA SETTING

This section describes the project setting including a description of the Study Area, the physiographic setting of the Study Area, the geology and hydrogeology, and a description of the area around the Study Area.

2.1 STUDY AREA DESCRIPTION

The Study Area consists of four separate land parcels: (Figures 1 to 8)

1. North Canyon (Staging) Parcel;
2. North-North Canyon (Debris) Parcel;
3. The SB Strip Parcel along I-405 immediately outside the barrier/retaining wall between Church Lane and Getty Center Drive (stations 1753+47 to 1806+60); and
4. The NB Strip Parcel along I-405 immediately outside the retaining wall (stations 1802+00 to 1812+00, which was expanded to station 1795+00 to the south and station 1824+50 to the north).

2.2 PHYSIOGRAPHIC SETTING

The topography along I-405 slopes easterly as the alignment descends south from an approximate elevation of 730 feet above mean sea level (amsl) when crossing the Santa Monica Mountains to an approximate elevation of 520 feet amsl near the Church Lane Bridge overcrossing (USGS, 1966 [photorevised 1981]).

2.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Study Area is located within the Transverse Ranges Geomorphic Province of California, within the Los Angeles Basin. The Study Area is underlain by the lower Pleistocene Saugus Formation, and Pleistocene and Holocene age alluvium. Holocene age alluvium consists primarily of coarse-grained unsorted gravel and sand deposited by coalescing alluvial fans emanating from the surrounding highlands. The Saugus Formation is composed of continental and shallow marines (Sunshine Ranch Member) deposits of conglomerates, sands, silts, and clays, with permeability less than that of the Pleistocene alluvium (CDCDMG, 1986).

According to DWR's Bulletin 118 (California Department of Water Resources (DWR, 2004), the Study Area lies in the Coastal Plain of Los Angeles Groundwater Basin (Hollywood Subbasin) within the South Coast Hydrologic Region. The Hollywood Subbasin underlies the northeastern part of the Coastal Plain of Los Angeles Groundwater Basin. The subbasin is bounded on the north by Santa Monica Mountains and the Hollywood fault, on the east by the Elysian Hills, on the west by the Inglewood fault zone, and on the south by the La Brea High, formed by an anticline that brings impermeable rocks close to the surface. Surface drainage flows southward to join Ballona Creek, then westward to the Pacific Ocean (DWR, 2004).

2.4 STUDYAREA VICINITY

The area surrounding the Study Area along I-405 is comprised largely of commercial and residential properties interspersed with undeveloped mountainous areas along the Caltrans right of way (ROW).

3.0 SCOPE OF WORK

This section describes the scope of work presented in the task order proposal. The task order served as the Work Plan for the SI. The scope of the SI consisted of the general elements described below. Deviations from this scope of work are described in Section 4.3.

- Pre-field activities
  - Development of a site specific health and safety plan;
  - Notification to Underground Service Alert (USA) for inquiry identification numbers; and
  - Coordination of equipment and subcontractors.

- Field Investigations
  - Implementation of traffic control at each location;
  - Advancement of 62 hand auger borings to a depth of four feet below ground surface (bgs) with samples collected at surface, 1.5, and 3.5 feet bgs;
  - Collection and preservation of soil samples from each boring;
  - Collection of field quality control samples;
  - Boring location survey using global positioning system (GPS);
  - Borehole abandonment; and
  - Transport and disposal of investigation derived wastes.

- Laboratory analysis of select soil samples

  <u>North Canyon (Staging) Parcel</u>
  - Samples will be collected from a total of 10 soil borings, plus one called "BG-1";
  - Total petroleum hydrocarbons calculated as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), and total petroleum hydrocarbons as extended range organics (TPH-o) by United States Environmental Protection Agency (USEPA) Method 8015B (modified);
  - Volatile organic compounds (VOCs) by USEPA Method 8260B/5035;
  - Total lead by USEPA Method 6010B; and
  - Asbestos containing material (ACM) by polarized light microscopy (PLM).

  <u>North-North Canyon (Debris) Parcel</u>
  - Samples will be collected from a total of nine soil borings;
  - TPH-g, TPH-d, and TPH-o by USEPA Method 8015B (modified);
  - Semi-volatile organic compounds (SVOCs) by USEPA Method 8270B;
  - Title 22 metals (including total lead) by USEPA Method 6010B/7471A;
  - Polychlorinated biphenyls (PCBs) by USEPA Method 8081A; and
  - ACM by PLM.

SB Strip Parcel

- Samples will be collected from a total of 36 soil borings along the southbound side of the I-405;
- TPH-g, TPH-d, and TPH-o by USEPA Method 8015B (modified);
- VOCs by USEPA Method 8260B/5035;
- Title 22 metals (including total lead) by USEPA Method 6010B/7471A; and
- Chlorinated herbicides by USEPA Method 8151A.

NB Strip Parcel

- Samples will be collected from seven soil borings along the northbound side of I-405;
- TPH-g, TPH-d, and TPH-o by USEPA Method 8015B (modified);
- VOCs by USEPA Method 8260B/5035;
- Title 22 metals (including total lead) by USEPA Method 6010B/7471A; and
- Chlorinated herbicides by USEPA Method 8151A.

- Data validation and report preparation.

4.0 SOIL INVESTIGATION METHODOLOGY

The soil investigation was conducted in general accordance with the methods and requirements of Contract 07A3322, and with Stantec's proposal dated February 12, 2015 attached to Task Order No. 23. The following subsections summarize the methodology implemented in completing the required scope of work. In addition, any deviations from the scope of work are also identified in the following subsections.

4.1 PRE-FIELD ACTIVITIES

Prior to beginning field work, the scope of work was reviewed and approved by the Caltrans. Proposed sample locations designated on site plans by Caltrans were checked for accessibility via a desktop review due to the rushed project schedule.

As required by Task Order No. 23, a site-specific Health and Safety Plan (HASP) was prepared in accordance with California Occupational Safety and Health Administration (Cal OSHA) requirements to guide field sampling activities. The HASP describes health and safety procedures and was submitted to Caltrans for approval prior to initiating field activities. A pre-field tail gate health and safety meeting was conducted at the Study Area with field personnel prior to beginning work each day. During the tail gate meeting, daily work activities and health and safety issues were discussed, including the following:

- Field tasks to be conducted throughout the day;
- Project schedule;
- Hazard awareness;
- General health and safety practices, procedures and issues;
- Specific health and safety issues related to the day's work;
- Health and Safety procedures, controls, etc.;
- Engineering controls; personal protective equipment and monitoring;
- Traffic control and safety; and
- Emergency procedures and contacts.

Field documentation of health and safety meetings and monitoring were maintained throughout the duration of field activities. A copy of the completed field forms are provided in Appendix A.

Stantec contacted USA to obtain inquiry identification numbers for the boring locations prior to the start of work. Boring locations in close proximity to each other were combined into one USA inquiry identification number. Locations were pre-marked in the field as required by USA. USA inquiry identification numbers are A50510547, A50510553, A50510568, A50510587, and A50640148.

4.2 FIELD INVESTIGATIONS

Field investigations were conducted on February 18, February 24 through 26, and March 5 and 10, 2015. The weather was sunny throughout each day. There were no weather-related restrictions during the field investigation. The following subsections describe the methodology and procedures followed in conducting field investigations.

4.2.1 *Traffic Control*

Soil borings were located within existing Caltrans ROW. The North Canyon and North-North Canyon parcels were accessed through Getty Center Drive. Traffic control was not needed for these two sites.

A portion of the SB Strip Parcel was accessed from 405 Freeway southbound mainline. To improve Stantec workers safety, traffic warning signage, cones and truck flashers were used to alert drivers of workers or parked Stantec vehicle along the shoulders. Traffic control consisted of the following elements:

- W21-5 "Shoulder Work" signs were placed not less than 500 feet and not more than one mile from each borehole. The signs were moved as work progressed to assure that the signage follows the work. Signs were placed at the top of hills or ahead of roadway curves to improve visibility to drivers.
- High visibility reflective cones were placed along the pavement edge at least 100 feet from the work area.
- Work trucks were equipped with flashing amber strobe lights and were positioned as safety barriers between workers and oncoming traffic.

4.2.2 *Soil Borings and Sampling*

Soil borings were advanced using a hand auger and samples were collected from the hand auger bucket at the target sample depth. Most of the boring locations on the SB Strip Parcel had limited access, which required the field crew to hike in and out with sampling collection equipment.

Hand augering at many planned boring locations encountered refusal. When refusal to hand auger advancement was encountered, field personnel made two addtional step-out attempts at each boring location to reach the desired sampling depth. Step-out attempts were made within a two-foot area from the original boring location. Step-out attempts were made at several boring locations due to refusal to advancement in the original borehole.

Boring locations are shown on Figures 2 through 8. Boring coordinates are provided in Appendix B and a photographic log is provided in Appendix F. The following paragraphs summarize field sample protocols.

4.2.3 *Sample Collection and Preservation*

Soil samples were collected from the surface to 0.5 feet bgs, one to 1.5 feet bgs, and 3.5 to 4 feet bgs at the designated boring locations, unless refusal prevented sample collection at the target depths.

Samples were collected from the hand auger bucket, a portion of the sample was extracted from the bucket via USEPA Method 5035 with Terra Core samplers, the remaining portion was discharged to a clean ziplock one (1) gallon bag, manually homogenized, and then discharged to eight-once laboratory certified clean glass jars. Soil cuttings were placed beside the borehole during hand augering activities. Once the final sample was collected, excess soil cuttings were placed in the borehole.

Upon sampling at each depth interval, the soil samples were visually examined and logged in accordance with the latest edition of the Soil & Rock Logging Classification Manual (Field Guide), State of California, Department of Transportation, Engineering Service Center, Office of Structural Foundations. A summary of the soil classifications are presented on the boring logs in Appendix C.

Each sample jar was labeled with a specific sample identification (I.D.), boring I.D., project I.D., EA number, sample date, and sample time, and then placed in an ice-filled cooler. Each sample was also recorded on a chain-of-custody (CoC) form and delivered to an environmental laboratory for analysis.

4.2.4 *Boring Locations*

All boring locations were identified and plotted on a field map with a unique boring I.D. number to represent each borehole. In addition, the spatial coordinates for each borehole were obtained using a handheld field GPS Trimble unit and recorded on field data sheets. The latitude and longitude for each boring are provided in Appendix B. Boring locations are shown on Figures 2 through 8.

4.2.5 *Decontamination*

All sampling equipment was decontaminated prior to advancing to the next sample depth within each borehole using a non-phosphate detergent solution and double-rinsed with distilled water.

4.2.6 *Borehole Abandonment*

Due to the shallow depths of the borings, excess soil cuttings were replaced in the borehole and tamped to keep soils from migrating away from the borehole.

4.2.7 *Investigation Derived Wastes*

All IDW were disposed in accordance with USEPA publication OSWER Directive 9345.3-02 entitled "Management of Investigation-Derived Waste During Site Inspections" as specified in Contract 07A3322, Method 17. Used and soiled personal protective equipment (PPE) and decontamination solid waste (i.e., used gloves, paper towels, etc.) were bagged and disposed to the municipal trash.

4.2.8 *Field Quality Assurance/Quality Control*

An equipment blank was collected at a rate of one for every ten samples to evaluate the adequacy of field decontamination efforts. The equipment blanks were collected after decontaminating sampling equipment by pouring deionized water over the sampling equipment and collecting the water in appropriate sample containers. The equipment blanks were analyzed for the same suite of constituents as the ten soil samples collected prior to collecting the equipment blank (Title 22 metals, TPH, SVOCs, PCBs, and chlorinated herbicides).

4.3 DEVIATIONS FROM TASK ORDER SCOPE OF WORK

Field conditions necessitated substantial modifications to the originally planned scope of work. Stantec reported adverse field conditions and requested approval of adjustments to the scope of work in a timely manner. Caltrans project manager worked with Getty Center staff, discussed the circumstances and approved the requested adjustments. The following describe deviations from the original task order scope of work:

1. One soil boring (1278-119), which was noted on URS map as "background sample BG-1 to be located approximately 200 feet due west", was identified by a Getty representative not to be on Getty Property. After receiving written consent from Getty's representative, the Caltrans project manager directed Stantec to eliminate this location from the investigation.

2. For North Canyon Parcel, refusal was met in all but one boring location and, despite multiple attempts; hand auguring could not penetrate deeper than one foot below the surface. As a result, only surface samples were collected at these locations. The exception was boring 1278-110, where two samples were analyzed, at surface and 1.5 feet bgs.

3. At North-North Canyon Parcel, refusal was met in all boring locations and hand auguring was unable to penetrate deeper than one foot below the surface. As a result, only surface samples were collected at these locations.

4. For the SB Strip Parcel, three borings (1278-124 through 1278-126) were removed from the scope of work due to inaccessibility with no option of relocating these

borings. Also due to accessibility reasons, six borings (1278-127, 1278-128, and 1278-131 through 1278-134) were relocated from the originally planned locations. In addition, refusal was met at one foot bgs or less for borings 1278-120, 1278-122, 1278-123, and 1278-128; at two feet for borings 1278-121, 1278-131, 1278-137, 1278-139, at two and half feet for boring 1278-154; and at three feet for boring 1278-150.

5. At NB Strip Parcel, adjustments to the scope of work were approved by the Caltrans project manager, with written consent from Getty, due to a conflict with landscaping work by Getty's contractors. From the scope of work, six borings (1278-156 through 1278-161) were removed. Seven new borings (1278-163 through 1278-169)—two at south of the South Garden Wall and five north of the North Garden Wall—were added to substitute for the eliminated borings. Among these newly added locations, refusal was encountered at one foot bgs or less by two borings (1278-162 and 1278-164), at two feet by four borings (1278-165 through 1278-168), and at two and half feet by one boring (1278-163).

In summary, the original planned scope of work was substantially modified due to adverse field conditions. The total number of borings actually sampled in the field amounted to 59, compared to 62 that had been planned. Out of 59 borings, 34 borings reached refusal at depths less than the planned target depth (25 at one foot bgs or less, eight at two feet bgs, two at two and half feet bgs, and one at three feet bgs). As a result, the total number of samples collected was 97.

5.0 LABORATORY ANALYSIS

A total of 97 soil samples were collected from 59 borings advanced in the Study Area and submitted under CoC to Advanced Technology Laboratories (ATL). ATL is certified through the California Environmental Laboratory Accreditation Program (ELAP) to conduct the analyses required in this task order. The lab was directed to perform the following analyses:

- *Total petroleum hydrocarbons (TPH) by USEPA test method 8015B (modified)*—used to evaluate total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), and total petroleum hydrocarbons as extended range organics (TPH-o) concentrations against the USEPA Region 9 Regional Screening Levels (RSLs) for industrial/commercial exposure to soil.

- *Total lead by USEPA test method 6010B*—used to evaluate total lead concentrations against USEPA RSLs, California Department of Toxic Substances Control-modified Screening Levels (DTSC-SLs) for industrial soils, and California hazardous waste total threshold limit concentration (TTLC).

- *Title 22 metals (USEPA test method 6010B/7470)*—select samples were analyzed for the full suite of Title 22 metals (except for lead) for characterization purposes and comparison against USEPA RSLs and California hazardous waste TTLC.

- *Volatile organic compounds (VOC) by USEPA test method 6010B and 7471A*—used to evaluate VOC analyte concentrations against the USEPA commercial/industrial RSLs and California hazardous waste TTLC.

- *Semi-volatile organic compounds (SVOCs) by USEPA test method 8015M*—used to evaluate SVOC analyte concentrations against the USEPA commercial/industrial RSLs and California hazardous waste TTLC.

- *Chlorinated herbicides USEPA test method 8151A*—used to evaluate chlorinated herbicide concentrations against the USEPA commercial/industrial RSLs.

- *Polychlorinated biphenyls (PCBs) by USEPA test method 8082*—used to evaluate PCB concentrations against the USEPA commercial/industrial RSLs.

- *Asbestos containing materials (ACMs) by polarized light microscopy*—used to evaluate the presence or absence of ACMs.

Copies of the laboratory CoCs and analytical reports are attached in Appendix D.

6.0 INVESTIGATIVE RESULTS

This section describes observations, findings and results of field investigations and laboratory analysis.

6.1 FIELD FINDINGS

The soils encountered during sampling were generally dark grayish brown, dark yellowish brown, or yellowish brown in color and consisted primarily of silty gravel, gravelly silt, silt with gravel, sandy silt, sandy silt with gravel, silty sand, silty sand with gravel, or well graded sand with gravel. No chemical odors or evidence of staining were noted in the soil samples. Groundwater was not encountered in any of the boreholes and not expected to be present in shallow soils.

6.2 ANALYTICAL RESULTS

A summary of the analytical results is presented in Tables 1 through 6. Copies of the laboratory reports and CoC forms are included in Appendix D.

6.2.1 *Total Petroleum Hydrocarbons*

A total of 97 soil samples were analyzed for TPH by USEPA test method 8015M and are presented in Table 1.

North Canyon (Staging) Parcel

A total of 11 samples from ten borings were collected from this parcel. TPH-g concentrations were all reported below the method detection limit. TPH-d concentrations ranged from 3.2J to 170J milligram per kilogram (mg/kg). TPH-o concentrations ranged from 6.4J to 680J mg/kg.

North-North Canyon (Debris) Parcel

A total of eight samples from eight borings were located in this parcel. TPH-g concentrations were all reported below the method detection limit. TPH-d concentrations ranged from 7.1J to 85 mg/kg. TPH-o concentrations ranged from 59J to 650 mg/kg.

SB Strip Parcel

A total of 64 samples from 33 borings were located in this parcel. TPH-g concentrations were all reported below the method detection limit. TPH-d concentrations ranged from non-detect (<1.0UJ) to 100 mg/kg. TPH-o concentrations ranged from non-detect (<1.0UJ) to 1,200 mg/kg.

NB Strip Parcel

A total of 14 samples from eight borings were located in this parcel. TPH-g concentrations were all reported below the method detection limit. TPH-d concentrations ranged from 2.3J to 85J mg/kg. TPH-o concentrations ranged from 6.9J to 730J mg/kg.

6.2.2 *Total Lead*

A total of 97 soil samples were analyzed for total lead by USEPA test method 6010B and are presented in Table 1.

North Canyon (Staging) Parcel
A total of 11 samples from ten borings were located in this parcel. Total lead concentrations ranged from 7.1 to 33 mg/kg.

North-North Canyon (Debris) Parcel
A total of eight samples from eight borings were located in this parcel. Total lead concentrations ranged from 11 to 29 mg/kg.

SB Strip Parcel
A total of 64 samples from 33 borings were located in this parcel. Total lead concentrations ranged from 4.6 to 430 mg/kg.

NB Strip Parcel
A total of 14 samples from eight borings were located in this parcel. Total lead concentrations ranged from 9.0 to 2,500 mg/kg.

6.2.3 *Title 22 Metals*

A total of 86 soil samples were analyzed for Title 22 Metals by USEPA test method 6010B and 7471A and are presented in Table 2. For comparison purposes, RSLs and DTSC expected background concentrations for each heavy metal analyte are included in Table 2.

North Canyon (Staging) Parcel
None of the samples collected from this parcel were analyzed for Title 22 metals.

North-North Canyon (Debris) Parcel
A total of eight samples from eight borings were located in this parcel. Arsenic concentrations ranged from 7.9 to 40 mg/kg.

SB Strip Parcel
A total of 64 samples from 33 borings were located in this parcel. Arsenic concentrations ranged from 0.65NJ to 19 mg/kg.

NB Strip Parcel
A total of 14 samples from eight borings were located in this parcel. Arsenic concentrations ranged from 0.20NJ to 9.3 mg/kg.

6.2.4 *Volatile Organic Compounds*

A total of 89 soil samples were analyzed for VOCs by USEPA Method 6010B and 7471A and are presented in Table 3.

North Canyon (Staging) Parcel
A total of 11 samples from ten borings were located in this parcel. Carbon disulfide was reported above the method detection limit.

North-North Canyon (Debris) Parcel
None of the samples collected from this parcel were analyzed for VOCs.

SB Strip Parcel
A total of 64 samples from 33 borings were located in this parcel. The following VOCs were detected: 4-isopropyltoluene, benzene, carbon disulfide, chloroethane, ethyl acetate, ethyl ether, ethylbenzene, methylene chloride, tert-butanol, toluene, and vinyl acetate.

NB Strip Parcel
A total of 14 samples from eight borings were located in this parcel. Carbon disulfide and chloromethane were reported above the method detection limit.

6.2.5 *Semi-volatile Organic Compounds*

A total of eight soil samples were analyzed for SVOCs by USEPA test method 8015M and are presented in Table 4.

North Canyon (Staging) Parcel
None of the samples collected from this parcel were analyzed for SVOCs.

North-North Canyon (Debris) Parcel
A total of eight samples from eight borings were located in this parcel. SVOC concentrations were all reported below the method detection limit.

SB Strip Parcel
None of the samples collected from this parcel were analyzed for SVOCs.

NB Strip Parcel
None of the samples collected from this parcel were analyzed for SVOCs.

6.2.6 *Chlorinated Herbicides*

A total of nine soil samples were analyzed for chlorinated herbicides by USEPA test method 8151A and are presented in Table 5.

North Canyon (Staging) Parcel
None of the samples collected from this parcel were analyzed for chlorinated herbicides.

North-North Canyon (Debris) Parcel
None of the samples collected from this parcel were analyzed for chlorinated herbicides.

SB Strip Parcel
A total of seven samples from seven borings were located in this parcel. In accordance with the Task Order, the samples selected for analysis consist of approximately 20 percent (%) of the total number of collected surface samples. The analyzed samples were chosen at random in the field. Chlorinated herbicides were all reported below the method detection limit.

NB Strip Parcel
A total of two samples from two borings were located in this parcel. In accordance with the Task Order, the samples selected for analysis consist of approximately 20 percent (%) of the total number of collected surface samples. The analyzed samples were chosen at random in the field. Chlorinated herbicides were all reported below the method detection limit.

6.2.7 *Polychlorinated Biphenyls*

A total of eight soil samples were analyzed for PCBs by USEPA test method 8082 and are presented in Table 6.

North Canyon (Staging) Parcel
None of the samples collected from this parcel were analyzed for PCBs.

North-North Canyon (Debris) Parcel
A total of eight samples from eight borings were located in this parcel. PCB concentrations (Aroclor 1262) ranged from non-detect (<2.1) to 14NJ micrograms per kilogram (µg/kg).

SB Strip Parcel
None of the samples collected from this parcel were analyzed for PCBs.

NB Strip Parcel
None of the samples collected from this parcel were analyzed for PCBs.

6.2.8 *Asbestos Containing Materials*

A total of 18 soil samples were analyzed for ACMs by PLM and are presented in Table 6.

North Canyon (Staging) Parcel
A total of 10 samples from ten borings were located in this parcel. ACMs were not reported in any of the samples analyzed.

North-North Canyon (Debris) Parcel
A total of eight samples from eight borings were located in this parcel. ACMs were not reported in any of the samples analyzed.

SB Strip Parcel
None of the samples collected from this parcel were analyzed for ACMs.

NB Strip Parcel
None of the samples collected from this parcel were analyzed for ACMs.

6.3 DATA VALIDATION

6.3.1 *Field QA/QC*

Quality assurance and quality control (QA/QC) procedures were performed in general accordance with the Task Order No. 23 notice to proceed. QA/QC procedures included analyses of equipment blanks. Low concentrations of arsenic, barium, beryllium, cadmium, chromium, copper, molybdenum, nickel, silver, vanadium, zinc, and TPH-o were detected in the equipment blanks. The low levels may be attributed to the metal sampling equipment from which the sample was derived, from dust in the air during sample collection or potentially from laboratory artifact. Due to the low concentrations detected near the method detection limits, these levels have little impact on the quality of the data or recommendations provided in this report.

6.3.2 *Laboratory QA/QC*

Prior to submitting soil samples to the laboratory, the CoC documentation was reviewed for accuracy and completeness. The laboratory reports were cross-checked with the chain-of-custody forms to confirm accurate transposing of sample information.

Laboratory QA/QC data (method blanks, laboratory control samples and duplicates, matrix spike samples and duplicates) were reviewed for compliance with QA/QC objectives. Stantec reviewed the laboratory QA/QC (duplicates, laboratory control, matrix spike and matrix spike duplicates). Other than minor issues related to natural heterogeneity of metals in soil duplicate sample analyses, and very low detections of certain metals in blank samples as discussed above, QA/QC data are within expected control limits and considered valid for the intended use. The following summarizes identified data QA/QC issues and associated remedy.

1. Method Blanks: Several metals analytes (chromium, copper, lead, nickel and zinc) were reported in method blanks at very low concentrations. Associated

sample results below the blank concentrations are flagged "UJB" in the data tables with the detection limit reported as the method blank concentration. Sample results greater than the blank concentration are flagged "JB". Sample results greater than 10 times the blank concentration require no qualifying action.

2. Equipment Blanks: Several metals (arsenic, barium, beryllium, cadmium, chromium, copper, molybdenum, nickel, silver, vanadium, and zinc) and TPH-o were reported in equipment blanks at very low levels, and may be reflective of one or more of the following sources: 1) laboratory method blank detections, 2) ambient artifact (e.g., dust), 3) incomplete decontamination, 4) contaminated decontamination rinse water, and/or 5) artifact from contact with metal sampling equipment. The reported detections are very low and do not appear to have adversely influenced sample results.

For Laboratory Control Samples (LCS) and other QA/QC details, see Appendix E Based on the validation process, the data contained herein are adequate for the purposes of this study. The validated data are summarized in attached tables with appropriate qualifiers. A copy of the data validation report is included as Appendix E.

7.0 CONCLUSIONS AND RECOMMENDATIONS

At the request of the Caltrans District 7, a site investigation was conducted to evaluate the potential presence of certain hazardous constituents of concern in soils on four parcels along I-405 near the Getty Center in Los Angeles County, California. Soil investigations were performed at the following four areas which comprise the Study Area: North Canyon (Staging) Parcel, North-North Canyon (Debris) Parcel, the SB Strip Parcel, and the NB Strip Parcel.

A total of 59 borings were advanced. The number of borings deviated from the original scope of work which called for 62 borings, due to encountered field conditions. The number of borings was modified as follows:

- One soil boring (1278-119), also called "BG-1", was identified by a Getty representative to not be on the Getty Property and was removed from the scope of work.
- Three borings (1278-124 through 1278-126), in the SB Strip Parcel, were removed from the scope of work due to inaccessibility with no relocation options.
- Six of the seven borings (1278-156 through 1278-161), at the NB Strip Parcel, were removed from the scope of work due to a conflict with the landscaping conducted by Getty's Contactor.
- Seven borings (1278-163 through 1278-169) were added to this task order in the NB Strip Parcel by Caltrans.

In addition to the above modifications, six borings (1278-127, 1278-128, and 1278-131 through 1278-134) were relocated because the originally planned locations were inaccessible.

Soil samples were collected at surface to 0.5 feet bgs (surface), one to 1.5 feet bgs (1.5-foot) and 3.5 to 4.0 feet bgs (3.5-foot), unless refusal was encountered prior to reaching the target depth. Field personnel made three attempts at each boring location to reach the desired sampling depth. Step-out attempts were made within a two-foot area from the original boring location. Step-out attempts were made at several boring locations due to refusal to advancement in the original borehole.

Based on the findings of the investigations, the following are concluded for each of the four areas of investigation:

<u>North Canyon (Staging) Parcel</u>

- Detected concentrations of TPH and VOCs did not exceed USEPA RSLs for commercial/industrial exposure.
- Detected concentrations of total lead were reported at concentrations below 50 mg/kg, below the USEPA commercial/industrial RSL and below the DTSC-SL for industrial soil.

- Asbestos was not detected in any of the samples tested.

The soil sample analytical results reported constituents of concern levels substantially lower than the DTSC-SLs and USEPA health screening levels (RSLs) or within the range of expected urban background levels. As such, the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant health risk or at concentrations above hazardous waste thresholds. No further investigation is recommended for this parcel.

North-North Canyon (Debris) Parcel

- Detected concentrations of TPH, VOCs, SVOCs, and PCBs did not exceed USEPA commercial/industrial RSLs.
- Detected concentrations of total lead were reported at concentrations below 50 mg/kg, below the USEPA commercial/industrial RSL and below the DTSC-SL for industrial soil.
- Title 22 metals did not exceed USEPA commercial/industrial RSLs with the exception of arsenic (3.0 mg/kg). One sample (1278-114-0) reported arsenic at 40 mg/kg which exceeds the DTSC upper limit for background of 12 mg/kg. The reported detection at 40 mg/kg is a statistical outlier at the 10 percent significance level. Excluding the statistical outlier, the remaining detected concentrations are below the DTSC upper limit for background of 12 mg/kg in the Los Angeles area (DTSC 2008).
- Asbestos was not detected in any of the samples tested.

The soil sample analytical results reported concentrations of constituents of concern substantially lower than the DTSC-SLs and USEPA health screening levels (RSLs) or within the range of expected urban background levels, with the exception of one arsenic outlier. As such, the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant incremental increase in health risk or at concentrations above hazardous waste thresholds. No further investigation is recommended for this parcel.

SB Strip Parcel

- Detected concentrations of TPH, VOCs, and chlorinated herbicides did not exceed USEPA commercial/industrial RSLs.
- Detected concentrations of total lead were reported at concentrations below USEPA commercial/industrial RSL and below the TTLC of 1,000 mg/kg. One sample (1278-146-1.5 at 430 mg/kg) was reported at a concentration above the DTSC-SL of 320 mg/kg for industrial soil.
- Title 22 metals did not exceed USEPA commercial/industrial RSLs with the exception of arsenic. Three samples reported arsenic above the DTSC upper limit for background of 12 mg/kg (1278-146-0 at 14 mg/kg, 1278-146-1.5 at 19 mg/kg, and 1278-147-1.5 at 18 mg/kg). The UCL95 was calculated to be 6.4

mg/kg, which is below the DTSC upper limit for background in the Los Angeles area (DTSC 2008).

With exception to one lead sample reporting a concentration greater than the DTSC-SL for industrial soil, the soil sample analytical results reported concentrations of constituents of concern substantially lower than the USEPA health screening levels (RSLs) or within the range of expected urban background levels. As such, the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant incremental increase in health risk or at concentrations above hazardous waste thresholds. No further investigation is recommended for this parcel.

NB Strip Parcel

- Detected concentrations of TPH, VOCs, and chlorinated herbicides did not exceed USEPA commercial/industrial RSLs.
- Title 22 metals did not exceed USEPA commercial/industrial RSLs with the exception of arsenic and total lead. Arsenic concentrations were detected above the USEPA commercial/industrial RSL, but were below the DTSC upper limit for background of 12 mg/kg (DTSC 2008).
- Lead concentrations exceeded the DTSC-SL, USEPA commercial/industrial RSL and the California total threshold limit concentration in one sample (1278-165-0 at 2,500 mg/kg); however, the reported detection is a statistical outlier (Appendix G). Excluding the outlier, the total lead UCL95 was calculated to be 214 mg/kg (which is below the DTSC-SL for industrial soils).

The soil sample analytical results reported concentrations of constituents of concern substantially lower than the DTSC-SL for industrial soils, USEPA health screening levels (RSLs) or within the range of expected urban background levels with the exception of total lead. The UCL95 for total lead is below the DTSC-SL for industrial soils and the nonresidential RSL. Arsenic was reported below the DTSC upper limit of background for the Los Angeles area. Based on these results the parcel does not appear to be impacted with concentrations of constituents of concern at levels that pose a significant incremental increase in health risk to nonresidential receptors. No further investigation is recommended for this parcel at this time.

8.0 REFERENCES

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TABLES

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS - TOTAL LEAD and TPH
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

Boring	Sample ID[1]	SAMPLE DEPTH[2]	Sample Date	TOTAL PETROLEUM HYDROCARBONS[3]			Total Lead[6] (mg/kg)
				TPH-g (C4-C8) (mg/kg)	TPH-d (C9-C22) (mg/kg)	TPH-o (C23-C32) (mg/Kg)	
USEPA RSL - Industrial Soils[4]				*420*	*600*	*33000*	*800*
DTSC HERO Screening Levels - Industrial Soils[5]				--	--	--	*320*
California TTLC				--	--	--	*1,000*
NORTH CANYON (STAGING) PARCEL							
1278-101	1278-101-0	Surface	2/24/2015	<0.05	40	280	12
1278-102	1278-102-0	Surface	2/24/2015	<0.05	15	110	7.4
1278-103	1278-103-0	Surface	2/24/2015	<0.05	81	480	33
1278-104	1278-104-0	Surface	2/24/2015	<0.05	54	270	12
1278-105	1278-105-0	Surface	2/24/2015	<0.05	170 J	370 J	7.6
1278-106	1278-106-0	Surface	2/24/2015	<0.05	81 J	510 J	10
1278-107	1278-107-0	Surface	2/24/2015	<0.05	78 J	680 J	13
1278-108	1278-108-0	Surface	2/24/2015	<0.05	33 J	240 J	12
1278-109	1278-109-0	Surface	2/24/2015	<0.05	47 J	430 J	12
1278-110	1278-110-0	Surface	2/24/2015	<0.05	3.4 J	6.4 J	10
	1278-110-1.5	1.5-Foot	2/24/2015	<0.05	3.2 J	7.1 J	7.1
ORTH-NORTH CANYON (DEBRIS) PARCEL							
1278-111	1278-111-0	Surface	2/24/2015	<0.20 UJ	51	430	28
1278-112	1278-112-0	Surface	2/24/2015	<0.20 UJ	32	240	29
1278-113	1278-113-0	Surface	2/24/2015	<0.20 UJ	62	560	25
1278-114	1278-114-0	Surface	2/24/2015	<0.20 UJ	85	550	25
1278-115	1278-115-0	Surface	2/24/2015	<0.20 UJ	7.1 J	59 J	24
1278-116	1278-116-0	Surface	2/24/2015	<0.20 UJ	50	480	11
1278-117	1278-117-0	Surface	2/24/2015	<0.20 UJ	16	130	22
1278-118	1278-118-0	Surface	2/24/2015	<0.20 UJ	76	650	25
1278-119	No Sample - Not on Property						
SOUTHBOUND STRIP PARCEL							
1278-120	1278-120-0	Surface	2/25/2015	<0.05	84	550	18
1278-121	1278-121-0	Surface	2/25/2015	<0.05	60	520	94
	1278-121-1.5	1.5-Foot	2/25/2015	<0.05	3.2	33	22
1278-122	1278-122-0	Surface	2/25/2015	<0.05	50	570	35
1278-123	1278-123-0	Surface	2/25/2015	<0.05	100	1000	26
1278-124	No Sample - Inaccessible						
1278-125	No Sample - Inaccessible						
1278-126	No Sample - Inaccessible						
1278-127	1278-127-0	Surface	3/5/2015	<0.05	2.9 J	5.3 J	28
	1278-127-1.5	1.5-Foot	3/5/2015	<0.05	1.9 J	3.5 J	8.2
1278-128	1278-128-0	Surface	3/5/2015	<0.05	10 J	26 J	74
1278-129	1278-129-0	Surface	2/25/2015	<0.05	1.2 J	6.5 J	110
	1278-129-1.5	1.5-Foot	2/25/2015	<0.05	<1.0 UJ	1.1 J	16

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LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

Boring	Sample ID[1]	SAMPLE DEPTH[2]	Sample Date	TOTAL PETROLEUM HYDROCARBONS[3]				Total Lead[6] (mg/kg)
				TPH-g (C4-C8) (mg/kg)	TPH-d (C9-C22) (mg/kg)		TPH-o (C23-C32) (mg/Kg)	
1278-130	1278-130-0	Surface	2/25/2015	<0.05	3.6 J		34 J	71
	1278-130-1.5	1.5-Foot	2/25/2015	<0.05	<1.0 UJ		1.6 J	24
1278-131	1278-131-0	Surface	3/5/2015	<0.05	2.3 J		5.7 J	51
	1278-131-1.5	1.5-Foot	3/5/2015	<0.05	1.1		2.5	11
1278-132	1278-132-0	Surface	3/5/2015	<0.05	4.5 J		7.0 J	53
	1278-132-1.5	1.5-Foot	3/5/2015	<0.05	<1.0 UJ		1.0 J	8.6
1278-133	1278-133-0	Surface	3/5/2015	<0.05	1.3 J		4.3 J	72
	1278-133-1.5	1.5-Foot	3/5/2015	<0.05	1.0 J		2.2 J	18
1278-134	1278-134-0	Surface	3/5/2015	<0.05	2.0 J		5.7 J	58
	1278-134-1.5	1.5-Foot	3/5/2015	<0.05	<1.0 UJ		1.9 J	9.3
1278-135	1278-135-0	Surface	2/25/2015	<0.05	<1.0 UJ		4.9 J	88
	1278-135-1.5	1.5-Foot	2/25/2015	<0.05	<1.0 UJ		<1.0 UJ	18
1278-136	1278-136-0	Surface	2/25/2015	<0.05	6.1		58	280
	1278-136-1.5	1.5-Foot	2/25/2015	<0.05	<1.0		8.8	71
	1278-136-3.5	3.5-Feet	2/25/2015	<0.05	<1.0 UJ		4.4 J	19
1278-137	1278-137-0	Surface	2/25/2015	<0.05	7.7		48	140
	1278-137-1.5	1.5-Foot	2/25/2015	<0.05	<1.0		2.8	17 J
1278-138	1278-138-0	Surface	2/25/2015	<0.05	2.6		22	52
	1278-138-1.5	1.5-Foot	2/25/2015	<0.05	1.3		18	32
	1278-138-3.5	3.5-Feet	2/25/2015	<0.05	2.2		23	35
1278-139	1278-139-0	Surface	2/25/2015	<0.05	8.6		46	140
	1278-139-1.5	1.5-Foot	2/25/2015	<0.05	1.8		10	59
1278-140	1278-140-0	Surface	2/25/2015	<0.05	3.3		28	36
	1278-140-1.5	1.5-Foot	2/25/2015	<0.05	<1.0 UJ		3.0 J	82
1278-141	1278-141-0	Surface	2/25/2015	<0.05	7.2		59	28
	1278-141-1.5	1.5-Foot	2/25/2015	<0.05	6.0		39	100
1278-142	1278-142-0	Surface	2/25/2015	<0.05	100		1200	120
	1278-142-1.5	1.5-Foot	2/25/2015	<0.05	34		410	40
1278-143	1278-143-0	Surface	2/25/2015	<0.05	28		340	13
1278-144	1278-144-0	Surface	2/25/2015	<0.05	21		210	31
	1278-144-1.5	1.5-Foot	2/25/2015	<0.05	<1.0		6.7	11
1278-145	1278-145-0	Surface	2/25/2015	<0.05	1.2		5.9	17 J
	1278-145-1.5	1.5-Foot	2/25/2015	<0.05	3.4		29	110
1278-146	1278-146-0	Surface	2/25/2015	<0.05	19		180	22
	1278-146-1.5	1.5-Foot	2/25/2015	<0.05	12		29	430
1278-147	1278-147-0	Surface	2/25/2015	<0.05	5.4		55	24
	1278-147-1.5	1.5-Foot	2/25/2015	<0.05	1.9		22	100
1278-148	1278-148-0	Surface	2/25/2015	<0.05	2.9		14	29
	1278-148-1.5	1.5-Foot	2/25/2015	<0.05	15		120	93
1278-149	1278-149-0	Surface	2/24/2015	<0.05	19	J	150 J	73
	1278-149-1.5	1.5-Foot	2/24/2015	<0.05	4.9	J	29 J	21

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EFIS:0700000107 (EA#120301)
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CONTRACT 07A3322

Boring	Sample ID[1]	SAMPLE DEPTH[2]	Sample Date	TOTAL PETROLEUM HYDROCARBONS[3]						Total Lead [6] (mg/kg)
				TPH-g (C4-C8) (mg/kg)		TPH-d (C9-C22) (mg/kg)		TPH-o (C23-C32) (mg/Kg)		
1278-150	1278-150-0	Surface	2/24/2015	<0.05		38	J	380	J	16
	1278-150-1.5	1.5-Foot	2/24/2015	<0.05		4.9	J	56	J	47
	1278-150-3	3-Feet	2/24/2015	<0.05		24	J	300	J	19
1278-151	1278-151-0	Surface	2/24/2015	<0.05		27	J	230	J	68 J
	1278-151-1.5	1.5-Foot	2/24/2015	<0.05		28	J	240	J	61
1278-152	1278-152-0	Surface	2/24/2015	<0.20	UJ	17		48		21
	1278-152-1.5	1.5-Foot	2/24/2015	<0.20	UJ	2.2		5.2		7.0
1278-153	1278-153-0	Surface	2/24/2015	<0.20	UJ	4.5		12		6.8
	1278-153-1.5	1.5-Foot	2/24/2015	<0.20	UJ	3.1		5.8		5.3
1278-154	1278-154-0	Surface	2/24/2015	<0.20	UJ	6.5	J	9.9	J	4.6
	1278-154-1.5	1.5-Foot	2/24/2015	<0.20	UJ	2.2		3.9		10
1278-155	1278-155-0	Surface	2/24/2015	<0.20	UJ	1.1		2.2		15
	1278-155-1.5	1.5-Foot	2/24/2015	<0.20	UJ	<1.0	UJ	2.9	J	5.2
NORTHBOUND STRIP PARCEL										
1278-156	No Sample - Removed from Scope due to Landscaping									
1278-157	No Sample - Removed from Scope due to Landscaping									
1278-158	No Sample - Removed from Scope due to Landscaping									
1278-159	No Sample - Removed from Scope due to Landscaping									
1278-160	No Sample - Removed from Scope due to Landscaping									
1278-161	No Sample - Removed from Scope due to Landscaping									
1278-162	1278-162-0	Surface	3/10/2015	<0.05		12	J	70	J	97
1278-163	1278-163-0	Surface	3/10/2015	<0.05		19	J	150	J	240
	1278-163-1.5	1.5-Foot	3/10/2015	<0.05		10	J	83	J	220
1278-164	1278-164-0	Surface	3/10/2015	<0.05		8.3	J	45	J	270
1278-165	1278-165-0	Surface	3/10/2015	<0.05		50	J	270	J	2500
	1278-165-1.5	1.5-Foot	3/10/2015	<0.05		8.6	J	59	J	270
1278-166	1278-166-0	Surface	3/10/2015	<0.05		6.6	J	43	J	160
	1278-166-1.5	1.5-Foot	3/10/2015	<0.05		4.9	J	35	J	100
1278-167	1278-167-0	Surface	3/10/2015	<0.05		85	J	730	J	250
	1278-167-1.5	1.5-Foot	3/10/2015	<0.05		43	J	360	J	180
1278-168	1278-168-0	Surface	3/10/2015	<0.05		3.2	J	9.7	J	68
	1278-168-1.5	1.5-Foot	3/10/2015	<0.05		3.4	J	12	J	33
1278-169	1278-169-0	Surface	3/10/2015	<0.05		14	J	49	J	270
	1278-169-1.5	1.5-Foot	3/10/2015	<0.05		2.3	J	6.9	J	9.0
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)										
Day 1	EBA-1-022415	QA/QC*	2/24/2015	<0.05		<0.05	UJ	<0.05	UJ	<0.0050
	EBA-2-022415	QA/QC*	2/24/2015	<0.05		<0.05		<0.05		<0.0050
	EBA-3-022415	QA/QC*	2/24/2015	<0.05		<0.05		<0.05		<0.0050
	EBB-1-022415	QA/QC*	2/24/2015	<0.05	UJ	<0.05	UJ	<0.05	UJ	<0.0050
	EBB-2-022415	QA/QC*	2/24/2015	<0.05	UJ	<0.05	UJ	<0.05	UJ	<0.0050
	EBB-3-022415	QA/QC*	2/24/2015	<0.05	UJ	<0.05	UJ	<0.05	UJ	<0.0050

TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS - TOTAL LEAD and TPH
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

Boring	Sample ID[1]	SAMPLE DEPTH[2]	Sample Date	TOTAL PETROLEUM HYDROCARBONS[3]			Total Lead[6] (mg/kg)
				TPH-g (C4-C8) (mg/kg)	TPH-d (C9-C22) (mg/kg)	TPH-o (C23-C32) (mg/Kg)	
Day 2	EBB-1-022515	QA/QC*	2/25/2015	<0.05	<0.05	<0.05	<0.0050
	EBB-2-022515	QA/QC*	2/25/2015	<0.05	<0.05 UJ	<0.05 UJ	<0.0050
	EBB-3-022515	QA/QC*	2/25/2015	<0.05	<0.05	<0.05	<0.0050
	EBA-1-022515	QA/QC*	2/25/2015	<0.05	<0.05	<0.05	<0.0050
	EBA-2-022515	QA/QC*	2/25/2015	<0.05	<0.05	<0.05	<0.0050
	EBA-3-022515	QA/QC*	2/25/2015	<0.05	<0.05	<0.05	<0.0050
Day 3	EB-1-030515	QA/QC*	3/5/2015	<0.05	<0.05	<0.05	<0.0050
	EB-2-030515	QA/QC*	3/5/2015	<0.05	<0.05	<0.05	<0.0050
Day 4	EB-1-031015	QA/QC*	3/10/2015	<0.05	<0.05 UJ	**0.05** J	<0.0050
	EB-2-031015	QA/QC*	3/10/2015	<0.05	<0.05 UJ	<0.05 UJ	<0.0050

Notes:

RSL = Regional Screening Level

* QA/QC samples consisted of liquid equipment blanks (mg/L)

(1) - Boring identification number/Caltrans Unique ID assigned

(2) - Sample depth reported in feet below the ground surface

- Total Petroleum Hydrocarbons (TPH): TPH-g by EPA Test Method LUFT/GCMS; TPH-d and TPH-o by EPA Test Method 8015M

(4) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in mg/Kg) for VOCs for industrial and residential soil (last updated January 2015) - Traditional Table with a Target Cancer Risk Level of 1.0x10-6 and a Target Hazard Quotient of 1.0.

(5) - California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO), Human Health Risk Assessment (HHRA) Note 3, DTSC-modified Screening Levels (DTSC-SLs) for Lead (in mg/kg) for industrial soil.

(6) Total Lead analysis done using EPA method 6010B. Extraction methods vary.

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

mg/L = milligrams per liter

-- = Not analyzed or not applicable

Bold =Detected above reporting limit

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - TITLE 22 METALS
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	TITLE 22 METALS														
				ANTIMONY	ARSENIC [5]	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC	MERCURY
Regional Screening Levels [3]				*470*	*3.0*	*220,000*	*2,300*	*980*	*--*	*350*	*47,000*	*5,800*	*22,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*	*40*
Southern California Background Levels [4]				*380*	*0.6-12.0*	*133-1400*	*0.25-2.70*	*0.05-1.70*	*23-1579*	*2.7-46.9*	*9.1-96.4*	*0.1-9.6*	*9-509*	*0.015-0.430*	*13.2-39.4*	*9.8-36.2*	*75-288*	*133-236*	*0.05-0.90*
California TTLC (mg/kg)				*500*	*500*	*10,000*	*75*	*100*	*2,500*	*8,000*	*2,500*	*3,500*	*2,000*	*100*	*500*	*700*	*2,400*	*5,000*	*20*
NORTH-NORTH CANYON (DEBRIS) PARCEL																			
1278-111	1278-111-0	Surface	2/24/2015	1.2 NJ	10	90	0.90 NJ	0.67 NJ	33	8.2	29	0.37 NJ	23	1.3	<1.0	<1.0	48	59	0.02 NJ
1278-112	1278-112-0	Surface	2/24/2015	0.89 NJ	9.3	97	0.81 NJ	0.83 NJ	22	6.5	22	1.2	19	1.4	<1.0	<1.0	38	64	0.03 NJ
1278-113	1278-113-0	Surface	2/24/2015	1.2 NJ	10	90	0.88 NJ	0.63 NJ	28	7.6	28	0.62 NJ	21	1.0	<1.0	<1.0	43	59	0.02 NJ
1278-114	1278-114-0	Surface	2/24/2015	0.77 NJ	40	92	0.70 NJ	0.66 NJ	38	7.8	24	0.33 NJ	24	0.99 NJ	<1.0	<1.0	39	67	0.02 NJ
1278-115	1278-115-0	Surface	2/24/2015	0.75 NJ	8.0	46	0.67 NJ	0.62 NJ	28	9.6	29	0.10 NJ	24	0.97 NJ	<1.0	<1.0	37	61	0.02 NJ
1278-116	1278-116-0	Surface	2/24/2015	0.76 NJ	8.8	86	0.72 NJ	0.73 NJ	21	6.3	24	1.1	18	0.91 NJ	<1.0	<1.0	36	64	0.04 NJ
1278-117	1278-117-0	Surface	2/24/2015	1.2 NJ	10	76	0.72 NJ	0.72 NJ	27	9.3	31	0.40 NJ	24	1.4	<1.0	<1.0	41	60	0.04 NJ
1278-118	1278-118-0	Surface	2/24/2015	0.83 NJ	7.9	98	0.70 NJ	0.59 NJ	19	5.9	20	0.49 NJ	18	0.94 NJ	<1.0	<1.0	33	53	0.02 NJ
1278-119	No Sample - Not on Property																		
SOUTHBOUND STRIP PARCEL																			
1278-120	1278-120-0	Surface	2/25/2015	0.99 NJ	9.2	110	0.98 NJ	0.86 NJ	33	7.6	26	0.78 NJ	25	1.1	<1.0	<1.0	54	62	0.05 NJ
1278-121	1278-121-0	Surface	2/25/2015	2.1	7.7	120	1.0	0.90 NJ	25	7.7	40	1.3	21	1.1	<1.0	<1.0	45	150	0.03 NJ
	1278-121-1.5	1.5-Foot	2/25/2015	3.7 J	10 J	110	1.0	0.92 NJ	38	7.6	28	0.62 NJ	30	1.2	<1.0	<1.0	60	73	0.03 NJ
1278-122	1278-122-0	Surface	2/25/2015	1.5 NJ	7.7	100	1.1	0.86 NJ	30	6.5	25	1.0	23	0.99 NJ	<1.0	<1.0	48	74	0.03 NJ
1278-123	1278-123-0	Surface	2/25/2015	1.6 NJ	5.4	82	0.96 NJ	0.63 NJ	14	4.2	17	0.65 NJ	13	0.95 NJ	<1.0	<1.0	35	47	0.03 NJ
1278-124	No Sample - Inaccessible																		
1278-125	No Sample - Inaccessible																		
1278-126	No Sample - Inaccessible																		
1278-127	1278-127-0	Surface	3/5/2015	<2.0 UJ	6.1	40	0.69 NJ	0.88 NJ	14 J	12	19	<1.0	38	<1.0	<1.0	<1.0	22	80	0.01 NJ
	1278-127-1.5	1.5-Foot	3/5/2015	<2.0	3.7	68	0.61 NJ	0.53 NJ	7.8	4.7	9.2	<1.0	11	<1.0	<1.0	<1.0	16	45	0.01 NJ
1278-128	1278-128-0	Surface	3/5/2015	<2.0	7.5	54	0.71 NJ	0.89 NJ	9.0	4.3	14	1.1	14	<1.0	<1.0	<1.0	22	59	0.04 NJ
1278-129	1278-129-0	Surface	2/25/2015	<2.0	5.3	49	0.62 NJ	0.87 NJ	12	5.7	14	0.90 NJ	19	1.0	<1.0	<1.0	24	61	0.02 NJ
	1278-129-1.5	1.5-Foot	2/25/2015	<2.0	5.4	42	0.59 NJ	0.80 NJ	11	5.7	11	0.47 NJ	16	0.98 NJ	<1.0	<1.0	21	51	0.01 NJ
1278-130	1278-130-0	Surface	2/25/2015	0.36 NJ	5.0	51	0.54 NJ	1.1	12	4.5	21	2.6	19	1.1	<1.0	<1.0	23	96	0.04 NJ
	1278-130-1.5	1.5-Foot	2/25/2015	<2.0	5.4	42	0.62 NJ	0.85 NJ	12	5.1	12	0.78 NJ	18	0.97 NJ	<1.0	<1.0	22	51	0.01 NJ
1278-131	1278-131-0	Surface	3/5/2015	<2.0	5.2	53	0.60 NJ	0.92 NJ	11	6.0	14	0.62 NJ	19	<1.0	<1.0	<1.0	22	49	0.01 NJ
	1278-131-1.5	1.5-Foot	3/5/2015	<2.0	4.8	46	0.62 NJ	0.71 NJ	11	5.7	10	0.21 NJ	16	<1.0	<1.0	<1.0	20	45	<0.10
1278-132	1278-132-0	Surface	3/5/2015	<2.0	3.5	48	0.67 NJ	1.3	10	4.1	12	2.0	15	<1.0	<1.0	<1.0	25	45	0.04 NJ
	1278-132-1.5	1.5-Foot	3/5/2015	<2.0	4.7	42	0.75 NJ	0.81 NJ	9.6	7.2	11	0.48 NJ	21	<1.0	<1.0	<1.0	19	45	<0.10
1278-133	1278-133-0	Surface	3/5/2015	<2.0	1.7	29	0.39 NJ	0.62 NJ	6.2	2.7	6.2	0.95 NJ	6.4	<1.0	<1.0	<1.0	17	120	0.02 NJ
	1278-133-1.5	1.5-Foot	3/5/2015	<2.0	1.4	25	0.32 NJ	0.41 NJ	5.5	2.2	4.3	0.58 NJ	5.3	<1.0	<1.0	<1.0	14	26	0.01 NJ
1278-134	1278-134-0	Surface	3/5/2015	<2.0	1.8	29	0.45 NJ	0.80 NJ	7.2	2.8	7.5	0.96 NJ	6.2	0.42 NJ	<1.0	<1.0	17	190	0.01 NJ
	1278-134-1.5	1.5-Foot	3/5/2015	0.40 NJ	1.0	22	0.42 NJ	0.33 NJ	5.1 J	1.8	3.3	0.84 NJ	4.9	<1.0	<1.0	<1.0	14	31 J	0.01 NJ
1278-135	1278-135-0	Surface	2/25/2015	0.35 NJ	1.7	28	0.40 NJ	0.82 NJ	6.9	2.6	7.5	1.4	6.7	0.50 NJ	<1.0	<1.0	17	450	0.02 NJ
	1278-135-1.5	1.5-Foot	2/25/2015	0.83 NJ	0.94 NJ	23	0.48 NJ	0.36 NJ	4.0	1.3	2.3	0.83 NJ	3.4	0.62 NJ	<1.0	<1.0	11	26	<0.10
1278-136	1278-136-0	Surface	2/25/2015	0.75 NJ	3.7	57	0.63 NJ	1.1	16	4.4	23	2.2	14	0.98 NJ	<1.0	<1.0	30	92	0.05 NJ
	1278-136-1.5	1.5-Foot	2/25/2015	0.29 NJ	2.2	32	0.38 NJ	0.61 NJ	6.7	3.2	7.1	1.9	7.4	0.80 NJ	<1.0	<1.0	18	31	0.02 NJ
	1278-136-3.5	3.5-Feet	2/25/2015	<2.0	2.1	31	0.32 NJ	0.50 NJ	6.1	2.3	4.5	1.1	5.2	0.67 NJ	<1.0	<1.0	16	20	0.02 NJ
1278-137	1278-137-0	Surface	2/25/2015	<2.0	5.0	55	0.59 NJ	1.0	14	6.2	20	1.4	17	1.0	<1.0	<1.0	28	82	0.04 NJ
	1278-137-1.5	1.5-Foot	2/25/2015	<2.0	5.2	39	0.60 NJ	0.86 NJ	12	5.5 J	12	1.4 J	19	1.0	<1.0	<1.0	24	49	0.01 NJ
1278-138	1278-138-0	Surface	2/25/2015	<2.0	4.9	52	0.57 NJ	1.1	13	5.3	19	1.5	17	1.1	<1.0	<1.0	27	72	0.03 NJ
	1278-138-1.5	1.5-Foot	2/25/2015	<2.0	4.7	45	0.58 NJ	0.93 NJ	13	5.6	12	1.3	17	0.80 NJ	<1.0	<1.0	25	53	0.02 NJ
	1278-138-3.5	3.5-Feet	2/25/2015	<2.0	4.9	45	0.58 NJ	0.98 NJ	15	7.0	13	1.2	17	0.88 NJ	<1.0	<1.0	25	71	0.03 NJ

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - TITLE 22 METALS
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	TITLE 22 METALS															
				ANTIMONY	ARSENIC [5]	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC	MERCURY
Regional Screening Levels [3]				*470*	*3.0*	*220,000*	*2,300*	*980*	*--*	*350*	*47,000*	*5,800*	*22,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*	*40*
Southern California Background Levels [4]				*380*	*0.6-12.0*	*133-1400*	*0.25-2.70*	*0.05-1.70*	*23-1579*	*2.7-46.9*	*9.1-96.4*	*0.1-9.6*	*9-509*	*0.015-0.430*	*13.2-39.4*	*9.8-36.2*	*75-288*	*133-236*	*0.05-0.90*
California TTLC (mg/kg)				*500*	*500*	*10,000*	*75*	*100*	*2,500*	*8,000*	*2,500*	*3,500*	*2,000*	*100*	*500*	*700*	*2,400*	*5,000*	*20*
1278-139	1278-139-0	Surface	2/25/2015	<2.0	4.5	49	0.61 NJ	1.2	13	5.2	21	1.7	16	1.3	<1.0	<1.0	25	88	0.02 NJ
	1278-139-1.5	1.5-Foot	2/25/2015	<2.0	4.8	42	0.65 NJ	0.92 NJ	12	5.5	13	0.70 NJ	15	0.86 NJ	<1.0	<1.0	22	57	0.01 NJ
1278-140	1278-140-0	Surface	2/25/2015	<2.0	5.6	48	0.77 NJ	1.0	14	5.3	19	0.65 NJ	14	1.6	<1.0	<1.0	26	63	0.01 NJ
	1278-140-1.5	1.5-Foot	2/25/2015	<2.0	4.7	41	0.60 NJ	0.77 NJ	10	7.0	10	0.24 NJ	26	0.89 NJ	<1.0	<1.0	20	46	0.009 NJ
1278-141	1278-141-0	Surface	2/25/2015	0.53 NJ	1.8	35	0.36 NJ	0.66 NJ	6.8	2.3	15	1.5	7.1	0.62 NJ	<1.0	<1.0	17	52	0.03 NJ
	1278-141-1.5	1.5-Foot	2/25/2015	0.66 NJ	5.5	59	0.61 NJ	3.1	20	4.2	25	6.6	29	2.7	<1.0	<1.0	51	83	0.09 NJ
1278-142	1278-142-0	Surface	2/25/2015	2.1	6.2	99	1.1	0.79 NJ	18	5.9	20	0.95 NJ	16	1.2	<1.0	<1.0	40	55	0.02 NJ
	1278-142-1.5	1.5-Foot	2/25/2015	1.1 NJ	5.5	73	0.78 NJ	1.0	17	4.5	24	1.9	16	0.86 NJ	<1.0	<1.0	36	52	0.05 NJ
1278-143	1278-143-0	Surface	2/25/2015	1.3 NJ	7.1	88	0.91 NJ	0.74 NJ	21	7.5	21	0.58 NJ	19	0.81 NJ	<1.0	<1.0	44	46	0.02 NJ
1278-144	1278-144-0	Surface	2/25/2015	0.94 NJ	8.9	91	0.95 NJ	1.3	31	6.6	29	2.5	27	1.3	<1.0	<1.0	54	70	0.05 NJ
	1278-144-1.5	1.5-Foot	2/25/2015	<2.0	7.6	43	0.74 NJ	0.81 NJ	28	8.7	32	<1.0	29	0.90 NJ	<1.0	<1.0	40	59	0.05 NJ
1278-145	1278-145-0	Surface	2/25/2015	0.80 NJ	5.6	70	0.81 NJ	1.7	33	4.3	20	3.9	28	1.5	<1.0	<1.0	55	63	0.05 NJ
	1278-145-1.5	1.5-Foot	2/25/2015	0.26 NJ	6.1	65	0.81 NJ	1.0	26	7.0	24	1.0	20	1.3	<1.0	<1.0	37	54	0.04 NJ
1278-146	1278-146-0	Surface	2/25/2015	0.89 NJ	14	110	0.98 NJ	0.66 NJ	36	8.8	26	<1.0	25	1.1	<1.0	<1.0	51	56	0.02 NJ
	1278-146-1.5	1.5-Foot	2/25/2015	1.3 NJ	19	160	1.6	1.4	59	14	62	0.46 NJ	44	1.6	<1.0	<1.0	90	130	0.04 NJ
1278-147	1278-147-0	Surface	2/25/2015	0.66 NJ	5.7	58	0.70 NJ	0.80 NJ	15	5.0	17	1.1	16	0.85 NJ	<1.0	<1.0	32	53	0.03 NJ
	1278-147-1.5	1.5-Foot	2/25/2015	1.2 NJ	18	130	1.2	0.85 NJ	45	9.1	27	0.29 NJ	30	1.2	<1.0	<1.0	62	69	0.03 NJ
1278-148	1278-148-0	Surface	2/25/2015	1.0 NJ	4.2	140	0.80 NJ	0.89 NJ	13	7.8	14	0.81 NJ	20	0.81 NJ	<1.0	<1.0	30	47	0.04 NJ
	1278-148-1.5	1.5-Foot	2/25/2015	0.34 NJ	6.0	61	0.75 NJ	0.71 NJ	18	4.7	13	0.09 NJ	14	0.68 NJ	<1.0	<1.0	32	89	0.01 NJ
1278-149	1278-149-0	Surface	2/24/2015	1.0 NJ	6.9	77	0.97 NJ	1.1	21	7.4	24	1.8	19	1.3	<1.0	<1.0	40	57	0.03 NJ
	1278-149-1.5	1.5-Foot	2/24/2015	<2.0	11	59	1.1	1.1	35	8.4	43	ND	28	1.6	<1.0	<1.0	54	69	0.03 NJ
1278-150	1278-150-0	Surface	2/24/2015	1.3 NJ	4.6	92	0.91 NJ	0.66 NJ	15	6.2	17	0.33 NJ	12	1.0	<1.0	<1.0	41	37	0.02 NJ
	1278-150-1.5	1.5-Foot	2/24/2015	0.81 NJ	7.2	77	0.80 NJ	0.73 NJ	19	7.4	30	0.17 NJ	19	1.0	<1.0	<1.0	38	55	0.01 NJ
	1278-150-3	3-feet	2/24/2015	1.4 NJ	7.5	100	1.1	0.77 NJ	25	7.5	33	0.19 NJ	20	1.0	<1.0	<1.0	49	56	0.02 NJ
1278-151	1278-151-0	Surface	2/24/2015	<2.0	6.4	96	0.92 NJ	1.4 NJ	24	7.8	26	1.6 NJ	23	1.0 NJ	<2.0	<2.0	44	89 J	0.03 NJ
	1278-151-1.5	1.5-Foot	2/24/2015	1.2 NJ	6.6	90	0.93 NJ	1.2	26	6.2	26	1.9	27	1.5	<1.0	<1.0	45	73	0.02 NJ
1278-152	1278-152-0	Surface	2/24/2015	0.73 NJ	6.0	99	0.32 NJ	0.64 NJ	15	4.9	21	3.1	17	2.0	<1.0	<1.0	28	130	0.05 NJ
	1278-152-1.5	1.5-Foot	2/24/2015	0.56 NJ	7.3	69	0.51 NJ	0.67 NJ	20	5.8	21	3.2	21	2.4	<1.0	<1.0	36	54	0.04 NJ
1278-153	1278-153-0	Surface	2/24/2015	0.43 NJ	5.4	56	0.31 NJ	0.86 NJ	14	4.1	15	3.1	18	1.6	<1.0	<1.0	25	55	0.04 NJ
	1278-153-1.5	1.5-Foot	2/24/2015	0.49 NJ	4.6	57	0.37 NJ	0.49 NJ	8.1	9.0	12	2.8	16	1.8	<1.0	<1.0	20	49	0.03 NJ
1278-154	1278-154-0	Surface	2/24/2015	0.46 NJ	2.9	140	0.23 NJ	0.51 NJ	8.4	2.7	20	1.9	9.9	1.4	<1.0	<1.0	19	190	0.02 NJ
	1278-154-1.5	1.5-Foot	2/24/2015	<2.0	6.6	98	0.33 NJ	1.5	17	4.5	18	4.9	21	1.5	<1.0	<1.0	37	48	0.05 NJ
1278-155	1278-155-0	Surface	2/24/2015	0.81 NJ	0.68 NJ	75	0.49 NJ	0.19 NJ	4.9	4.6	13	<1.0	4.4	0.51 NJ	<1.0	<1.0	21	38	0.01 NJ
	1278-155-1.5	1.5-Foot	2/24/2015	0.75 NJ	0.65 NJ	65	0.52 NJ	0.19 NJ	5.5	4.9	14	<1.0	5.0	0.70 NJ	<1.0	<1.0	21	22	0.01 NJ
NORTHBOUND STRIP PARCEL																			
1278-156	No Sample - Removed from Scope due to Landscaping																		
1278-157	No Sample - Removed from Scope due to Landscaping																		
1278-158	No Sample - Removed from Scope due to Landscaping																		
1278-159	No Sample - Removed from Scope due to Landscaping																		
1278-160	No Sample - Removed from Scope due to Landscaping																		
1278-161	No Sample - Removed from Scope due to Landscaping																		
1278-162	1278-162-0	Surface	3/10/2015	0.70 NJ	2.7	73	0.11 NJ	0.70 NJ	18	5.8	21	0.50 NJ	14	<1.0	<1.0	<1.0	31	86	0.03 NJ
1278-163	1278-163-0	Surface	3/10/2015	<2.0	9.3	100	0.44 NJ	1.6	35	11	44	1.1	29	<1.0	<1.0	<1.0	47	260	0.05 NJ
	1278-163-1.5	1.5-Foot	3/10/2015	0.48 NJ	4.7	73	0.31 NJ	1.4	18	7.9	28	1.3	22	<1.0	<1.0	<1.0	30	140	0.03 NJ
1278-164	1278-164-0	Surface	3/10/2015	0.42 NJ	6.0	90	0.39 NJ	1.4	27	8.2	29	0.98 NJ	25	<1.0	<1.0	<1.0	39	130	0.04 NJ
1278-165	1278-165-0	Surface	3/10/2015	1.3 NJ	5.3	120	0.17 NJ	2.1	29	7.1	56	2.2	22	<1.0	<1.0	<1.0	33	460	0.11 J
	1278-165-1.5	1.5-Foot	3/10/2015	<2.0	8.4	140	0.50 NJ	1.7	48	12	49	1.1	34	<1.0	<1.0	<1.0	64	220	0.04 NJ

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - TITLE 22 METALS
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	TITLE 22 METALS														
				ANTIMONY	ARSENIC[5]	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	MOLYBDENUM	NICKEL	SELENIUM	SILVER	THALLIUM	VANADIUM	ZINC	MERCURY
Regional Screening Levels [3]				*470*	*3.0*	*220,000*	*2,300*	*980*	*--*	*350*	*47,000*	*5,800*	*22,000*	*5,800*	*5,800*	*12*	*5,800*	*350,000*	*40*
Southern California Background Levels [4]				*380*	*0.6-12.0*	*133-1400*	*0.25-2.70*	*0.05-1.70*	*23-1579*	*2.7-46.9*	*9.1-96.4*	*0.1-9.6*	*9-509*	*0.015-0.430*	*13.2-39.4*	*9.8-36.2*	*75-288*	*133-236*	*0.05-0.90*
California TTLC (mg/kg)				*500*	*500*	*10,000*	*75*	*100*	*2,500*	*8,000*	*2,500*	*3,500*	*2,000*	*100*	*500*	*700*	*2,400*	*5,000*	*20*
1278-166	1278-166-0	Surface	3/10/2015	**0.37 NJ**	**1.2**	**78**	**0.04 NJ**	**0.66 NJ**	**12**	**6.0**	**23**	**0.33 NJ**	**11**	<1.0	<1.0	<1.0	**25**	**73**	**0.02 NJ**
	1278-166-1.5	1.5-Foot	3/10/2015	**0.36 NJ**	**4.6**	**90**	**0.05 NJ**	**0.91 NJ**	**21**	**6.3**	**32**	**0.30 NJ**	**16**	<1.0	<1.0	<1.0	**36**	**190**	**0.03 NJ**
1278-167	1278-167-0	Surface	3/10/2015	**0.39 NJ**	**0.20 NJ**	**100**	<1.0	**0.70 NJ**	**10**	**4.9**	**19**	**0.77 NJ**	**8.2**	<1.0	<1.0	<1.0	**26**	**130**	**0.02 NJ**
	1278-167-1.5	1.5-Foot	3/10/2015	**1.2 NJ**	**5.5**	**100**	**0.08 NJ**	**1.1**	**30**	**9.1**	**43**	**0.15 NJ**	**24**	<1.0	<1.0	<1.0	**45**	**110**	**0.04 NJ**
1278-168	1278-168-0	Surface	3/10/2015	**0.41 NJ**	**4.3**	**70**	**0.45 NJ**	**2.0**	**23**	**6.3**	**23**	**2.8**	**21**	<1.0	<1.0	<1.0	**40**	**75**	**0.04 NJ**
	1278-168-1.5	1.5-Foot	3/10/2015	<2.0	**4.7**	**81**	**0.20 NJ**	**1.1**	**23**	**6.4**	**23**	**1.5**	**20**	<1.0	<1.0	<1.0	**38**	**58**	**0.03 NJ**
1278-169	1278-169-0	Surface	3/10/2015	**0.30 NJ**	**5.0**	**98**	**0.26 NJ**	**1.6**	**28**	**7.4**	**32**	**2.4**	**25**	<1.0	<1.0	<1.0	**41**	**150**	**0.05 NJ**
	1278-169-1.5	1.5-Foot	3/10/2015	**1.2 NJ**	**3.5**	**57**	**0.30 NJ**	**2.2**	**28**	**8.8**	**29**	**4.7**	**34**	<1.0	<1.0	<1.0	**46**	**62**	**0.09 NJ**
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)																			
Day 1	EBA-3-022415	QA/QC*	2/24/2015	<0.010	<0.010	**0.0006 NJ**	<0.0030	<0.0030	**0.0010 NJB**	<0.0030	**0.0027 NJB**	**0.0006 NJ**	<0.0050	<0.010	<0.0030	<0.015	<0.0030	<0.025 **UJB**	<0.20
	EBB-1-022415	QA/QC*	2/24/2015	<0.010	<0.010	**0.0006 NJ**	<0.0030	<0.0030	<0.0030 **UJB**	<0.0030	<0.0090 **UJB**	**0.0005 UJ**	<0.0050	<0.010	**0.0007 NJ**	<0.015	<0.0030	<0.025 **UJB**	<0.20
	EBB-2-022415	QA/QC*	2/24/2015	<0.010	<0.010	**0.0005 NJ**	<0.0030	<0.0030	**0.0011 NJB**	<0.0030	**0.0028 NJB**	**0.0006 NJ**	<0.0050 **UJB**	<0.010	**0.0015 NJ**	<0.015	<0.0030	**0.0056 NJB**	<0.20
	EBB-3-022415	QA/QC*	2/24/2015	<0.010	<0.010	<0.0030	<0.0030	<0.0030	<0.0030 **UJB**	<0.0030	<0.0090 **UJB**	<0.0050	<0.0050 **UJB**	<0.010	**0.0011 NJ**	<0.015	<0.0030	**0.0062 NJB**	<0.20
Day 2	EBB-1-022515	QA/QC*	2/25/2015	<0.010	<0.010	**0.0006 NJ**	<0.0030	<0.0030	**0.0011 NJB**	<0.0030	<0.0090 **UJB**	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	**0.0094 NJB**	<0.20
	EBB-2-022515	QA/QC*	2/25/2015	<0.010	<0.010	**0.0005 NJ**	<0.0030	<0.0030	**0.0014 NJB**	<0.0030	<0.0090 **UJB**	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	<0.025 **UJB**	<0.20
	EBB-3-022515	QA/QC*	2/25/2015	<0.010	<0.010	**0.0005 NJ**	<0.0030	<0.0030	**0.0010 NJB**	<0.0030	<0.0090 **UJB**	<0.0050	<0.0050	<0.010	<0.0030	<0.015	**0.0014 NJ**	<0.025 **UJB**	<0.20
	EBA-1-022515	QA/QC*	2/25/2015	<0.010	**0.0026 NJ**	**0.0045 NJ**	<0.0030	<0.0030	**0.0010 NJB**	<0.0030	<0.0090 **UJB**	**0.0005 NJ**	<0.0050	<0.010	<0.0030	<0.015	<0.0030	**0.0078 NJB**	<0.20
	EBA-2-022515	QA/QC*	2/25/2015	<0.010	<0.010	**0.0005 NJ**	<0.0030	<0.0030	<0.0030 **UJB**	<0.0030	<0.0090 **UJB**	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	<0.025 **UJB**	<0.20
	EBA-3-022515	QA/QC*	2/25/2015	<0.010	<0.010	**0.0005 NJ**	<0.0030	<0.0030	**0.0010 NJB**	<0.0030	**0.0050 NJB**	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	**0.0048 NJB**	<0.20
Day 3	EB-1-030515	QA/QC*	3/5/2015	<0.010	<0.010	**0.0004 NJ**	<0.0030	<0.0030	<0.0030 **UJB**	<0.0030	<0.0090	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	**0.0041 NJB**	<0.20
	EB-2-030515	QA/QC*	3/5/2015	<0.010	<0.010	<0.0030	**0.0002 NJ**	**0.0001 NJ**	**0.0010 NJB**	<0.0030	**0.0011 NJ**	<0.0050	<0.0050	<0.010	<0.0030	<0.015	<0.0030	**0.0047 NJB**	<0.20
Day 4	EB-1-031015	QA/QC*	3/10/2015	<0.010	<0.010	**0.0004 NJ**	<0.0030	**0.0003 NJ**	**0.0015 NJB**	<0.0030	**0.0030 NJB**	<0.0050	**0.0005 NJ**	<0.010	<0.0030	<0.015	<0.0030	**0.032 JB**	<0.20
	EB-2-031015	QA/QC*	3/10/2015	<0.010	<0.010	<0.0030	**0.0002 NJ**	<0.0030	**0.0012 NJB**	<0.0030	**0.0031 NJB**	<0.0050	<0.0050	<0.010	**0.0008 NJ**	<0.015	<0.0030	**0.0093 NJB**	<0.20

NOTES:

(1) - Boring identification number

(2) - Sample depth reported in feet below the ground surface

(3) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in mg/Kg) for industrial soil (last updated January 2015)

(4) - California DTSC, Determination of a Southern California Regional Background Arsenic Concentration in Soil, March 2008. Marrett, D.J., A.L. Page, G.R. Bradford, D. Bakhtar, R.C. Graham, A.C. Chang, Background Levels of Soil Trace Elements in Southern California Soils, April, 1991

(5) - Sample 1278-114-0 was reanalyzed for arsenic. Reanalysis concentration was reported at 35 mg/kg.

All soil results in milligrams per kilogram (mg/kg)

All EB results in milligrams per liter (mg/L)

* QA/QC samples consisted of liquid equipment blanks (mg/L)

Bold =Detected above reporting limit

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

B - The analyte was detected in the method, field and/or trip blank.

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS (VOCs)
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	VOLATILE ORGANIC COMPOUNDS (ug/kg)																																		
				1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform
USEPA RSLs - Industrial Use (ug/kg) [3]				8,800	36,000,000	2,700	5,000	16,000	1,000	--	660,000	110	110,000	240,000	64	160	9,300,000	2,000	4,400	12,000,000	--	23,000,000	11,000	--	23,000,000	23,000,000	--	5,100	1,800,000	630,000	1,300	290,000	30,000	3,500,000	2,900	1,300,000	--	1,400
California TTLC (ug/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NORTH CANYON (STAGING) PARCEL																																						
1278-101	1278-101-0	Surface	2/24/2015	<1.1	<1.1	<1.6	<0.99	<0.80	<0.92	<1.3	<2.2	<1.5	<1.7	<1.2	<1.7	<1.2	<1.2	<0.71	<2.8	<1.1	<1.1	<0.90	<1.4	<0.99	<1.1	<1.1	<1.1	<0.96	<1.3	<1.1	<1.3	<1.2	<2.1	<1.9	<1.2	<0.98	<4.0	<1.2
1278-102	1278-102-0	Surface	2/24/2015	<1.2	<1.2	<1.8	<1.1	<0.92	<1.1	<1.4	<2.6	<1.7	<1.9	<1.3	<2.0	<1.4	<1.3	<0.82	<3.2	<1.3	<1.3	<1.0	<1.7	<1.1	<1.3	<1.2	<1.2	<1.1	<1.5	<1.3	<1.5	<1.4	<2.5	<2.2	<1.4	<1.1	<4.7	<1.3
1278-103	1278-103-0	Surface	2/24/2015	<1.1	<1.1	<1.7	<1.0	<0.84	<0.97	<1.3	<2.3	<1.6	<1.8	<1.2	<1.8	<1.2	<1.2	<0.75	<2.9	<1.2	<1.2	<0.94	<1.5	<1.0	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.3	<1.3	<2.3	<2.0	<1.3	<1.0	<4.2	<1.2
1278-104	1278-104-0	Surface	2/24/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.8	<3.1	<2.1	<2.3	<1.6	<2.4	<1.7	<1.6	<1.0	<3.9	<1.6	<1.5	<1.3	<2.0	<1.4	<1.6	<1.5	<1.5	<1.4	<1.9	<1.6	<1.8	<1.7	<3.0	**6.2**	<1.7	<1.4	<5.7	<1.6
1278-105	1278-105-0	Surface	2/24/2015	<1.3	<1.3	<2.0	<1.2	<0.98	<1.1	<1.5	<2.7	<1.8	<2.1	<1.4	<2.1	<1.5	<1.4	<0.88	<3.4	<1.4	<1.4	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.6	<1.4	<1.6	<1.5	<2.6	**4.3** NJ	<1.5	<1.2	<5.0	<1.4
1278-106	1278-106-0	Surface	2/24/2015	<1.2	<1.2	<1.7	<1.1	<0.87	<1.0	<1.4	<2.4	<1.6	<1.8	<1.3	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.98	<1.6	<1.1	<1.2	<1.2	<1.2	<1.0	<1.5	<1.2	<1.4	<1.3	<2.3	**3.3** NJ	<1.3	<1.1	<4.4	<1.3
1278-107	1278-107-0	Surface	2/24/2015	<1.2	<1.2	<1.8	<1.1	<0.90	<1.0	<1.4	<2.5	<1.7	<1.9	<1.3	<2.0	<1.3	<1.3	<0.80	<3.1	<1.2	<1.2	<1.0	<1.6	<1.1	<1.3	<1.2	<1.2	<1.1	<1.5	<1.3	<1.4	<1.4	<2.4	<2.1	<1.4	<1.1	<4.5	<1.3
1278-108	1278-108-0	Surface	2/24/2015	<1.1	<1.2	<1.7	<1.1	<0.86	<0.99	<1.3	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.2	<0.76	<3.0	<1.2	<1.2	<0.96	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	**3.9** NJ	<1.3	<1.1	<4.3	<1.2
1278-109	1278-109-0	Surface	2/24/2015	<1.1	<1.1	<1.7	<1.1	<0.85	<0.98	<1.3	<2.3	<1.6	<1.8	<1.2	<1.8	<1.2	<1.2	<0.75	<2.9	<1.2	<1.2	<0.95	<1.5	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.3	<1.3	<2.3	**3.7** NJ	<1.3	<1.0	<4.3	<1.2
1278-110	1278-110-0	Surface	2/24/2015	<1.2	<1.2	<1.7	<1.1	<0.86	<1.0	<1.4	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.97	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	<2.0	<1.3	<1.1	<4.4	<1.3
	1278-110-1.5	1.5-Foot	2/24/2015	<1.2	<1.2	<1.7	<1.1	<0.87	<1.0	<1.4	<2.4	<1.6	<1.8	<1.3	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.98	<1.6	<1.1	<1.2	<1.2	<1.1	<1.0	<1.5	<1.2	<1.4	<1.3	<2.3	<2.1	<1.3	<1.1	<4.4	<1.3
SOUTHBOUND STRIP PARCEL																																						
1278-120	1278-120-0	Surface	2/25/2015	<1.3	<1.3	<1.9	<1.2	<0.95	<1.1	<1.5	<2.6	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.85	<3.3	<1.3	<1.3	<1.1	<1.7	<1.2	<1.3	<1.3	<1.3	<1.1	<1.6	<1.4	<1.5	<1.4	<2.6	<2.2	<1.5	<1.2	<4.8	<1.4
1278-121	1278-121-0	Surface	2/25/2015	<1.1	<1.1	<1.7	<1.1	<0.86	<0.99	<1.3	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.2	<0.76	<3.0	<1.2	<1.2	<0.96	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	<2.0	<1.3	<1.1	<4.3	<1.2
	1278-121-1.5	1.5-Foot	2/25/2015	<1.1	<1.2	<1.7	<1.1	<0.86	<0.99	<1.3	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.2	<0.76	<3.0	<1.2	<1.2	<0.96	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	<2.0	<1.3	<1.1	<4.3	<1.2
1278-122	1278-122-0	Surface	2/25/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.8	<3.1	<2.1	<2.3	<1.6	<2.4	<1.7	<1.6	<1.0	<3.9	<1.6	<1.5	<1.3	<2.0	<1.4	<1.6	<1.5	**1.5** NJ	**1.9** NJ	<1.9	<1.6	<1.8	<1.7	<3.0	<2.7	<1.7	<1.4	<5.7	<1.6
1278-123	1278-123-0	Surface	2/25/2015	<1.4	<1.4	<2.1	<1.3	<1.0	<1.2	<1.6	<2.9	<1.9	<2.2	<1.5	<2.3	<1.5	<1.5	<0.93	<3.6	<1.5	<1.4	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.8	<2.5	<1.6	<1.3	<5.3	<1.5
1278-124	No Sample - Inaccessible																																					
1278-125	No Sample - Inaccessible																																					
1278-126	No Sample - Inaccessible																																					
1278-127	1278-127-0	Surface	3/5/2015	<1.3	<1.3	<1.9	<1.2	<0.96	<1.1	<1.5	<2.7	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.85	<3.3	<1.3	<1.3	<1.1	<1.7	<1.2	<1.3	<1.3	<1.3	<1.2	<1.6	<1.4	<1.5	<1.5	<2.6	<2.3	<1.5	<1.2	<4.9	<1.4
	1278-127-1.5	1.5-Foot	3/5/2015	<1.1	<1.1	<1.7	<1.1	<0.85	<0.99	<1.3	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.2	<0.76	<3.0	<1.2	<1.2	<0.96	<1.5	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	<2.0	<1.3	<1.1	<4.3	<1.2
1278-128	1278-128-0	Surface	3/5/2015	<1.8	<1.8	<2.6	<1.7	<1.3	<1.5	<2.1	<3.7	<2.5	<2.8	<1.9	<2.9	<2.0	<1.9	<1.2	<4.6	<1.8	<1.8	<1.5	<2.4	<1.7	<1.9	<1.8	<1.8	<1.6	<2.2	<1.9	<2.1	<2.0	<3.6	<3.2	<2.0	<1.6	<6.7	<1.9
1278-129	1278-129-0	Surface	2/25/2015	<1.3	<1.3	<2.0	<1.2	<1.0	<1.2	<1.6	<2.8	<1.9	<2.1	<1.4	<2.2	<1.5	<1.4	<0.89	<3.5	<1.4	<1.4	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.7	<1.4	<1.6	<1.5	<2.7	<2.4	<1.5	<1.2	<5.0	<1.4
	1278-129-1.5	1.5-Foot	2/25/2015	<1.4	<1.4	<2.1	<1.3	<1.1	<1.2	<1.6	<2.9	<2.0	<2.2	<1.5	<2.3	<1.5	<1.5	<0.93	<3.7	<1.5	<1.4	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.8	<2.5	<1.6	<1.3	<5.3	<1.5
1278-130	1278-130-0	Surface	2/25/2015	<1.4	<1.4	<2.1	<1.3	<1.0	<1.2	<1.6	<2.9	<1.9	<2.2	<1.5	<2.3	<1.5	<1.5	<0.93	<3.6	<1.4	<1.4	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.8	<2.5	<1.6	<1.3	<5.3	<1.5
	1278-130-1.5	1.5-Foot	2/25/2015	<1.4	<1.4	<2.1	<1.3	<1.1	<1.2	<1.7	<3.0	<2.0	<2.2	<1.6	<2.3	<1.6	<1.6	<0.96	<3.7	<1.5	<1.5	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.9	<2.5	<1.6	<1.3	<5.4	<1.6
1278-131	1278-131-0	Surface	3/5/2015	<1.4	<1.4	<2.0	<1.3	<1.0	<1.2	<1.6	<2.8	<1.9	<2.1	<1.5	<2.2	<1.5	<1.5	<0.91	<3.6	<1.4	<1.4	<1.2	<1.9	<1.3	<1.4	<1.4	<1.4	<1.2	<1.7	<1.5	<1.6	<1.6	<2.7	<2.4	<1.6	<1.3	<5.2	<1.5
	1278-131-1.5	1.5-Foot	3/5/2015	<1.4	<1.4	<2.1	<1.3	<1.0	<1.2	<1.6	<2.9	<1.9	<2.2	<1.5	<2.3	<1.5	<1.5	<0.93	<3.6	<1.4	<1.4	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.7	<1.5	<1.7	<1.6	<2.8	<2.5	<1.6	<1.3	<5.3	<1.5
1278-132	1278-132-0	Surface	3/5/2015	<1.4	<1.4	<2.1	<1.3	<1.1	<1.2	<1.7	<2.9	<2.0	<2.2	<1.5	<2.3	<1.6	<1.5	<0.94	<3.7	<1.5	<1.5	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.8	<2.5	<1.6	<1.3	<5.4	<1.5
	1278-132-1.5	1.5-Foot	3/5/2015	<1.7	<1.7	<2.6	<1.6	<1.3	<1.5	<2.0	<3.6	<2.4	<2.7	<1.9	<2.8	<1.9	<1.9	<1.2	<4.5	<1.8	<1.8	<1.5	<2.4	<1.6	<1.8	<1.7	<1.7	<1.6	<2.2	<1.9	<2.1	<2.0	<3.5	<3.1	<2.0	<1.6	<6.6	<1.9
1278-133	1278-133-0	Surface	3/5/2015	<1.4	<1.4	<2.1	<1.3	<1.0	<1.2	<1.6	<2.9	<1.9	<2.2	<1.5	<2.3	<1.5	<1.5	<0.92	<3.6	<1.4	<1.4	<1.2	<1.9	<1.3	<1.4	<1.4	<1.4	<1.2	<1.7	<1.5	<1.6	<1.6	<2.8	<2.5	<1.6	<1.3	<5.2	<1.5
	1278-133-1.5	1.5-Foot	3/5/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.8	<3.1	<2.1	<2.3	<1.6	<2.4	<1.7	<1.6	<1.0	<3.9	<1.6	<1.5	<1.3	<2.0	<1.4	<1.6	<1.5	<1.5	<1.4	<1.9	<1.6	<1.8	<1.7	<3.0	<2.7	<1.7	<1.4	<5.7	<1.6
1278-134	1278-134-0	Surface	3/10/2015	<1.2	<1.2	<1.7	<1.1	<0.87	<1.0	<1.4	<2.4	<1.6	<1.8	<1.3	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.98	<1.6	<1.1	<1.2	<1.2	<1.2	<1.0	<1.5	<1.2	<1.4	<1.3	<2.3	<2.1	<1.3	<1.1	<4.4	<1.3
	1278-134-1.5	1.5-Foot	3/5/2015	<2.1	<2.1	<3.1	<1.9	<1.6	<1.8	<2.4	<4.3	<2.9	<3.3	<2.3	<3.4	<2.3	<2.3	<1.4	<5.4	<2.2	<2.1	<1.8	<2.8	<1.9	<2.2	<2.1	<2.1	<1.9	<2.6	<2.2	<2.5	<2.4	<4.2	<3.7	<2.4	<1.9	<7.9	<2.3
1278-135	1278-135-0	Surface	2/25/2015	<1.3	<1.3	<2.0	<1.2	<1.0	<1.2	<1.6	<2.8	<1.9	<2.1	<1.4	<2.2	<1.5	<1.5	<0.89	<3.5	<1.4	<1.4	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.7	<1.4	<1.6	<1.5	<2.7	<2.4	<1.5	<1.2	<5.0	<1.4
	1278-135-1.5	1.5-Foot	2/25/2015	<1.3	<1.3	<1.9	<1.2	<0.96	<1.1	<1.5	<2.6	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.85	<3.3	<1.3	<1.3	<1.1	<1.7	<1.2	<1.3	<1.3	<1.3	<1.2	<1.6	<1.4	<1.5	<1.4	<2.6	<2.3	<1.5	<1.2	<4.8	<1.4
1278-136	1278-136-0	Surface	2/25/2015	<1.9	<1.9	<2.7	<1.7	<1.4	<1.6	<2.2	<3.8	<2.6	<2.9	<2.0	<3.0	<2.0	<2.0	<1.2	<4.8	<1.9	<1.9	<1.6	<2.5	<1.7	<1.9	<1.8	<1.8	<1.7	<2.3	<2.0	<2.2	<2.1	<3.7	<3.3	<2.1	<1.7	<7.0	<2.0
	1278-136-1.5	1.5-Foot	2/25/2015	<1.4	<1.4	<2.0	<1.3	<1.0	<1.2	<1.6	<2.9	<1.9	<2.2	<1.5	<2.2	<1.5	<1.5	<0.92	<3.6	<1.4	<1.4	<1.2	<1.9	<1.3	<1.4	<1.4	<1.4	<1.2	<1.7	<1.5	<1.6	<1.6	<2.8	<2.4	<1.6	<1.3	<5.2	<1.5
	1278-136-3.5	3.5-Feet	2/25/2015	<1.3	<1.3	<2.0	<1.2	<1.0	<1.2	<1.6	<2.8	<1.9	<2.1	<1.5	<2.2	<1.5	<1.5	<0.90	<3.5	<1.4	<1.4	<1.1	<1.8	<1.3	<1.4	<1.3	<1.3	<1.2	<1.7	<1.4	<1.6	<1.5	<2.7	<2.4	<1.5	<1.2	<5.1	<1.5
1278-137	1278-137-0	Surface	2/25/2015	<1.5	<1.5	<2.2	<1.3	<1.1	<1.3	<1.7	<3.0	<2.0	<2.3	<1.6	<2.4	<1.6	<1.6	<0.97	<3.8	<1.5	<1.5	<1.2	<2.0	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.6	<1.7	<1.6	<2.9	<2.6	<1.7	<1.3	<5.5	<1.6
	1278-137-1.5	1.5-Foot	2/25/2015	<1.2	<1.2	<1.7	<1.1	<0.86	<0.99	<1.3	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.97	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	**2.1**	<1.3	<1.1	<4.3	<1.2
1278-138	1278-138-0	Surface	2/25/2015	<1.4	<1.4	<2.1	<1.3	<1.1	<1.2	<1.7	<3.0	<2.0	<2.2	<1.6	<2.3	<1.6	<1.6	<0.96	<3.7	<1.5	<1.5	<1.2	<2.0	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.9	<2.5	<1.7	<1.3	<5.4	<1.6
	1278-138-1.5	1.5-Foot	2/25/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.8	<3.1	<2.1	<2.4	<1.6	<2.5	<1.7	<1.6	<1.0	<3.9	<1.6	<1.6	<1.3	<2.1	<1.4	<1.6	<1.5	<1.5	<1.4	<1.9	<1.6	<1.8	<1.7	<3.0	<2.7	<1.7	<1.4	<5.7	<1.6
	1278-138-3.5	3.5-Feet	2/25/2015	<1.0	<1.0	<1.6	<0.97	<0.78	<0.90	<1.2	<2.2	<1.5	<1.6	<1.1	<1.7	<1.2	<1.1	<0.70	<2.7	<1.1	<1.1	<0.88	<1.4	<0.97	<1.1	<1.0	<1.0	<0.94	<1.3	<1.1	<1.2	<1.2	<2.1	<1.8	<1.2	<0.96	<4.0	<1.1
1278-139	1278-139-0	Surface	2/25/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.8	<3.1	<2.1	<2.4	<1.6	<2.5	<1.7	<1.6	<1.0	<3.9	<1.6	<1.6	<1.3	<2.0	<1.4	<1.6	<1.5	<1.5	<1.4	<1.9	<1.6	<1.8	<1.7	<3.0	<2.7	<1.7	<1.4	<5.7	<1.6
	1278-139-1.5	1.5-Foot	2/25/2015	<1.3	<1.3	<1.9	<1.2	<0.95	<1.1	<1.5	<2.6	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.84	<3.3	<1.3	<1.3	<1.1	<1.7	<1.2	<1.3	<1.3	<1.3	<1.1	<1.6	<1.4	<1.5	<1.4	<2.5	**4.5**	<1.5	<1.2	<4.8	<1.4
1278-140	1278-140-0	Surface	2/25/2015	<1.3	<1.3	<2.0	<1.2	<1.0	<1.2	<1.6	<2.8	<1.9	<2.1	<1.4	<2.2	<1.5	<1.5	<0.89	<3.5	<1.4	<1.4	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.7	<1.4	<1.6	<1.5	<2.7	<2.4	<1.5	<1.2	<5.1	<1.5
	1278-140-1.5	1.5-Foot	2/25/2015	<1.6	<1.6	<2.3	<1.5	<1.2	<1.4	<1.9	<3.3	<2.2	<2.5	<1.7	<2.6	<1.7	<1.7	<1.1	<4.1	<1.6	<1.6	<1.3	<2.1	<1.5	<1.7	<1.6	<1.6	<1.4	<2.0	<1.7	<1.9	<1.8	<3.2	<2.8	<1.8	<1.5	<6.0	<1.7
1278-141	1278-141-0	Surface	2/25/2015	<1.9	<1.9	<2.7	<1.7	<1.4	<1.6	<2.2	<3.8	<2.6	<2.9	<2.0	<3.0	<2.0	<2.0	<1.2	<4.8	<1.9	<1.9	<1.6	<2.5	<1.7	<1.9	<1.8	<1.8	<1.7	<2.3	<2.0	<2.2	<2.1	<3.7	<3.3	<2.1	<1.7	<7.0	<2.0
	1278-141-1.5	1.5-Foot	2/25/2015	<1.4	<1.4	<2.1	<1.3	<1.1	<1.2	<1.7	<3.0	<2.0	<2.2	<1.6	<2.3	<1.6	<1.6	<0.96	<3.7	<1.5	<1.5	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.9	**2.9** NJ	<1.6	<1.3	<5.4	<1.6
1278-142	1278-142-0	Surface	2/25/2015	<1.4	<1.5	<2.1	<1.3	<1.1	<1.3	<1.7	<3.0	<2.0	<2.3	<1.6	<2.4	<1.6	<1.6	<0.96	<3.8	<1.5	<1.5	<1.2	<2.0	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.6	<1.7	<1.6	<2.9	<2.6	<1.7	<1.3	<5.5	<1.6
	1278-142-1.5	1.5-Foot	2/25/2015	<1.2	<1.2	<1.8	<1.1	<0.91	<1.1	<1.4	<2.5	<1.7	<1.9	<1.3	<2.0	<1.3	<1.3	<0.81	<3.2	<1.3	<1.3	<1.0	<1.7	<1.1	<1.3	<1.2	<1.2	<1.1	<1.5	<1.3	<1.5	<1.4	<2.4	<2.2	<1.4	<1.1	<4.6	<1.3
1278-143	1278-143-0	Surface	2/25/2015	<1.4	<1.4	<2.0	<1.3	<1.0	<1.2	<1.6	<2.8	<1.9	<2.1	<1.5	<2.2	<1.5	<1.5	<0.91	<3.5	<1.4	<1.4	<1.1	<1.9	<1.3	<1.4	<1.4	<1.3	<1.2	<1.7	<1.5	<1.6	<1.5	<2.7	**3.2** NJ	<1.6	<1.3	<5.2	<1.5
1278-144	1278-144-0	Surface	2/25/2015	<1.3	<1.3	<1.9	<1.2	<0.96	<1.1	<1.5	<2.6	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.85	<3.3	<1.3	<1.3	<1.1	<1.7	<1.2	<1.3	<1.3	<1.3	<1.2	<1.6	<1.4	<1.5	<1.5	<2.6	**9.4**	<1.5	<1.2	<4.8	<1.4
	1278-144-1.5	1.5-Foot	2/25/2015	<1.4	<1.4	<2.1	<1.3	<1.1	<1.2	<1.7	<3.0	<2.0	<2.3	<1.6	<2.4	<1.6	<1.6	<0.96	<3.8	<1.5	<1.5	<1.2	<2.0	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.9	<2.6	<1.7	<1.3	<5.5	<1.6
1278-145	1278-145-0	Surface	2/25/2015	<1.2	<1.2	<1.8	<1.1	<0.91	<1.1	<1.4	<2.5	<1.7	<1.9	<1.3	<2.0	<1.3	<1.3	<0.81	<3.2	<1.3	<1.3	<1.0	<1.7	<1.1	<1.3	<1.2	<1.2	**2.9** NJ	<1.5	<1.3	<1.4	<1.4	<2.4	**3.1** NJ	<1.4	<1.1	<4.6	<1.3
	1278-145-1.5	1.5-Foot	2/25/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.7	<3.1	<2.1	<2.3	<1.6	<2.4	<1.6	<1.6	<0.99	<3.9	<1.5	<1.5	<1.3	<2.0	<1.4	<1.6	<1.5	<1.5	<1.3	<1.9	<1.6	<1.8	<1.7	<3.0	**4.1** NJ	<1.7	<1.4	<5.6	<1.6
1278-146	1278-146-0	Surface	2/25/2015	<1.2	<1.2	<1.7	<1.1	<0.88	<1.0	<1.4	<2.4	<1.6	<1.8	<1.3	<1.9	<1.3	<1.3	<0.78	<3.1	<1.2	<1.2	<0.99	<1.6	<1.1	<1.2	<1.2	<1.2	<1.1	<1.5	<1.3	<1.4	<1.3	<2.4	**4.1** NJ	<1.4	<1.1	<4.4	<1.3
	1278-146-1.5	1.5-Foot	2/25/2015	<1.5	<1.5	<2.2	<1.3	<1.1	<1.3	<1.7	<3.0	<2.0	<2.3	<1.6	<2.4	<1.6	<1.6	<0.97	<3.8	<1.5	<1.5	<1.2	<2.0	<1.4	<1.5	<1.4	<1.4	<1.3	<1.8	<1.6	<1.7	<1.6	<2.9	**4.5** NJ	<1.7	<1.3	<5.5	<1.6
1278-147	1278-147-0	Surface	2/25/2015	<1.2	<1.2	<1.7	<1.1	<0.88	<1.0	<1.4	<2.4	<1.6	<1.8	<1.3	<1.9	<1.3	<1.3	<0.78	<3.1	<1.2	<1.2	<0.99	<1.6	<1.1	<1.2	<1.2	<1.2	<1.1	<1.5	<1.3	<1.4	<1.3	<2.4	<2.1	<1.4	<1.1	<4.5	<1.3
	1278-147-1.5	1.5-Foot	2/25/2015	<1.2	<1.2	<1.8	<1.1	<0.89	<1.0	<1.4	<2.5	<1.6	<1.9	<1.3	<1.9	<1.3	<1.3	<0.79	<3.1	<1.2	<1.2	<1.0	<1.6	<1.1	<1.2	<1.2	<1.2	<1.1	<1.5	<1.3	<1.4	<1.3	<2.4	**3.8** NJ	<1.4	<1.1	<4.5	<1.3
1278-148	1278-148-0	Surface	2/25/2015	<1.3	<1.3	<1.9	<1.2	<0.96	<1.1	<1.5	<2.7	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.86	<3.3	<1.3	<1.3	<1.1	<1.7	<1.2	<1.3	<1.3	<1.3	<1.2	<1.6	<1.4	<1.5	<1.5	<2.6	**2.6** NJ	<1.5	<1.2	<4.9	<1.4
	1278-148-1.5	1.5-Foot	2/25/2015	<1.2	<1.2	<1.7	<1.1	<0.86	<0.99	<1.3	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.97	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	**2.1** NJ	<1.3	<1.1	<4.3	<1.2
1278-149	1278-149-0	Surface	2/24/2015	<1.6	<1.6	<2.4	<1.5	<1.2	<1.4	<1.9	<3.3	<2.2	<2.5	<1.7	<2.6	<1.8	<1.7	<1.1	<4.2	<1.7	<1.6	<1.3	<2.2	<1.5	<1.7	<1.6	<1.6	<1.4	<2.0	<1.7	<1.9	<1.8	<3.2	<2.8	<1.8	<1.5	<6.0	<1.7
	1278-149-1.5	1.5-Foot	2/24/2015	<1.4	<1.4	<2.0	<1.3	<1.0	<1.2	<1.6	<2.8	<1.9	<2.1	<1.5	<2.2	<1.5	<1.5	<0.91	<3.6	<1.4	<1.4	<1.1	<1.9	<1.3	<1.4	<1.4	<1.4	<1.2	<1.7	<1.5	<1.6	<1.5	<2.7	<2.4	<1.6	<1.3	**5.2**	<1.5
1278-150	1278-150-0	Surface	2/24/2015	<1.3	<1.3	<1.9	<1.2	<0.97	<1.1	<1.5	<2.7	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.86	<3.4	<1.3	<1.3	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.6	<1.4	<1.5	<1.5	<2.6	**2.7**	<1.5	<1.2	<4.9	<1.4
	1278-150-1.5	1.5-Foot	2/24/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.7	<3.1	<2.1	<2.3	<1.6	<2.4	<1.6	<1.6	<0.98	<3.8	<1.5	<1.5	<1.2	<2.0	<1.4	<1.5	<1.5	**1.7** NJ	<1.3	<1.8	<1.6	<1.8	<1.7	<3.0	<2.6	<1.7	<1.4	<5.6	<1.6
	1278-150-3	3-Feet	2/24/2015	<1.0	<1.0	<1.5	<0.94	<0.76	<0.88	<1.2	<2.1	<1.4	<1.6	<1.1	<1.7	<1.1	<1.1	<0.68	<2.6	<1.1	<1.0	<0.85	<1.4	<0.94	<1.1	<1.0	<1.0	<0.92	<1.3	<1.1	<1.2	<1.2	<2.0	<1.8	<1.2	<0.94	<3.8	<1.1
1278-151	1278-151-0	Surface	2/24/2015	<1.7	<1.7	<2.5	<1.6	<1.3	<1.5	<2.0	<3.5	<2.4	<2.6	<1.8	<2.8	<1.9	<1.8	<1.1	<4.4	<1.8	<1.7	<1.4	<2.3	<1.6	<1.8	<1.7	<1.7	**1.7** NJ	<2.1	<1.8	<2.0	<1.9	<3.4	<3.0	<1.9	<1.6	<6.4	<1.8
	1278-151-1.5	1.5-Foot	2/24/2015	<1.3	<1.3	<1.9	<1.2	<0.97	<1.1	<1.5	<2.7	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.86	<3.4	<1.3	<1.3	<1.1	<1.8	<1.2	<1.4	<1.3	**3.3** NJ	<1.2	<1.6	<1.4	<1.5	<1.5	<2.6	<2.3	<1.5	<1.2	<4.9	<1.4
1278-152	1278-152-0	Surface	2/24/2015	<1.2	<1.2	<1.8	<1.1	<0.89	<1.0	<1.4	<2.5	<1.6	<1.9	<1.3	<1.9	<1.3	<1.3	<0.79	<3.1	<1.2	<1.2	<1.0	<1.6	<1.1	<1.2	<1.2	<1.2	<1.1	<1.5	<1.3	<1.4	<1.3	<2.4	<2.1	<1.4	<1.1	<4.5	<1.3
	1278-152-1.5	1.5-Foot	2/24/2015	<1.8	<1.8	<2.6	<1.7	<1.3	<1.5	<2.1	<3.7	<2.5	<2.8	<1.9	<2.9	<2.0	<1.9	<1.2	<4.6	<1.8	<1.8	<1.5	<2.4	<1.7	<1.9	<1.8	<1.8	<1.6	<2.2	<1.9	<2.1	<2.0	<3.6	<3.2	<2.0	<1.6	<6.7	<1.9
1278-153	1278-153-0	Surface	2/24/2015	<1.1	<1.1	<1.6	<1.0	<0.81	<0.94	<1.3	<2.3	<1.5	<1.7	<1.2	<1.8	<1.2	<1.2	<0.72	<2.8	<1.1	<1.1	<0.92	<1.5	<1.0	<1.1	<1.1	<1.1	<0.98	<1.4	<1.2	<1.3	<1.2	<2.2	<1.9	<1.3	<1.0	<4.1	<1.2
	1278-153-1.5	1.5-Foot	2/24/2015	<1.3	<1.3	<1.9	<1.2	<0.98	<1.1	<1.5	<2.7	<1.8	<2.1	<1.4	<2.1	<1.4	<1.4	<0.87	<3.4	<1.4	<1.4	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.6	<1.4	<1.6	<1.5	<2.6	**3.1** NJ	<1.5	<1.2	<5.0	<1.4
1278-154	1278-154-0	Surface	2/24/2015	<1.8	<1.8	<2.7	<1.7	<1.4	<1.6	<2.2	<3.8	<2.6	<2.9	<2.0	<3.0	<2.0	<2.0	<1.2	<4.8	<1.9	<1.9	<1.5	<2.5	<1.7	<1.9	<1.8	<1.8	<1.7	<2.3	<2.0	<2.2	<2.1	<3.7	<3.2	<2.1	<1.7	<7.0	<2.0
	1278-154-1.5	1.5-Foot	2/24/2015	<1.4	<1.4	<2.1	<1.3	<1.0	<1.2	<1.6	<2.9	<1.9	<2.2	<1.5	<2.3	<1.5	<1.5	<0.93	<3.6	<1.4	<1.4	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.7	<1.5	<1.7	<1.6	<2.8	<2.5	<1.6	<1.3	<5.3	<1.5
1278-155	1278-155-0	Surface	2/24/2015	<1.2	<1.2	<1.7	<1.1	<0.86	<1.0	<1.4	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.97	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	<2.0	<1.3	<1.1	<4.4	<1.3
	1278-155-1.5	1.5-Foot	2/24/2015	<1.1	<1.1	<1.6	<0.97	<0.79	<0.91	<1.2	<2.2	<1.5	<1.6	<1.1	<1.7	<1.2	<1.1	<0.70	<2.7	<1.1	<1.1	<0.88	<1.4	<0.98	<1.1	<1.0	<1.0	<0.95	<1.3	<1.1	<1.2	<1.2	<2.1	<1.9	<1.2	<0.97	<4.0	<1.1

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS (VOCs)
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	VOLATILE ORGANIC COMPOUNDS (ug/kg)																																		
				1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform
USEPA RSLs - Industrial Use (ug/kg) [3]				8,800	36,000,000	2,700	5,000	16,000	1,000	--	660,000	110	110,000	240,000	64	160	9,300,000	2,000	4,400	12,000,000	--	23,000,000	11,000	--	23,000,000	23,000,000	--	5,100	1,800,000	630,000	1,300	290,000	30,000	3,500,000	2,900	1,300,000	--	1,400
California TTLC (ug/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NORTHBOUND STRIP PARCEL																																						
1278-156	No Sample - Removed from Scope due to Landscaping																																					
1278-157	No Sample - Removed from Scope due to Landscaping																																					
1278-158	No Sample - Removed from Scope due to Landscaping																																					
1278-159	No Sample - Removed from Scope due to Landscaping																																					
1278-160	No Sample - Removed from Scope due to Landscaping																																					
1278-161	No Sample - Removed from Scope due to Landscaping																																					
1278-162	1278-162-0	Surface	3/10/2015	<1.2	<1.2	<1.8	<1.1	<0.91	<1.1	<1.4	<2.5	<1.7	<1.9	<1.3	<2.0	<1.3	<1.3	<0.81	<3.2	<1.3	<1.3	<1.0	<1.7	<1.1	<1.3	<1.2	<1.2	<1.1	<1.5	<1.3	<1.4	<1.4	<2.4	<2.2	<1.4	<1.1	<4.6	<1.3
1278-163	1278-163-0	Surface	3/10/2015	<1.4	<1.4	<2.1	<1.3	<1.1	<1.2	<1.7	<2.9	<2.0	<2.2	<1.5	<2.3	<1.6	<1.5	<0.95	<3.7	<1.5	<1.5	<1.2	<1.9	<1.3	<1.5	<1.4	<1.4	<1.3	<1.8	<1.5	<1.7	<1.6	<2.9	<2.5	<1.6	<1.3	<5.4	<1.5
	1278-163-1.5	1.5-Foot	3/10/2015	<1.7	<1.7	<2.5	<1.6	<1.3	<1.5	<2.0	<3.5	<2.4	<2.7	<1.8	<2.8	<1.9	<1.9	<1.1	<4.4	<1.8	<1.8	<1.4	<2.3	<1.6	<1.8	<1.7	<1.7	<1.5	<2.1	<1.8	<2.0	<1.9	<3.4	<3.0	<2.0	<1.6	<6.4	<1.8
1278-164	1278-164-0	Surface	3/10/2015	<1.5	<1.5	<2.2	<1.4	<1.1	<1.3	<1.8	<3.1	<2.1	<2.4	<1.6	<2.5	<1.7	<1.6	<1.0	<3.9	<1.6	<1.6	<1.3	<2.1	<1.4	<1.6	<1.5	<1.5	<1.4	<1.9	<1.6	<1.8	<1.7	<3.0	<2.7	<1.7	<1.4	<5.7	<1.6
1278-165	1278-165-0	Surface	3/10/2015	<1.3	<1.3	<1.9	<1.2	<0.98	<1.1	<1.5	<2.7	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.87	<3.4	<1.4	<1.3	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.6	<1.4	<1.6	<1.5	<2.6	<2.3	<1.5	<1.2	<4.9	<1.4
	1278-165-1.5	1.5-Foot	3/10/2015	<1.7	<1.7	<2.6	<1.6	<1.3	<1.5	<2.0	<3.6	<2.4	<2.7	<1.9	<2.8	<1.9	<1.9	<1.2	<4.5	<1.8	<1.8	<1.5	<2.4	<1.6	<1.8	<1.7	<1.7	<1.6	<2.2	<1.9	<2.1	<2.0	<3.5	<3.1	<2.0	<1.6	<6.6	<1.9
1278-166	1278-166-0	Surface	3/10/2015	<1.1	<1.1	<1.7	<1.0	<0.84	<0.97	<1.3	<2.3	<1.6	<1.8	<1.2	<1.8	<1.2	<1.2	<0.75	<2.9	<1.2	<1.2	<0.94	<1.5	<1.0	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.3	<1.3	<2.3	<2.0	<1.3	<1.0	<4.2	<1.2
	1278-166-1.5	1.5-Foot	3/10/2015	<1.3	<1.3	<2.0	<1.2	<0.99	<1.1	<1.6	<2.7	<1.8	<2.1	<1.4	<2.2	<1.5	<1.4	<0.88	<3.5	<1.4	<1.4	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.7	<1.4	<1.6	<1.5	<2.7	<2.3	<1.5	<1.2	<5.0	<1.4
1278-167	1278-167-0	Surface	3/10/2015	<1.3	<1.3	<1.9	<1.2	<0.95	<1.1	<1.5	<2.6	<1.8	<2.0	<1.4	<2.1	<1.4	<1.4	<0.84	<3.3	<1.3	<1.3	<1.1	<1.7	<1.2	<1.3	<1.3	<1.3	<1.1	<1.6	<1.4	<1.5	<1.4	<2.5	<2.2	<1.5	<1.2	<4.8	<1.4
	1278-167-1.5	1.5-Foot	3/10/2015	<2.2	<2.2	<3.2	<2.0	<1.6	<1.9	<2.6	<4.5	<3.0	<3.4	<2.4	<3.6	<2.4	<2.4	<1.5	<5.7	<2.3	<2.3	<1.8	<3.0	<2.0	<2.3	<2.2	<2.2	<2.0	<2.7	<2.3	<2.6	<2.5	<4.4	<3.9	<2.5	<2.0	<8.3	<2.4
1278-168	1278-168-0	Surface	3/10/2015	<1.2	<1.2	<1.7	<1.1	<0.86	<1.0	<1.4	<2.4	<1.6	<1.8	<1.2	<1.9	<1.3	<1.3	<0.77	<3.0	<1.2	<1.2	<0.97	<1.6	<1.1	<1.2	<1.1	<1.1	<1.0	<1.4	<1.2	<1.4	<1.3	<2.3	**7.3**	<1.3	<1.1	<4.4	<1.2
	1278-168-1.5	1.5-Foot	3/10/2015	<1.3	<1.3	<2.0	<1.2	<0.99	<1.1	<1.6	<2.7	<1.8	<2.1	<1.4	<2.2	<1.5	<1.4	<0.88	<3.4	<1.4	<1.4	<1.1	<1.8	<1.2	<1.4	<1.3	<1.3	<1.2	<1.7	<1.4	<1.6	<1.5	<2.7	**4.8** NJ	<1.5	<1.2	<5.0	<1.4
1278-169	1278-169-0	Surface	3/10/2015	<1.6	<1.6	<2.3	<1.5	<1.2	<1.4	<1.8	<3.3	<2.2	<2.5	<1.7	<2.6	<1.7	<1.7	<1.0	<4.1	<1.6	<1.6	<1.3	<2.1	<1.5	<1.6	<1.6	<1.6	<1.4	<2.0	<1.7	<1.9	<1.8	<3.2	**7.8**	<1.8	<1.4	<5.9	<1.7
	1278-169-1.5	1.5-Foot	3/10/2015	<1.2	<1.2	<1.8	<1.1	<0.91	<1.1	<1.4	<2.5	<1.7	<1.9	<1.3	<2.0	<1.3	<1.3	<0.81	<3.2	<1.3	<1.3	<1.0	<1.6	<1.1	<1.3	<1.2	<1.2	<1.1	<1.5	<1.3	<1.4	<1.4	<2.4	**2.3** NJ	<1.4	<1.1	<4.6	<1.3
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)																																						
Day 1	EBA-1-022415	QA/QC*	2/24/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBA-2-022415	QA/QC*	2/24/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBA-3-022415	QA/QC*	2/24/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBB-3-022415	QA/QC*	2/24/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
Day 2	EBA-1-022515	QA/QC*	2/25/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBA-2-022515	QA/QC*	2/25/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBA-3-022515	QA/QC*	2/25/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBB-1-022515	QA/QC*	2/25/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBB-2-022515	QA/QC*	2/25/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EBB-3-022515	QA/QC*	2/25/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
Day 3	EB-1-030515	QA/QC*	3/5/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EB-2-030515	QA/QC*	3/5/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
Day 4	EB-1-031015	QA/QC*	3/10/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32
	EB-2-031015	QA/QC*	3/10/2015	<0.38	<0.20	<0.38	<0.38	<0.26	<0.26	<0.21	<0.47	<0.20	<0.44	<0.24	<0.40	<0.24	<0.35	<0.27	<0.27	<0.26	<0.39	<0.34	<0.42	<0.23	<0.28	<0.30	<0.22	<0.22	<0.32	<0.40	<0.20	<0.34	<0.49	<1.0	<0.18	<0.33	<0.23	<0.32

NOTES:

(1) - Boring identification number
(2) - Sample depth reported in feet below the ground surface
(3) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in ug/kg) for VOCs for industrial soil (last updated January 2015) - Traditional Table with a Target Cancer Risk Level of 1.0x10-6 and a Target Hazard Quotient of 1.0.
NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

Bold =Detected above reporting limit
All soil results in milligrams per kilogram (mg/kg)
All EB results in milligrams per liter (mg/L)
* QA/QC samples consisted of liquid equipment blanks (mg/L)

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS (VOCs)
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	VOLATILE ORGANIC COMPOUNDS (ug/kg)																																	
				Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Di-isopropyl ether	Ethyl Acetate	Ethyl Ether	Ethyl tert-butyl ether	Ethylbenzene	Freon-113	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene chloride	MTBE	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Amyl methyl ether	tert-Butanol	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride
USEPA RSLs - Industrial Use (ug/kg) [3]				460,000	2,300,000	8,200	3,200	--	370,000	--	2,600,000	2.3E+08	--	25,000	--	30,000	--	2,400,000	1,000,000	210,000	17,000	58,000,000	22,000,000	2,800,000	1.2E+08	35,000,000	--	--	1.2E+08	100,000	47,000,000	23,000,000	8,200	6,000	3,100,000	3,800,000	1,700
California TTLC (ug/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2040000	--	--	--
NORTH CANYON (STAGING) PARCEL																																					
1278-101	1278-101-0	Surface	2/24/2015	<0.61	<0.96	<1.9	<1.0	<1.6	<0.60	<0.82	<11	<9.8	<0.95	<0.91	<1.1	<1.1	<1.2	<2.0	<4.1	<0.74	<2.6	<1.1	<1.0	<1.0	<1.1	<1.1	<0.83	<16	<1.1	<1.0	<0.72	<1.2	<0.96	<0.99	<1.5	<8.7	<0.83
1278-102	1278-102-0	Surface	2/24/2015	<0.70	<1.1	<2.2	<1.2	<1.9	<0.70	<0.95	<12	<11	<1.1	<1.1	<1.2	<1.3	<1.3	<2.3	<4.7	<0.85	<3.0	<1.2	<1.2	<1.2	<1.2	<1.2	<0.96	<19	<1.3	<1.2	<0.83	<1.3	<1.1	<1.1	<1.7	<10	<0.96
1278-103	1278-103-0	Surface	2/24/2015	<0.64	<1.0	<2.0	<1.1	<1.7	<0.63	<0.87	<11	<10	<1.0	<0.96	<1.1	<1.2	<1.2	<2.1	<4.3	<0.77	<2.7	<1.1	<1.0	<1.1	<1.1	<1.1	<0.88	<17	<1.2	<1.1	<0.76	<1.2	<1.0	<1.0	<1.5	<9.2	<0.88
1278-104	1278-104-0	Surface	2/24/2015	<0.85	<1.4	<2.6	<1.4	<2.3	<0.85	<1.2	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.9	<5.7	<1.0	<3.6	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.4	<1.0	<1.6	<1.3	<1.4	<2.1	<12	<1.2
1278-105	1278-105-0	Surface	2/24/2015	<0.75	<1.2	<2.3	<1.2	<2.0	<0.74	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.0	<0.91	<3.2	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.3	<0.89	<1.4	<1.2	<1.2	<1.8	<11	<1.0
1278-106	1278-106-0	Surface	2/24/2015	<0.66	<1.1	<2.0	<1.1	<1.8	<0.66	<0.90	<12	<11	<1.0	<0.99	<1.1	<1.2	<1.3	<2.2	<4.4	<0.80	<2.8	<1.2	<1.1	<1.1	<1.1	<1.2	<0.91	<18	<1.2	<1.1	<0.79	<1.3	<1.0	<1.1	<1.6	<9.5	<0.91
1278-107	1278-107-0	Surface	2/24/2015	<0.68	<1.1	<2.1	<1.1	<1.8	<0.68	<0.93	<12	<11	<1.1	<1.0	<1.2	<1.3	<1.3	<2.3	<4.6	<0.83	<2.9	<1.2	<1.1	<1.1	<1.2	<1.2	<0.94	<18	<1.3	<1.2	<0.81	<1.3	<1.1	<1.1	<1.6	<9.8	<0.94
1278-108	1278-108-0	Surface	2/24/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.89	<12	<11	<1.0	<0.98	<1.1	<1.2	<1.2	<2.2	<4.4	<0.79	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
1278-109	1278-109-0	Surface	2/24/2015	<0.64	<1.0	<2.0	<1.1	<1.7	<0.64	<0.88	<11	<10	<1.0	<0.97	<1.1	<1.2	<1.2	<2.2	<4.3	<0.78	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.88	<17	<1.2	<1.1	<0.77	<1.2	<1.0	<1.1	<1.6	<9.2	<0.89
1278-110	1278-110-0	Surface	2/24/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.89	<12	<11	<1.0	<0.99	<1.1	<1.2	<1.2	<2.2	<4.4	<0.80	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
	1278-110-1.5	1.5-Foot	2/24/2015	<0.66	<1.1	<2.0	<1.1	<1.8	<0.66	<0.90	<12	<11	<1.0	<0.99	<1.1	<1.2	<1.3	<2.2	<4.4	<0.80	<2.8	<1.2	<1.1	<1.1	<1.1	<1.2	<0.91	<18	<1.2	<1.1	<0.79	<1.3	<1.0	<1.1	<1.6	<9.5	<0.91
SOUTHBOUND STRIP PARCEL																																					
1278-120	1278-120-0	Surface	2/25/2015	<0.72	<1.2	<2.2	<1.2	<1.9	<0.72	<0.98	<13	<12	<1.1	<1.1	<1.3	<1.3	<1.4	<2.4	<4.9	<0.88	<3.1	<1.3	<1.2	<1.2	<1.3	<1.3	<0.99	<19	<1.4	<1.2	<0.86	<1.4	<1.1	<1.2	<1.7	<10	<0.99
1278-121	1278-121-0	Surface	2/25/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.88	<12	<10	<1.0	<0.98	<1.1	<1.2	<1.2	<2.2	<4.4	<0.79	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.89	<18	<1.2	<1.1	<0.77	<1.2	<1.0	<1.1	<1.6	<9.3	<0.89
	1278-121-1.5	1.5-Foot	2/25/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.89	<12	<11	<1.0	<0.98	<1.1	<1.2	<1.2	<2.2	<4.4	<0.79	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
1278-122	1278-122-0	Surface	2/25/2015	<0.85	<1.4	<2.6	<1.4	<2.3	<0.85	<1.2	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.9	<5.7	<1.0	<3.6	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.4	<1.0	<1.6	<1.3	<1.4	<2.1	<12	<1.2
1278-123	1278-123-0	Surface	2/25/2015	<0.79	<1.3	<2.5	<1.3	<2.1	<0.79	<1.1	<14	<13	<1.2	<1.2	<1.4	<1.5	<1.5	<2.7	<5.4	<0.97	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.3	<0.95	<1.5	<1.3	<1.3	<1.9	<11	<1.1
1278-124	No Sample - Inaccessible																																				
1278-125	No Sample - Inaccessible																																				
1278-126	No Sample - Inaccessible																																				
1278-127	1278-127-0	Surface	3/5/2015	<0.73	<1.2	<2.2	<1.2	<1.9	<0.72	<0.99	<13	<12	<1.1	<1.1	<1.3	<1.4	<1.4	<2.4	<4.9	<0.88	<3.1	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.2	<0.87	<1.4	<1.2	<1.2	<1.8	<10	<1.0
	1278-127-1.5	1.5-Foot	3/5/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.64	<0.88	<12	<10	<1.0	<0.97	<1.1	<1.2	<1.2	<2.2	<4.4	<0.79	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.89	<17	<1.2	<1.1	<0.77	<1.2	<1.0	<1.1	<1.6	<9.3	<0.89
1278-128	1278-128-0	Surface	3/5/2015	<1.0	<1.6	<3.1	<1.7	<2.7	<1.0	<1.4	<18	<16	<1.6	<1.5	<1.8	<1.9	<1.9	<3.4	<6.8	<1.2	<4.3	<1.8	<1.7	<1.7	<1.8	<1.8	<1.4	<27	<1.9	<1.7	<1.2	<1.9	<1.6	<1.7	<2.4	<15	<1.4
1278-129	1278-129-0	Surface	2/25/2015	<0.76	<1.2	<2.3	<1.2	<2.0	<0.75	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.1	<0.92	<3.2	<1.3	<1.2	<1.3	<1.3	<1.3	<1.0	<20	<1.4	<1.3	<0.90	<1.5	<1.2	<1.2	<1.8	<11	<1.0
	1278-129-1.5	1.5-Foot	2/25/2015	<0.80	<1.3	<2.5	<1.3	<2.1	<0.79	<1.1	<14	<13	<1.2	<1.2	<1.4	<1.5	<1.5	<2.7	<5.4	<0.97	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.4	<0.95	<1.5	<1.3	<1.3	<1.9	<11	<1.1
1278-130	1278-130-0	Surface	2/25/2015	<0.79	<1.3	<2.4	<1.3	<2.1	<0.79	<1.1	<14	<13	<1.2	<1.2	<1.4	<1.5	<1.5	<2.7	<5.3	<0.96	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.3	<0.94	<1.5	<1.3	<1.3	<1.9	<11	<1.1
	1278-130-1.5	1.5-Foot	2/25/2015	<0.81	<1.3	<2.5	<1.3	<2.2	<0.81	<1.1	<14	<13	<1.3	<1.2	<1.4	<1.5	<1.6	<2.7	<5.5	<0.99	<3.5	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<22	<1.5	<1.4	<0.97	<1.6	<1.3	<1.3	<2.0	<12	<1.1
1278-131	1278-131-0	Surface	3/5/2015	<0.78	<1.2	<2.4	<1.3	<2.1	<0.77	<1.1	<14	<13	<1.2	<1.2	<1.3	<1.4	<1.5	<2.6	<5.2	<0.94	<3.3	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.3	<0.92	<1.5	<1.2	<1.3	<1.9	<11	<1.1
	1278-131-1.5	1.5-Foot	3/5/2015	<0.79	<1.3	<2.4	<1.3	<2.1	<0.79	<1.1	<14	<13	<1.2	<1.2	<1.4	<1.5	<1.5	<2.7	<5.3	<0.96	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.3	<0.94	<1.5	<1.3	<1.3	<1.9	<11	<1.1
1278-132	1278-132-0	Surface	3/5/2015	<0.80	<1.3	<2.5	<1.3	<2.1	<0.80	<1.1	<14	<13	<1.3	<1.2	<1.4	<1.5	<1.5	<2.7	<5.4	<0.98	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<22	<1.5	<1.4	<0.96	<1.6	<1.3	<1.3	<1.9	<12	<1.1
	1278-132-1.5	1.5-Foot	3/5/2015	<0.99	<1.6	<3.1	<1.6	<2.6	<0.99	<1.3	<18	<16	<1.6	<1.5	<1.7	<1.8	<1.9	<3.3	<6.7	<1.2	<4.2	<1.7	<1.6	<1.6	<1.7	<1.7	<1.4	<27	<1.9	<1.7	<1.2	<1.9	<1.6	<1.6	<2.4	<14	<1.4
1278-133	1278-133-0	Surface	3/5/2015	<0.79	<1.3	<2.4	<1.3	<2.1	<0.78	<1.1	<14	<13	<1.2	<1.2	<1.4	<1.5	<1.5	<2.6	<5.3	<0.96	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.3	<0.94	<1.5	<1.2	<1.3	<1.9	<11	<1.1
	1278-133-1.5	1.5-Foot	3/5/2015	<0.85	<1.4	<2.6	<1.4	<2.3	<0.85	<1.2	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.9	<5.7	<1.0	<3.6	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.4	<1.0	<1.6	<1.3	<1.4	<2.1	<12	<1.2
1278-134	1278-134-0	Surface	3/10/2015	<0.66	<1.1	<2.0	<1.1	<1.8	<0.66	<0.90	<12	<11	<1.0	<0.99	<1.1	<1.2	<1.3	<2.2	<4.4	<0.80	<2.8	<1.2	<1.1	<1.1	<1.1	<1.2	<0.91	<18	<1.2	<1.1	<0.79	<1.3	<1.0	<1.1	<1.6	<9.5	<0.91
	1278-134-1.5	1.5-Foot	3/5/2015	<1.2	<1.9	<3.6	<2.0	<3.1	<1.2	<1.6	<21	<19	<1.9	<1.8	<2.1	<2.2	<2.3	<4.0	<8.0	<1.4	<5.1	<2.1	<1.9	<2.0	<2.1	<2.1	<1.6	<32	<2.2	<2.0	<1.4	<2.3	<1.9	<1.9	<2.9	<17	<1.6
1278-135	1278-135-0	Surface	2/25/2015	<0.76	<1.2	<2.3	<1.3	<2.0	<0.75	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.1	<0.92	<3.2	<1.3	<1.2	<1.3	<1.3	<1.3	<1.0	<20	<1.4	<1.3	<0.90	<1.5	<1.2	<1.2	<1.8	<11	<1.0
	1278-135-1.5	1.5-Foot	2/25/2015	<0.72	<1.2	<2.2	<1.2	<1.9	<0.72	<0.99	<13	<12	<1.1	<1.1	<1.3	<1.4	<1.4	<2.4	<4.9	<0.88	<3.1	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.2	<0.86	<1.4	<1.1	<1.2	<1.8	<10	<1.0
1278-136	1278-136-0	Surface	2/25/2015	<1.1	<1.7	<3.2	<1.7	<2.8	<1.0	<1.4	<19	<17	<1.6	<1.6	<1.8	<2.0	<2.0	<3.5	<7.1	<1.3	<4.5	<1.8	<1.7	<1.7	<1.8	<1.8	<1.4	<28	<2.0	<1.8	<1.3	<2.0	<1.7	<1.7	<2.5	<15	<1.4
	1278-136-1.5	1.5-Foot	2/25/2015	<0.78	<1.2	<2.4	<1.3	<2.1	<0.78	<1.1	<14	<13	<1.2	<1.2	<1.4	<1.5	<1.5	<2.6	<5.3	<0.95	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.3	<0.93	<1.5	<1.2	<1.3	<1.9	<11	<1.1
	1278-136-3.5	3.5-Feet	2/25/2015	<0.76	<1.2	<2.4	<1.3	<2.0	<0.76	<1.0	<14	<12	<1.2	<1.2	<1.3	<1.4	<1.5	<2.6	<5.1	<0.93	<3.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.1	<21	<1.4	<1.3	<0.91	<1.5	<1.2	<1.2	<1.8	<11	<1.1
1278-137	1278-137-0	Surface	2/25/2015	<0.82	<1.3	<2.5	<1.4	<2.2	<0.82	<1.1	<15	<13	<1.3	<1.2	<1.4	<1.5	<1.6	<2.8	<5.5	<1.0	<3.5	<1.4	<1.4	<1.4	<1.4	<1.4	<1.1	<22	<1.6	<1.4	<0.98	<1.6	<1.3	<1.3	<2.0	<12	<1.1
	1278-137-1.5	1.5-Foot	2/25/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.89	<12	<11	<1.0	<0.98	<1.1	<1.2	<1.2	<2.2	<4.4	<0.79	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
1278-138	1278-138-0	Surface	2/25/2015	<0.82	<1.3	<2.5	<1.3	<2.2	<0.81	<1.1	<15	<13	<1.3	<1.2	<1.4	<1.5	<1.6	<2.7	<5.5	<0.99	<3.5	<1.4	<1.3	<1.4	<1.4	<1.4	<1.1	<22	<1.5	<1.4	<0.97	<1.6	<1.3	<1.3	<2.0	<12	<1.1
	1278-138-1.5	1.5-Foot	2/25/2015	<0.86	<1.4	<2.7	<1.4	<2.3	<0.86	<1.2	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.9	<5.8	<1.0	<3.7	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.5	<1.0	<1.7	<1.4	<1.4	<2.1	<12	<1.2
	1278-138-3.5	3.5-Feet	2/25/2015	<0.59	<0.94	<1.8	<0.98	<1.6	<0.59	<0.81	<11	<9.6	<0.93	<0.89	<1.0	<1.1	<1.1	<2.0	<4.0	<0.72	<2.5	<1.0	<0.98	<0.98	<1.0	<1.0	<0.82	<16	<1.1	<1.0	<0.71	<1.1	<0.94	<0.97	<1.4	<8.5	<0.82
1278-139	1278-139-0	Surface	2/25/2015	<0.85	<1.4	<2.6	<1.4	<2.3	<0.85	<1.2	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.9	<5.8	<1.0	<3.7	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.5	<1.0	<1.6	<1.4	<1.4	<2.1	<12	<1.2
	1278-139-1.5	1.5-Foot	2/25/2015	<0.72	<1.1	<2.2	<1.2	<1.9	<0.71	<0.98	<13	<12	<1.1	<1.1	<1.2	<1.3	<1.4	<2.4	<4.8	<0.87	<3.1	<1.3	<1.2	<1.2	<1.2	<1.3	<0.99	<19	<1.4	<1.2	<0.85	<1.4	<1.1	<1.2	<1.7	<10	<0.99
1278-140	1278-140-0	Surface	2/25/2015	<0.76	<1.2	<2.3	<1.3	<2.0	<0.76	<1.0	<14	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.1	<0.92	<3.2	<1.3	<1.3	<1.3	<1.3	<1.3	<1.0	<20	<1.4	<1.3	<0.90	<1.5	<1.2	<1.2	<1.8	<11	<1.0
	1278-140-1.5	1.5-Foot	2/25/2015	<0.90	<1.4	<2.8	<1.5	<2.4	<0.89	<1.2	<16	<14	<1.4	<1.4	<1.6	<1.7	<1.7	<3.0	<6.0	<1.1	<3.8	<1.6	<1.5	<1.5	<1.6	<1.6	<1.2	<24	<1.7	<1.5	<1.1	<1.7	<1.4	<1.5	<2.2	<13	<1.2
1278-141	1278-141-0	Surface	2/25/2015	<1.1	<1.7	<3.2	<1.7	<2.8	<1.0	<1.4	<19	<17	<1.6	<1.6	<1.8	<2.0	<2.0	<3.5	<7.1	<1.3	<4.5	<1.8	<1.7	<1.7	<1.8	<1.8	<1.4	<28	<2.0	<1.8	<1.3	<2.0	<1.7	<1.7	<2.5	<15	<1.4
	1278-141-1.5	1.5-Foot	2/25/2015	<0.81	<1.3	<2.5	<1.3	<2.2	<0.81	<1.1	<14	<13	<1.3	<1.2	<1.4	<1.5	<1.6	<2.7	<5.5	<0.99	<3.5	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<22	<1.5	<1.4	<0.97	<1.6	<1.3	<1.3	<2.0	<12	<1.1
1278-142	1278-142-0	Surface	2/25/2015	<0.82	<1.3	<2.5	<1.4	<2.2	<0.82	<1.1	<15	<13	<1.3	<1.2	<1.4	<1.5	<1.6	<2.8	<5.5	<1.0	<3.5	<1.4	<1.4	<1.4	<1.4	<1.4	<1.1	<22	<1.5	<1.4	<0.98	<1.6	<1.3	<1.3	<2.0	<12	<1.1
	1278-142-1.5	1.5-Foot	2/25/2015	<0.69	<1.1	<2.1	<1.1	<1.8	<0.69	<0.94	<12	<11	<1.1	<1.0	<1.2	<1.3	<1.3	<2.3	<4.7	<0.84	<3.0	<1.2	<1.1	<1.1	<1.2	<1.2	<0.95	<19	<1.3	<1.2	<0.82	<1.3	<1.1	<1.1	<1.7	<10	<0.95
1278-143	1278-143-0	Surface	2/25/2015	<0.77	<1.2	<2.4	<1.3	<2.1	<0.77	<1.1	<14	<12	<1.2	<1.2	<1.3	<1.4	<1.5	<2.6	<5.2	<0.94	<3.3	<1.4	<1.3	<1.3	<1.3	<1.4	<1.1	<21	<1.5	<1.3	<0.92	<1.5	<1.2	<1.3	<1.9	<11	<1.1
1278-144	1278-144-0	Surface	2/25/2015	<0.73	<1.2	<2.2	<1.2	<1.9	<0.72	<0.99	<13	<12	<1.1	<1.1	<1.3	<1.4	<1.4	<2.4	<4.9	<0.88	<3.1	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.2	<0.86	<1.4	<1.2	<1.2	<1.8	<10	<1.0
	1278-144-1.5	1.5-Foot	2/25/2015	<0.82	<1.3	<2.5	<1.4	<2.2	<0.82	<1.1	<15	<13	<1.3	<1.2	<1.4	<1.5	<1.6	<2.7	<5.5	<1.0	<3.5	<1.4	<1.4	<1.4	<1.4	<1.4	<1.1	<22	<1.5	<1.4	<0.98	<1.6	<1.3	<1.3	<2.0	<12	<1.1
1278-145	1278-145-0	Surface	2/25/2015	<0.69	<1.1	<2.1	<1.1	<1.8	<0.69	<0.94	<12	<11	<1.1	1.8 NJ	<1.2	<1.3	<1.3	<2.3	<4.6	<0.84	<3.0	<1.2	<1.1	<1.1	<1.2	<1.2	<0.95	<19	<1.3	<1.2	4.2 NJ	<1.3	<1.1	<1.1	<1.7	<9.9	<0.95
	1278-145-1.5	1.5-Foot	2/25/2015	<0.85	<1.3	<2.6	<1.4	<2.2	<0.84	<1.2	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.8	<5.7	<1.0	<3.6	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.4	<1.0	<1.6	<1.3	<1.4	<2.0	<12	<1.2
1278-146	1278-146-0	Surface	2/25/2015	<0.67	<1.1	<2.1	<1.1	<1.8	<0.66	<0.91	<12	<11	<1.0	<1.0	<1.2	<1.2	<1.3	<2.2	<4.5	<0.81	<2.9	<1.2	<1.1	<1.1	<1.2	<1.2	<0.92	<18	<1.3	<1.1	<0.79	<1.3	<1.1	<1.1	<1.6	<9.6	<0.92
	1278-146-1.5	1.5-Foot	2/25/2015	<0.82	<1.3	<2.5	<1.4	<2.2	<0.82	<1.1	<15	<13	<1.3	<1.2	<1.4	<1.5	<1.6	<2.8	<5.6	<1.0	<3.5	<1.4	<1.4	<1.4	<1.4	<1.4	<1.1	<22	<1.6	<1.4	<0.98	<1.6	<1.3	<1.3	<2.0	<12	<1.1
1278-147	1278-147-0	Surface	2/25/2015	<0.67	<1.1	<2.1	<1.1	<1.8	<0.67	<0.91	<12	<11	<1.0	<1.0	<1.2	<1.2	<1.3	<2.2	<4.5	<0.81	<2.9	<1.2	<1.1	<1.1	<1.2	<1.2	<0.92	<18	<1.3	<1.1	<0.80	<1.3	<1.1	<1.1	<1.6	<9.6	<0.92
	1278-147-1.5	1.5-Foot	2/25/2015	<0.67	<1.1	<2.1	<1.1	<1.8	<0.67	<0.92	<12	<11	<1.1	<1.0	<1.2	<1.3	<1.3	<2.3	<4.5	<0.82	<2.9	<1.2	<1.1	<1.1	<1.2	<1.2	<0.92	<18	<1.3	<1.1	<0.80	<1.3	<1.1	<1.1	<1.6	<9.7	<0.93
1278-148	1278-148-0	Surface	2/25/2015	<0.73	<1.2	<2.2	<1.2	<1.9	<0.73	<0.99	<13	<12	<1.1	<1.1	<1.3	<1.4	<1.4	<2.4	<4.9	<0.89	<3.1	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.2	<0.87	<1.4	<1.2	<1.2	<1.8	<10	<1.0
	1278-148-1.5	1.5-Foot	2/25/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.89	<12	<11	<1.0	<0.98	<1.1	<1.2	<1.2	<2.2	<4.4	<0.79	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
1278-149	1278-149-0	Surface	2/24/2015	<0.90	<1.4	<2.8	<1.5	<2.4	<0.90	<1.2	<16	<15	<1.4	<1.4	<1.6	<1.7	<1.7	<3.0	<6.1	<1.1	<3.9	<1.6	<1.5	<1.5	<1.6	<1.6	<1.2	<24	<1.7	<1.5	<1.1	<1.7	<1.4	<1.5	<2.2	<13	<1.2
	1278-149-1.5	1.5-Foot	2/24/2015	<0.77	<1.2	<2.4	<1.3	<2.1	<0.77	<1.1	14	13	<1.2	<1.2	<1.3	<1.4	<1.5	<2.6	5.2	<0.94	<3.3	<1.4	<1.3	<1.3	<1.3	<1.4	<1.1	21	<1.5	<1.3	<0.92	<1.5	<1.2	<1.3	<1.9	11	<1.1
1278-150	1278-150-0	Surface	2/24/2015	<0.74	<1.2	<2.3	<1.2	<2.0	<0.73	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.0	<0.89	<3.2	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.2	<0.88	<1.4	<1.2	<1.2	<1.8	<11	<1.0
	1278-150-1.5	1.5-Foot	2/24/2015	<0.84	<1.3	<2.6	<1.4	<2.2	<0.83	<1.1	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.8	<5.6	<1.0	<3.6	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.4	<1.0	<1.6	<1.3	<1.4	<2.0	<12	<1.2
	1278-150-3	3-Feet	2/24/2015	<0.58	<0.92	<1.8	<0.95	<1.5	<0.57	<0.78	<10	<9.3	<0.90	<0.87	<1.0	<1.1	<1.1	<1.9	<3.9	<0.70	<2.5	<1.0	<0.95	<0.95	<1.0	<1.0	<0.79	<16	<1.1	<0.98	<0.69	<1.1	<0.91	<0.94	<1.4	<8.3	<0.79
1278-151	1278-151-0	Surface	2/24/2015	<0.96	<1.5	<3.0	<1.6	<2.6	<0.96	<1.3	<17	<16	<1.5	<1.4	<1.7	<1.8	<1.8	<3.2	<6.5	<1.2	<4.1	<1.7	<1.6	<1.6	<1.7	<1.7	<1.3	<26	<1.8	<1.6	2.7 NJ	<1.9	<1.5	<1.6	<2.3	<14	<1.3
	1278-151-1.5	1.5-Foot	2/24/2015	<0.73	<1.2	<2.3	<1.2	<1.9	<0.73	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<4.9	<0.89	<3.1	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.2	<0.87	<1.4	<1.2	<1.2	<1.8	<11	<1.0
1278-152	1278-152-0	Surface	2/24/2015	<0.67	<1.1	<2.1	<1.1	<1.8	<0.67	<0.92	<12	<11	<1.1	<1.0	<1.2	<1.3	<1.3	<2.3	<4.5	<0.82	<2.9	<1.2	<1.1	<1.1	<1.2	<1.2	<0.92	<18	<1.3	<1.1	<0.80	<1.3	<1.1	<1.1	<1.6	<9.7	<0.93
	1278-152-1.5	1.5-Foot	2/24/2015	<1.0	<1.6	<3.1	<1.7	<2.7	<1.0	<1.4	<18	<16	<1.6	<1.5	<1.8	<1.9	<1.9	<3.4	<6.8	<1.2	<4.3	<1.8	<1.7	<1.7	<1.8	<1.8	<1.4	<27	<1.9	<1.7	<1.2	<1.9	<1.6	<1.7	<2.4	<15	<1.4
1278-153	1278-153-0	Surface	2/24/2015	<0.62	<0.98	<1.9	<1.0	<1.6	<0.61	<0.84	<11	<10	<0.97	<0.93	<1.1	<1.2	<1.2	<2.1	<4.2	<0.75	<2.6	<1.1	<1.0	<1.0	<1.1	<1.1	<0.85	<17	<1.2	<1.0	<0.74	<1.2	<0.98	<1.0	<1.5	<8.9	<0.85
	1278-153-1.5	1.5-Foot	2/24/2015	<0.74	<1.2	<2.3	<1.2	<2.0	<0.74	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.0	<0.91	<3.2	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.3	<0.89	<1.4	<1.2	<1.2	<1.8	<11	<1.0
1278-154	1278-154-0	Surface	2/24/2015	<1.0	<1.7	<3.2	<1.7	<2.8	<1.0	<1.4	<19	<17	<1.6	<1.6	<1.8	<1.9	<2.0	<3.5	<7.0	<1.3	<4.5	<1.8	<1.7	<1.7	<1.8	<1.8	<1.4	<28	<2.0	<1.8	<1.2	<2.0	<1.7	<1.7	<2.5	<15	<1.4
	1278-154-1.5	1.5-Foot	2/24/2015	<0.79	<1.3	<2.4	<1.3	<2.1	<0.79	<1.1	<14	<13	<1.2	<1.2	<1.4	<1.5	<1.5	<2.6	<5.3	<0.96	<3.4	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<21	<1.5	<1.3	<0.94	<1.5	<1.3	<1.3	<1.9	<11	<1.1
1278-155	1278-155-0	Surface	2/24/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.89	<12	<11	<1.0	<0.99	<1.1	<1.2	<1.2	<2.2	<4.4	<0.80	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
	1278-155-1.5	1.5-Foot	2/24/2015	<0.60	<0.95	<1.8	<0.98	<1.6	<0.59	<0.81	<11	<9.6	<0.93	<0.90	<1.0	<1.1	<1.1	<2.0	<4.0	<0.72	<2.5	<1.0	<0.98	<0.99	<1.0	<1.0	<0.82	<16	<1.1	<1.0	<0.71	<1.1	<0.94	<0.97	<1.4	<8.6	<0.82

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS (VOCs)
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	VOLATILE ORGANIC COMPOUNDS (ug/kg)																																		
				Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Di-isopropyl ether	Ethyl Acetate	Ethyl Ether	Ethyl tert-butyl ether	Ethylbenzene	Freon-113	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene chloride	MTBE	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Amyl methyl ether	tert-Butanol	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride
USEPA RSLs - Industrial Use (ug/kg) [3]				*460,000*	*2,300,000*	*8,200*	*3,300*	--	*370,000*	--	*2,600,000*	*2.3E+08*	--	*25,000*	--	*36,000*	--	*2,400,000*	*1,000,000*	*210,000*	*17,000*	*58,000,000*	*22,000,000*	*2,800,000*	*1.2E+08*	*35,000,000*	--	--	--	*1.2E+08*	*100,000*	*47,000,000*	*23,000,000*	*8,200*	*6,000*	*3,100,000*	*2,800,000*	*1,700*
California TTLC (ug/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*2040000*	--	--	--
NORTHBOUND STRIP PARCEL																																						
1278-156	No Sample - Removed from Scope due to Landscaping																																					
1278-157	No Sample - Removed from Scope due to Landscaping																																					
1278-158	No Sample - Removed from Scope due to Landscaping																																					
1278-159	No Sample - Removed from Scope due to Landscaping																																					
1278-160	No Sample - Removed from Scope due to Landscaping																																					
1278-161	No Sample - Removed from Scope due to Landscaping																																					
1278-162	1278-162-0	Surface	3/10/2015	<0.69	<1.1	<2.1	<1.1	<1.8	<0.69	<0.94	<12	<11	<1.1	<1.0	<1.2	<1.3	<1.3	<2.3	<4.7	<0.84	<3.0	<1.2	<1.1	<1.1	<1.2	<1.2	<0.95	<19	<1.3	<1.2	<0.82	<1.3	<1.1	<1.1	<1.7	<9.9	<0.95
1278-163	1278-163-0	Surface	3/10/2015	**1.7 NJ**	<1.3	<2.5	<1.3	<2.1	<0.80	<1.1	<14	<13	<1.3	<1.2	<1.4	<1.5	<1.5	<2.7	<5.4	<0.98	<3.5	<1.4	<1.3	<1.3	<1.4	<1.4	<1.1	<22	<1.5	<1.4	<0.96	<1.6	<1.3	<1.3	<1.9	<12	<1.1
	1278-163-1.5	1.5-Foot	3/10/2015	<0.97	<1.5	<3.0	<1.6	<2.6	<0.96	<1.3	<17	<16	<1.5	<1.5	<1.7	<1.8	<1.8	<3.2	<6.5	<1.2	<4.1	<1.7	<1.6	<1.6	<1.7	<1.7	<1.3	<26	<1.8	<1.6	<1.2	<1.9	<1.5	<1.6	<2.3	<14	<1.3
1278-164	1278-164-0	Surface	3/10/2015	<0.86	<1.4	<2.7	<1.4	<2.3	<0.86	<1.2	<15	<14	<1.3	<1.3	<1.5	<1.6	<1.6	<2.9	<5.8	<1.0	<3.7	<1.5	<1.4	<1.4	<1.5	<1.5	<1.2	<23	<1.6	<1.5	<1.0	<1.7	<1.4	<1.4	<2.1	<12	<1.2
1278-165	1278-165-0	Surface	3/10/2015	<0.74	<1.2	<2.3	<1.2	<2.0	<0.74	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.0	<0.90	<3.2	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.3	<0.88	<1.4	<1.2	<1.2	<1.8	<11	<1.0
	1278-165-1.5	1.5-Foot	3/10/2015	<0.99	<1.6	<3.0	<1.6	<2.6	<0.98	<1.3	<18	<16	<1.5	<1.5	<1.7	<1.8	<1.9	<3.3	<6.6	<1.2	<4.2	<1.7	<1.6	<1.6	<1.7	<1.7	<1.4	<27	<1.9	<1.7	<1.2	<1.9	<1.6	<1.6	<2.4	<14	<1.4
1278-166	1278-166-0	Surface	3/10/2015	<0.64	<1.0	<2.0	<1.1	<1.7	<0.63	<0.87	<11	<10	<1.0	<0.96	<1.1	<1.2	<1.2	<2.1	<4.3	<0.77	<2.7	<1.1	<1.0	<1.1	<1.1	<1.1	<0.88	<17	<1.2	<1.1	<0.76	<1.2	<1.0	<1.0	<1.5	<9.2	<0.88
	1278-166-1.5	1.5-Foot	3/10/2015	<0.75	<1.2	<2.3	<1.2	<2.0	<0.75	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.4	<4.8	<0.87	<3.1	<1.3	<1.2	<1.2	<1.2	<1.3	<0.99	<19	<1.4	<1.2	<0.85	<1.4	<1.1	<1.2	<1.7	<10	<0.99
1278-167	1278-167-0	Surface	3/10/2015	<0.72	<1.1	<2.2	<1.2	<1.9	<0.71	<0.98	<13	<12	<1.1	<1.1	<1.2	<1.3	<1.4	<2.4	<4.8	<0.87	<3.1	<1.3	<1.2	<1.2	<1.2	<1.3	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
	1278-167-1.5	1.5-Foot	3/10/2015	<1.2	<2.0	<3.8	<2.1	<3.3	<1.2	<1.7	<22	<20	<1.9	<1.9	<2.2	<2.3	<2.4	<4.2	<8.4	<1.5	<5.3	<2.2	<2.0	<2.1	<2.2	<2.2	<1.7	<33	<2.3	<2.1	<1.5	<2.4	<2.0	<2.0	<3.0	<18	<1.7
1278-168	1278-168-0	Surface	3/10/2015	<0.65	<1.0	<2.0	<1.1	<1.7	<0.65	<0.89	<12	<11	<1.0	<0.98	<1.1	<1.2	<1.2	<2.2	<4.4	<0.79	<2.8	<1.1	<1.1	<1.1	<1.1	<1.1	<0.90	<18	<1.2	<1.1	<0.78	<1.3	<1.0	<1.1	<1.6	<9.4	<0.90
	1278-168-1.5	1.5-Foot	3/10/2015	<0.75	<1.2	<2.3	<1.2	<2.0	<0.75	<1.0	<13	<12	<1.2	<1.1	<1.3	<1.4	<1.4	<2.5	<5.1	<0.91	<3.2	<1.3	<1.2	<1.2	<1.3	<1.3	<1.0	<20	<1.4	<1.3	<0.89	<1.4	<1.2	<1.2	<1.8	<11	<1.0
1278-169	1278-169-0	Surface	3/10/2015	<0.89	<1.4	<2.8	<1.5	<2.4	<0.89	<1.2	<16	<14	<1.4	<1.3	<1.5	<1.7	<1.7	<3.0	<6.0	<1.1	<3.8	<1.6	<1.5	<1.5	<1.6	<1.6	<1.2	<24	<1.7	<1.5	<1.1	<1.7	<1.4	<1.5	<2.2	<13	<1.2
	1278-169-1.5	1.5-Foot	3/10/2015	<0.69	<1.1	<2.1	<1.1	<1.8	<0.69	<0.94	<12	<11	<1.1	<1.0	<1.2	<1.3	<1.3	<2.3	<4.6	<0.84	<2.9	<1.2	<1.1	<1.1	<1.2	<1.2	<0.95	<19	<1.3	<1.2	<0.82	<1.3	<1.1	<1.1	<1.7	<9.9	<0.95
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)																																						
Day 1	EBA-1-022415	QA/QC*	2/24/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBA-2-022415	QA/QC*	2/24/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBA-3-022415	QA/QC*	2/24/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBB-3-022415	QA/QC*	2/24/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBB-3-022415	QA/QC*	2/24/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
Day 2	EBA-1-022515	QA/QC*	2/25/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBA-2-022515	QA/QC*	2/25/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBA-3-022515	QA/QC*	2/25/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBB-1-022515	QA/QC*	2/25/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBB-2-022515	QA/QC*	2/25/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EBB-3-022515	QA/QC*	2/25/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
Day 3	EB-1-030515	QA/QC*	3/5/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EB-2-030515	QA/QC*	3/5/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
Day 4	EB-1-031015	QA/QC*	3/10/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23
	EB-2-031015	QA/QC*	3/10/2015	<0.30	<0.25	<0.30	<0.44	<0.27	<0.23	<0.31	<4.0	<2.9	<0.24	<0.31	<0.35	<0.47	<0.25	<0.46	<1.0	<0.23	<0.40	<0.27	<0.26	<0.29	<0.36	<0.29	<0.31	<7.6	<0.32	<0.28	<0.21	<0.22	<0.22	<0.31	<0.28	<2.6	<0.23

NOTES:
(1) - Boring identification number
(2) - Sample depth reported in feet below the ground surface
(3) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in ug/kg) for VOCs for industrial soil (last updated January 2015) - Traditional Table with a Target Cancer Risk Level of 1.0x10-6 and a Target Hazard Quotient of 1.0.
NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

Bold =Detected above reporting limit
All soil results in milligrams per kilogram (mg/kg)
All EB results in milligrams per liter (mg/L)
* QA/QC samples consisted of liquid equipment blanks (mg/L)

TABLE 4
SUMMARY OF SOIL ANALYTICAL RESULTS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	SEMI-VOLATILE ORGANIC COMPOUNDS (ug/kg)																																				
				1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl-phenylether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl-phenylether	4-Methylphenol	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Anthracene	Benzidine (M)	Benzo(a)anthracene	Benzo(a)pyrene
USEPA RSLs - Industrial Use (ug/kg) [3]				110,000	9,300,000	--	11,000	8.2E+07	210,000	2,500,000	1.6E+07	1,600,000	7,400	1,500	--	--	--	--	--	--	5,100	--	--	--	--	12,000	--	--	120,000	--	--	--	2.3E+08	10	2,900	290
California TTLC (ug/kg)				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NORTH-NORTH CANYON (DEBRIS) PARCEL																																								
1278-111	1278-111-0	Surface	2/24/2015	<1400	<1500	<1600	<1500	<3200	<3500	<3300	<3200	<3200	<1400	<1700	<1500	<3000	<1500	<1900	<1400	<3700	<7200	<1100	<2300	<2000	<3100	<1500	<1500	<1800	<1600	<5100	<1400	<1400	<1400	<41000	<1400	<1600				
1278-112	1278-112-0	Surface	2/24/2015	<1400	<1500	<1600	<1500	<3200	<3500	<3300	<3200	<3200	<1400	<1700	<1500	<3000	<1500	<1900	<1400	<3700	<7200	<1100	<2300	<2000	<3100	<1500	<1500	<1800	<1600	<5100	<1400	<1400	<1400	<41000	<1400	<1600				
1278-113	1278-113-0	Surface	2/24/2015	<1400	<1500	<1600	<1500	<3200	<3500	<3300	<3200	<3200	<1400	<1700	<1500	<3000	<1500	<1900	<1400	<3700	<7200	<1100	<2300	<2000	<3100	<1500	<1500	<1800	<1600	<5100	<1400	<1400	<1400	<41000	<1400	<1600				
1278-114	1278-114-0	Surface	2/24/2015	<1400	<1500	<1600	<1500	<3200	<3500	<3300	<3200	<3200	<1400	<1700	<1500	<3000	<1500	<1900	<1400	<3700	<7200	<1100	<2300	<2000	<3100	<1500	<1500	<1800	<1600	<5100	<1400	<1400	<1400	<41000	<1400	<1600				
1278-115	1278-115-0	Surface	2/24/2015	<280 UJ	<320 UJ	<290 UJ	<320 UJ	<290 UJ	<650 UJ	<700 UJ	<660 UJ	<640 UJ	<630 UJ	<280 UJ	<340 UJ	<300 UJ	<610 UJ	<300 UJ	<370 UJ	<270 UJ	<740 UJ	<1400 UJ	<230 UJ	<460 UJ	<390 UJ	<620 UJ	<310 UJ	<300 UJ	<360 UJ	<330 UJ	<1000 UJ	<280 UJ	<280 UJ	<290 UJ	<8200 UJ	<270 UJ	<320 UJ				
1278-116	1278-116-0	Surface	2/24/2015	<1400	<1500	<1600	<1500	<3200	<3500	<3300	<3200	<3200	<1400	<1700	<1500	<3000	<1500	<1900	<1400	<3700	<7200	<1100	<2300	<2000	<3100	<1500	<1500	<1800	<1600	<5100	<1400	<1400	<1400	<41000	<1400	<1600				
1278-117	1278-117-0	Surface	2/24/2015	<570 UJ	<590 UJ	<640 UJ	<590 UJ	<1300 UJ	<1400 UJ	<1300 UJ	<1300 UJ	<1300 UJ	<560 UJ	<690 UJ	<610 UJ	<1200 UJ	<610 UJ	<740 UJ	<540 UJ	<1500 UJ	<2900 UJ	<450 UJ	<920 UJ	<780 UJ	<1200 UJ	<610 UJ	<600 UJ	<730 UJ	<650 UJ	<2000 UJ	<560 UJ	<560 UJ	<570 UJ	<16000 UJ	<550 UJ	<640 UJ				
1278-118	1278-118-0	Surface	2/24/2015	<1400	<1500	<1600	<1500	<3200	<3500	<3300	<3200	<3200	<1400	<1700	<1500	<3000	<1500	<1900	<1400	<3700	<7200	<1100	<2300	<2000	<3100	<1500	<1500	<1800	<1600	<5100	<1400	<1400	<1400	<41000	<1400	<1600				
1278-119	No Sample - Not on Property																																							
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)																																								
EBB-1-022415	EBB-1-022415	QA/QC*	2/24/2015	<1.5	<1.7	<1.5	<1.3	<2.3 UJ	<3.3 UJ	<3.9 UJ	<3.3 UJ	<2.8 UJ	<2.0	<2.1	<1.4	<3.5 UJ	<1.4	<2.0 UJ	<1.9	<3.3 UJ	<11	<1.8	<2.4 UJ	<1.5	<3.7 UJ	<1.7	<1.8	<2.1 UJ	<2.2	<3.6 UJ	<1.4	<1.3	<1.5	<2.7	<1.6	<1.8				
EBB-2-022415	EBB-2-022415	QA/QC*	2/24/2015	<1.5	<1.7	<1.5	<1.3	<2.3 UJ	<3.3 UJ	<3.9 UJ	<3.3 UJ	<2.8 UJ	<2.0	<2.1	<1.4	<3.5 UJ	<1.4	<2.0 UJ	<1.9	<3.3 UJ	<11	<1.8	<2.4 UJ	<1.5	<3.7 UJ	<1.7	<1.8	<2.1 UJ	<2.2	<3.6 UJ	<1.4	<1.3	<1.5	<2.7	<1.6	<1.8				

NOTES:

(1) - Boring identification number

(2) - Sample depth reported in feet below the ground surface

(3) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in ug/kg) for SVOCs for industrial soil (last updated January 2015) - Traditional Table with a Target Cancer Risk Level of 1.0x10-6 and a Target Hazard Quotient of 1.0.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

* QA/QC samples consisted of liquid equipment blanks (mg/L)

Bold =Detected above reporting limit
All soil results in micrograms per kilogram (ug/kg)
All EB results in milligrams per liter (mg/L)

TABLE 4
SUMMARY OF SOIL ANALYTICAL RESULTS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs)
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	SEMI-VOLATILE ORGANIC COMPOUNDS (ug/kg)																																			
				Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	bis(2-chloroethoxy)methane	bis(2-Chloroethyl)ether	bis(2-chloroisopropyl)ether	bis(2-ethylhexyl)phthalate	Butylbenzylphthalate	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butylphthalate	Di-n-octylphthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Naphthalene	Nitrobenzene	N-Nitroso-di-n propylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
	USEPA RSLs - Industrial Use (ug/kg) [3]			*2,900*	--	*29,000*	*3.3E+09*	*82,000*	*2.5E+08*	*1000*	--	*160,000*	--	*290,000*	*29,000*	*1,000,000*	*6.6E+08*	--	--	--	--	*3.0E+07*	*1,400*	*30,000*	*4.9E+07*	*58,000*	*2,900*	*2,400,000*	*17,000*	*22,000*	*330*	*470000*	*4000*	--	--	--	--
	California TTLC (ug/kg)			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*17000*	--	--	--	--
NORTH-NORTH CANYON (DEBRIS) PARCEL																																							
1278-111	1278-111-0	Surface	2/24/2015	<1500	<970	<1600	<11000	<1900	<1600	<3900	<1600	<1600	<1700	<1000	<1200	<1400	<1500	<1400	<1500	<1700	<1300	<1300	<1500	<1400	<1800	<1600	<1600	<1700	<1500	<1400	<1800	<1700	<2100	<1500	<3300	<1400	<8100
1278-112	1278-112-0	Surface	2/24/2015	<1500	<970	<1600	<11000	<1900	<1600	<3900	<1600	<1600	<1700	<1000	<1200	<1400	<1500	<1400	<1500	<1700	<1300	<1300	<1500	<1400	<1800	<1600	<1600	<1700	<1500	<1400	<1800	<1700	<2100	<1500	<3300	<1400	<8100
1278-113	1278-113-0	Surface	2/24/2015	<1500	<970	<1600	<11000	<1900	<1600	<3900	<1600	<1600	<1700	<1000	<1200	<1400	<1500	<1400	<1500	<1700	<1300	<1300	<1500	<1400	<1800	<1600	<1600	<1700	<1500	<1400	<1800	<1700	<2100	<1500	<3300	<1400	<8100
1278-114	1278-114-0	Surface	2/24/2015	<1500	<970	<1600	<11000	<1900	<1600	<3900	<1600	<1600	<1700	<1000	<1200	<1400	<1500	<1400	<1500	<1700	<1300	<1300	<1500	<1400	<1800	<1600	<1600	<1700	<1500	<1400	<1800	<1700	<2100	<1500	<3300	<1400	<8100
1278-115	1278-115-0	Surface	2/24/2015	<310 UJ	<190 UJ	<330 UJ	<2100 UJ	<380 UJ	<330 UJ	<790 UJ	<330 UJ	<320 UJ	<330 UJ	<210 UJ	<230 UJ	<290 UJ	<310 UJ	<280 UJ	<300 UJ	<340 UJ	<260 UJ	<250 UJ	<300 UJ	<290 UJ	<360 UJ	<320 UJ	<320 UJ	<340 UJ	<290 UJ	<290 UJ	<360 UJ	<330 UJ	<410 UJ	<310 UJ	<660 UJ	<270 UJ	<1600 UJ
1278-116	1278-116-0	Surface	2/24/2015	<1500	<970	<1600	<11000	<1900	<1600	<3900	<1600	<1600	<1700	<1000	<1200	<1400	<1500	<1400	<1500	<1700	<1300	<1300	<1500	<1400	<1800	<1600	<1600	<1700	<1500	<1400	<1800	<1700	<2100	<1500	<3300	<1400	<8100
1278-117	1278-117-0	Surface	2/24/2015	<610 UJ	<390 UJ	<650 UJ	<4200 UJ	<760 UJ	<650 UJ	<1600 UJ	<650 UJ	<630 UJ	<670 UJ	<410 UJ	<470 UJ	<570 UJ	<620 UJ	<570 UJ	<600 UJ	<670 UJ	<520 UJ	<500 UJ	<610 UJ	<570 UJ	<720 UJ	<640 UJ	<650 UJ	<680 UJ	<580 UJ	<580 UJ	<730 UJ	<660 UJ	<830 UJ	<610 UJ	<1300 UJ	<550 UJ	<3300 UJ
1278-118	1278-118-0	Surface	2/24/2015	<1500	<970	<1600	<11000	<1900	<1600	<3900	<1600	<1600	<1700	<1000	<1200	<1400	<1500	<1400	<1500	<1700	<1300	<1300	<1500	<1400	<1800	<1600	<1600	<1700	<1500	<1400	<1800	<1700	<2100	<1500	<3300	<1400	<8100
1278-119	No Sample - Not on Property																																						
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)																																							
EBB-1-022415	EBB-1-022415	QA/QC*	2/24/2015	<2.0	<2.5	<1.6	<35	<1.3 UJ	<1.7	<2.9	<1.5	<2.1	<2.1	<1.5	<1.5	<1.6	<1.8	<1.6	<3.2	<2.2	<1.7	<1.5	<1.5	<1.6	<1.9	<1.5	<1.9	<1.6 UJ	<1.5	<1.7	<1.6	<1.5	<2.9 UJ	<1.8	<4.8 UJ	<1.9	<9.2
EBB-2-022415	EBB-2-022415	QA/QC*	2/24/2015	<2.0	<2.5	<1.6	<35	<1.3 UJ	<1.7	<2.9	<1.5	<2.1	<2.1	<1.5	<1.5	<1.6	<1.8	<1.6	<3.2	<2.2	<1.7	<1.5	<1.5	<1.6	<1.9	<1.5	<1.9	<1.6 UJ	<1.5	<1.7	<1.6	<1.5	<2.9 UJ	<1.8	<4.8 UJ	<1.9	<9.2

NOTES:

(1) - Boring identification number

(2) - Sample depth reported in feet below the ground surface

(3) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in ug/kg) for SVOCs for industrial soil (last updated January 2015) - Traditional Table with a Target Cancer Risk Level of 1.0x10-6 and a Target Hazard Quotient of 1.0.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

* QA/QC samples consisted of liquid equipment blanks (mg/L)

Bold =Detected above reporting limit
All soil results in micrograms per kilogram (ug/kg)
All EB results in milligrams per liter (mg/L)

TABLE 5
SUMMARY OF SOIL ANALYTICAL RESULTS - CHLORINATED HERBICIDES
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	CALTRANS UNIQUE SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	CHLORINATED HERBICIDES (ug/kg)																	
				Acifluorfen	Bentazon	Chloramben	2,4-D	Dalapon	2,4-DB	DCPA diacid	Dicamba	3,5-Dichlorobenzoic Acid	Dichloroprop	Dinoseb (DNBP, 2-sec-Butyl1-4, 6-dinitrophenol)	MCPA	MCPP	4-Nitrophenol	Pentachlorophenol (PCP)	Picloram	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	2,4,5-TP
USEPA RSL - Industrial Soils (ug/kg) [3]				--	*2.5E+07*	*1.2E+07*	--	*2.5E+07*	--	--	*2.5E+07*	--	--	--	*410,000*	*820,000*	--	*4,000*	--	*8,200,000*	*6,600,000*
SOUTHBOUND STRIP PARCEL																					
1278-120	1278-120-0	Surface	2/25/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
1278-123	1278-123-0	Surface	2/25/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
1278-136	1278-136-0	Surface	2/25/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
1278-139	1278-139-0	Surface	2/25/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
1278-145	1278-145-0	Surface	2/25/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
1278-149	1278-149-0	Surface	2/24/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
1278-153	1278-153-0	Surface	2/24/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
NORTHBOUND STRIP PARCEL																					
1278-165	1278-165-0	Surface	3/10/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
1278-168	1278-168-0	Surface	3/10/2015	<20	<10	<10	<10	<20	<10	<20	<10	<10	<10	<20	<2000	<2000	<10	<10	<10	<10	<10
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)																					
Day 1	EBA-3-022415	QA/QC*	2/24/2015	<1.0	<0.5	<0.5	<0.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	<100	<100	<0.5	<0.5	<0.5	<0.5	<0.5
	EBB-3-022415	QA/QC*	2/24/2015	<1.0	<0.5	<0.5	<0.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	<100	<100	<0.5	<0.5	<0.5	<0.5	<0.5
Day 2	EBA-1-022515	QA/QC*	2/25/2015	<1.0	<0.5	<0.5	<0.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	<100	<100	<0.5	<0.5	<0.5	<0.5	<0.5
	EBA-2-022515	QA/QC*	2/25/2015	<1.0	<0.5	<0.5	<0.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	<100	<100	<0.5	<0.5	<0.5	<0.5	<0.5
	EBA-3-022515	QA/QC*	2/25/2015	<1.0	<0.5	<0.5	<0.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	<100	<100	<0.5	<0.5	<0.5	<0.5	<0.5
	EBB-3-022515	QA/QC*	2/25/2015	<1.0	<0.5	<0.5	<0.5	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<100	<100	<100	<0.5	<0.5	<0.5	<0.5	<0.5

NOTES:

(1) - Boring identification number
(2) - Sample depth reported in feet below the ground surface
(3) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in ug/kg) for industrial soil (last updated January 2015)
ug/kg = micrograms per kilogram
Bold =Detected above reporting limit

All soil results in ug/kg
<20 - Analyte not reported at or above stated reporting limit
* QA/QC samples consisted of liquid equipment blanks (ug/L)
-- = Not available

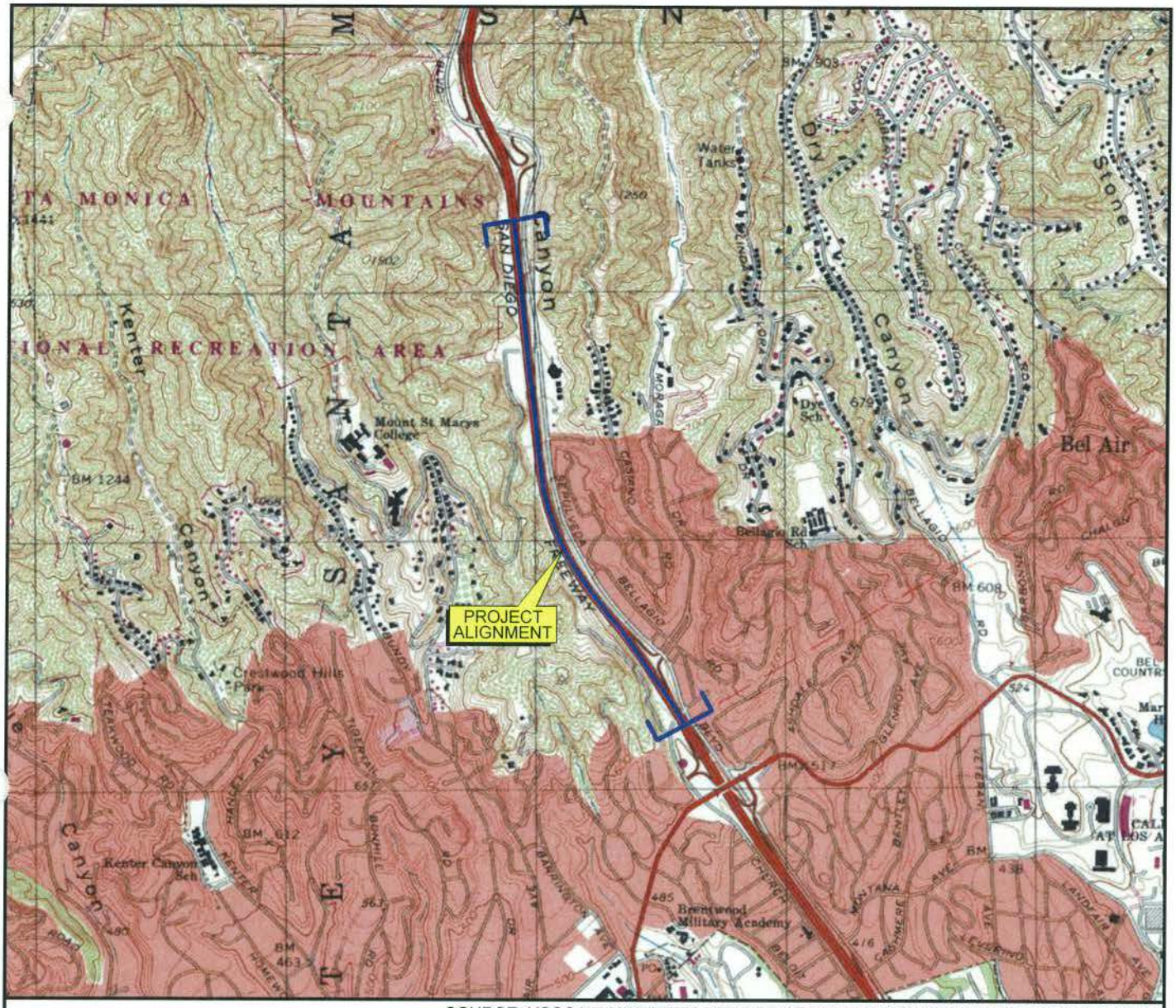
SUMMARY OF SOIL ANALYTICAL RESULTS - ACM and PCBs
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

BORING	SAMPLE ID[1]	SAMPLE DEPTH[2]	SAMPLE DATE	ACM	POLYCHLORINATED BIPHENYLS[3]								
					Aroclor 1016 (ug/kg)	Aroclor 1221 (ug/kg)	Aroclor 1232 (ug/kg)	Aroclor 1242 (ug/kg)	Aroclor 1248 (ug/kg)	Aroclor 1254 (ug/kg)	Aroclor 1260 (ug/kg)	Aroclor 1262 (ug/kg)	Aroclor 1268 (ug/kg)
USEPA RSL - Industrial Soils (ug/kg) [4]				--	*30,000*	*660*	*660*	*1,000*	*1,000*	*1,000*	*1,000*	--	--
California TTLC				--	*Total PCBs = 50,000*								
NORTH CANYON (STAGING) PARCEL													
1278-101	1278-101-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**7.5 NJ**	<2.1
1278-102	1278-102-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**14 NJ**	<2.1
1278-103	1278-103-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**3.3 NJ**	<2.1
1278-104	1278-104-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**4.6 NJ**	<2.1
1278-105	1278-105-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1
1278-106	1278-106-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**3.1 NJ**	<2.1
1278-107	1278-107-0	Surface	2/24/2015	Undetected	--	--	--	--	--	--	--	--	--
1278-108	1278-108-0	Surface	2/24/2015	Undetected	--	--	--	--	--	--	--	--	--
1278-109	1278-109-0	Surface	2/24/2015	Undetected	--	--	--	--	--	--	--	--	--
1278-110	1278-110-0	Surface	2/24/2015	Undetected	--	--	--	--	--	--	--	--	--
	1278-110-1.5	1.5-Foot	2/24/2015	Undetected	--	--	--	--	--	--	--	--	--
NORTH-NORTH CANYON (DEBRIS) PARCEL													
1278-111	1278-111-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**7.5 NJ**	<2.1
1278-112	1278-112-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**14 NJ**	<2.1
1278-113	1278-113-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**3.3 NJ**	<2.1
1278-114	1278-114-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**4.6 NJ**	<2.1
1278-115	1278-115-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1
1278-116	1278-116-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**3.1 NJ**	<2.1
1278-117	1278-117-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**2.2**	<2.1
1278-118	1278-118-0	Surface	2/24/2015	Undetected	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	**2.9**	<2.1
1278-119	No Sample - Not on Property												
QA/QC EQUIPMENT BLANK (EB) SAMPLES (mg/L)													
Day 1	EBB-1-022415	QA/QC	2/24/2015	Undetected	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
	EBB-2-022415	QA/QC	2/24/2015	Undetected	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

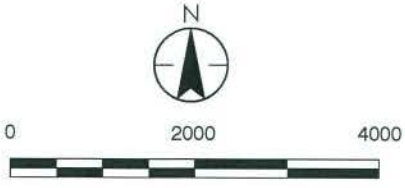
Notes:
RSL = Regional Screening Level
TTLC = Total Threshold Limit Concentration
(1) - Boring identification number/Caltrans Unique ID assigned
(2) - Sample depth reported in feet below the ground surface
(3) - Polychlorinated Biphenyls (PCBs): EPA Test Method 8082
(4) - United States Environmental Protection Agency (Region 9) Regional Screening Levels (RSLs; in ug/kg) for VOCs for industrial soil (last updated January 2015) - Traditional Table with a Target Cancer Risk Level of 1.0x10-6 and a Target Hazard Quotient of 1.0.
ug/kg = micrograms per kilogram
mg/L = milligrams per liter
-- = Not analyzed or not applicable
Bold =Detected above reporting limit
NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

* QA/QC samples consisted of liquid equipment blanks (mg/L)
ACM = Asbestos Containing Materials

FIGURES



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, BEVERLY HILLS QUADRANGLE, 1995



APPROXIMATE SCALE (FEET)

Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361
PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR:
Site Investigation
Agreement No. 07A3322
Task Order No. 23
LA-405, pm 28.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

SITE LOCATION MAP

FIGURE: 1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

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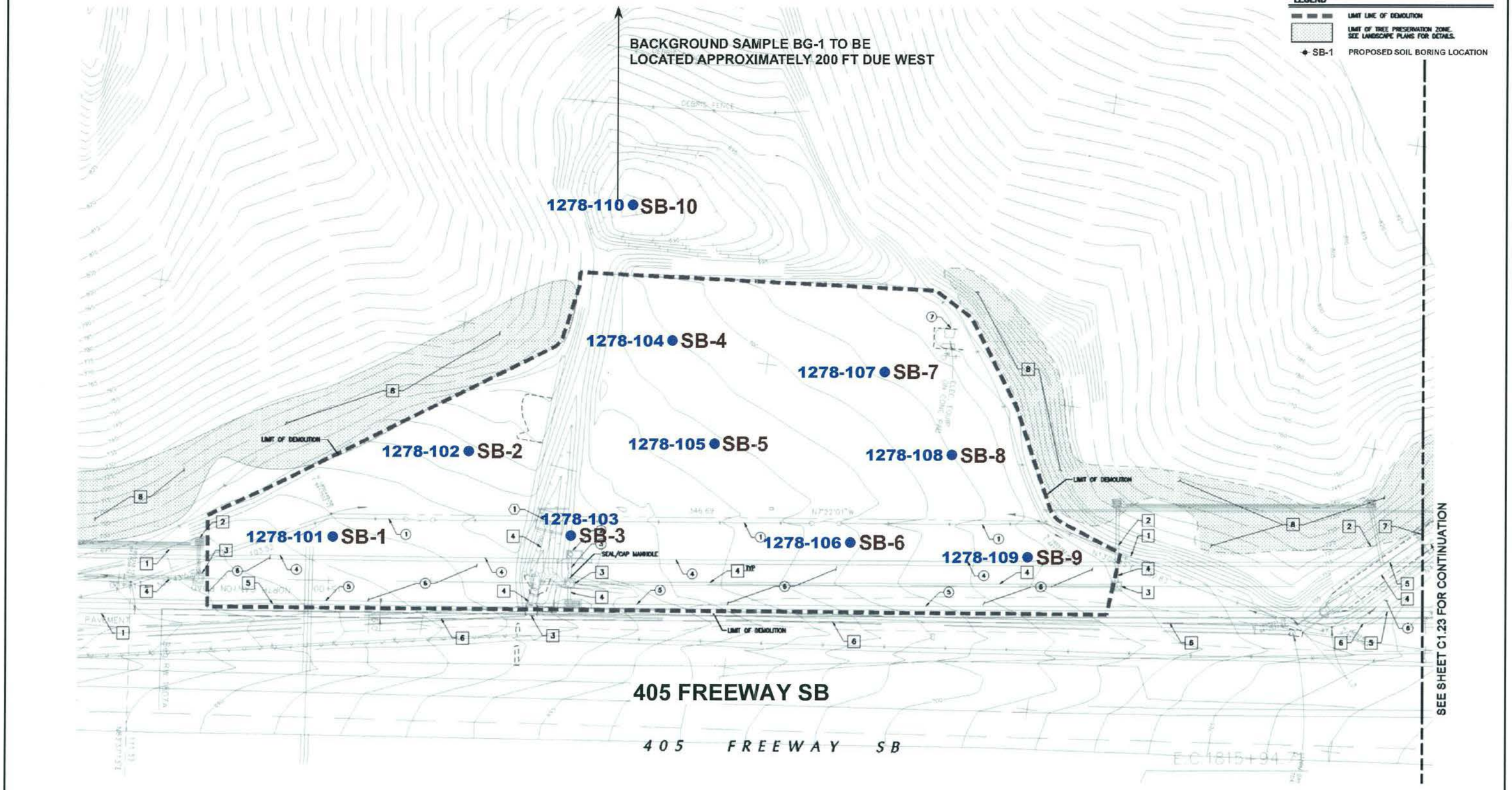

LEGEND

● SAMPLE LOCATION

NOT TO SCALE

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Thousand Oaks, CA 91361
PHONE: (805) 230-1266 FAX: (805) 230-1277

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Agreement No. 07A3322
Task Order No. 23
LA-405, pm 26.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

NORTH CANYON
(STAGING) AREA
SOIL SAMPLING LOCATIONS

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

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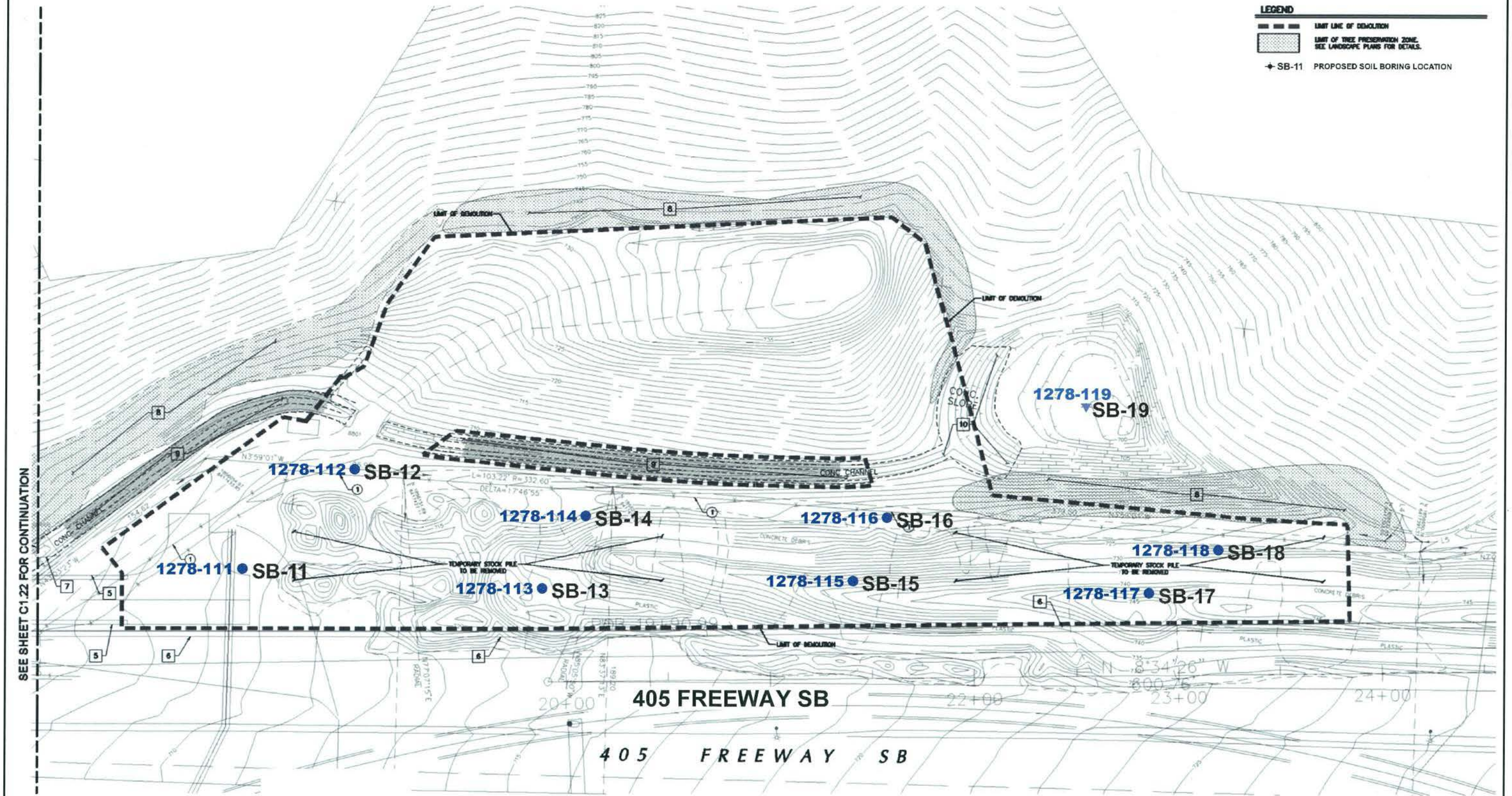

LEGEND

- ● SAMPLE LOCATION
- ▼ LOCATION NOT SAMPLED

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Site Investigation
Agreement No. 07A3322
Task Order No. 23
LA-405, pm 28.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

NORTH-NORTH CANYON (DEBRIS) AREA SOIL SAMPLING LOCATIONS

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

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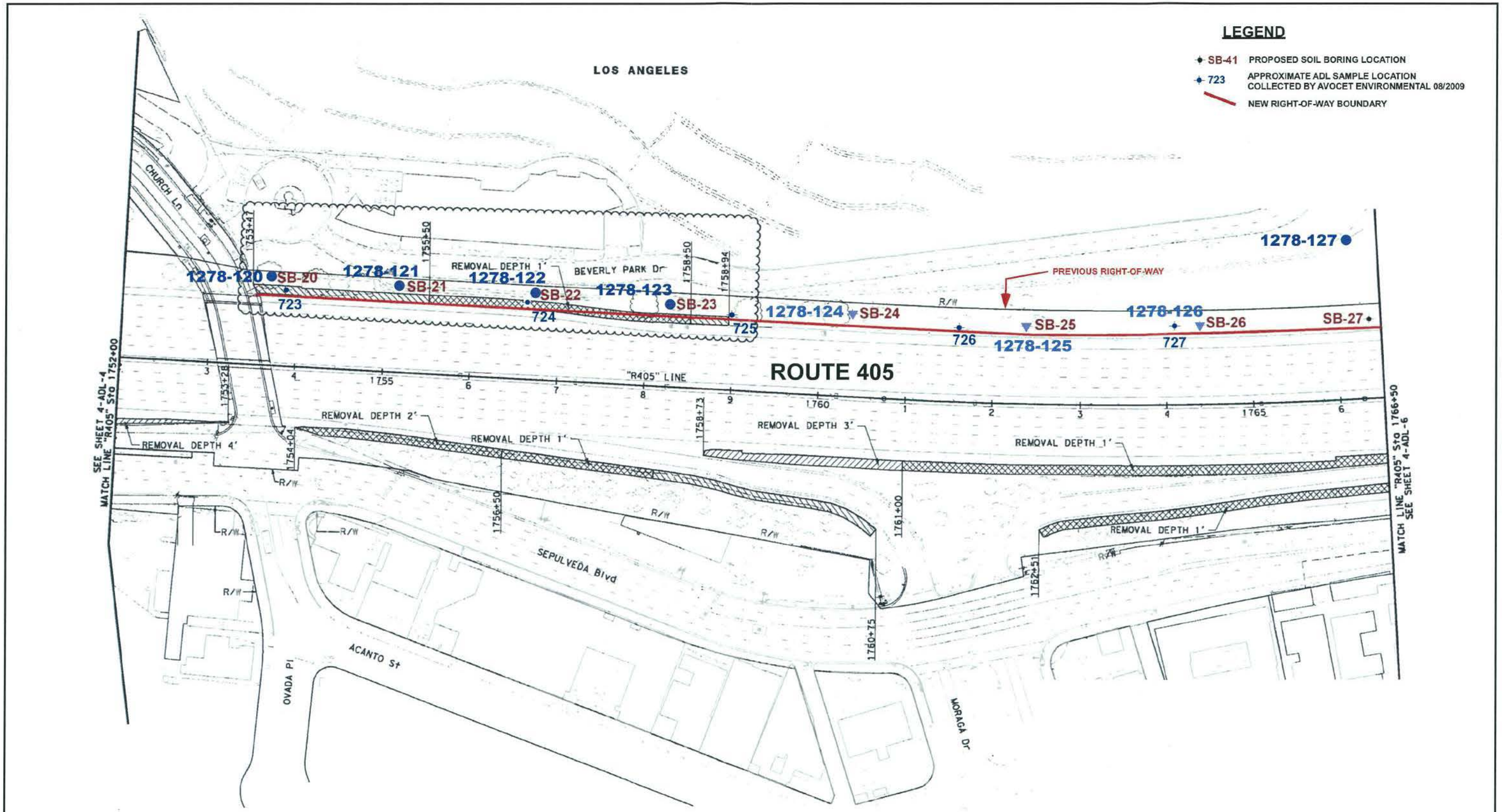

LEGEND

- ● SAMPLE LOCATION
- ▼ LOCATION NOT SAMPLED

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FOR: Site Investigation
Agreement No. 07A3322
Task Order No. 23
LA-405, pm 28.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

SOUTHBOUND STRIP PARCEL
STATIONS 1753+47 TO 1766+50
SOIL SAMPLING LOCATIONS

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

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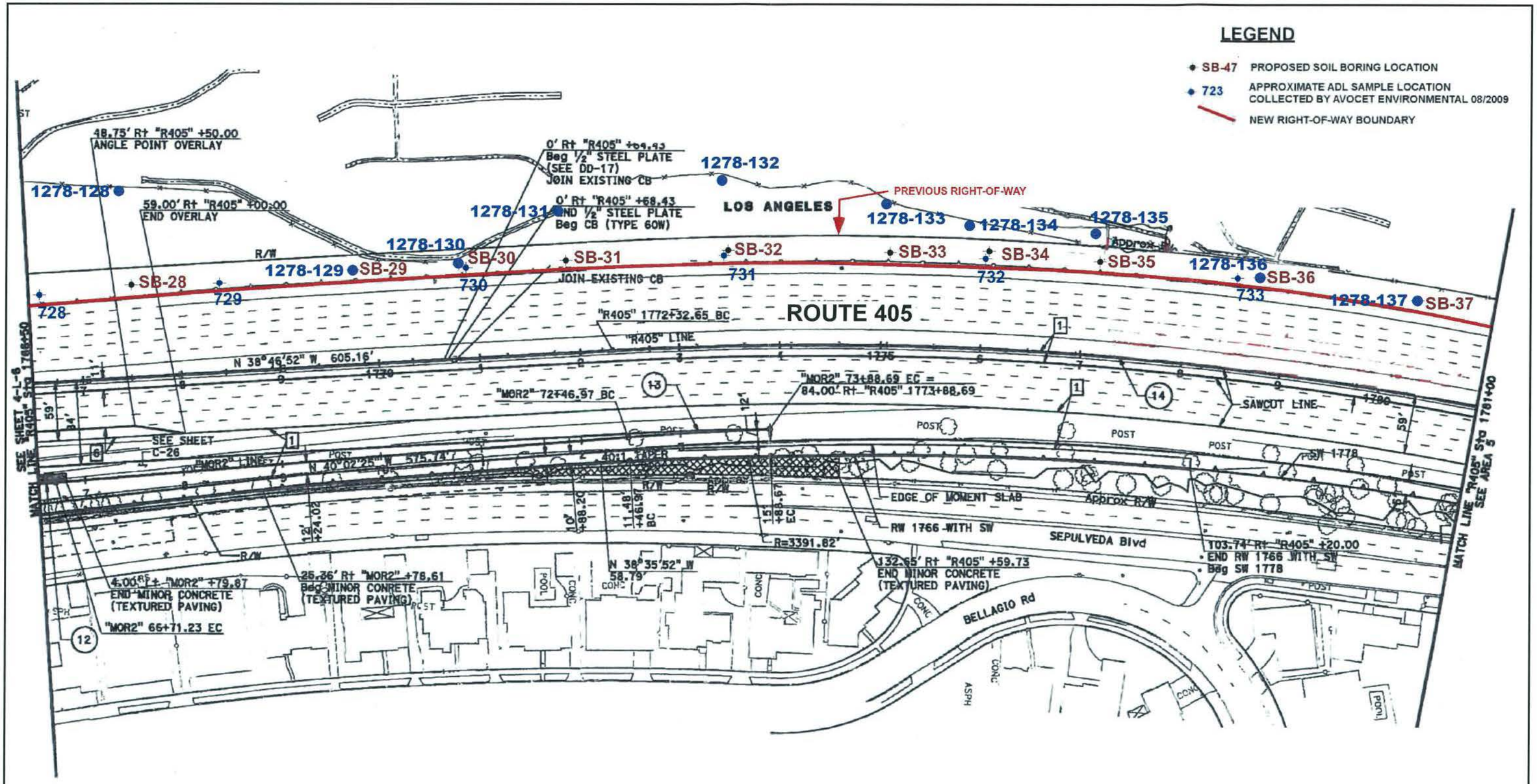

LEGEND

● SAMPLE LOCATION

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FOR:
Site Investigation
Agreement No. 07A3322
Task Order No. 23
LA-405, pm 28.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

SOUTHBOUND STRIP PARCEL
STATIONS 1766+50 TO 1781+00
SOIL SAMPLING LOCATION

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

FILEPATH:C:\CADD-37\Client\Caltrans\07A3322_TO23\07A3322_TO23.dwg|TRoman|May 22, 2015 at 9:38|Layout: F5

LEGEND

- SB-47 PROPOSED SOIL BORING LOCATION
- 723 APPROXIMATE ADL SAMPLE LOCATION COLLECTED BY AVOCET ENVIRONMENTAL 08/2009
- NEW RIGHT-OF-WAY BOUNDARY

LOS ANGELES

ROUTE 405

"R405" LINE

PREVIOUS RIGHT-OF-WAY

1278-138 SB-38 734

1278-139 SB-39 735

1278-140 SB-40

1278-141 SB-41 736

SB-42 1278-142 737

SB-43 1278-143

SB-44 1278-144 738

SB-45 1278-145

SB-46 1278-146

SB-47 1278-147

REMOVAL DEPTH 1'

1787+63

1789+00

1781+00

1785+00

1790

1795+00

SEPULVEDA Blvd

REMOVAL DEPTH 1'

REMOVAL DEPTH 1'

MATCH LINE R405 Sta 1781+00 SEE AREA 4

MATCH LINE R405 Sta 1795+00 SEE SHEET 5-ADL-2

POOL

CONC

STAIRS

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LEGEND

- SAMPLE LOCATION

NOT TO SCALE

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PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR:
Site Investigation
Agreement No. 07A3322
Task Order No. 23
LA-405, pm 28.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

SOUTHBOUND I-405 STRIP PARCEL
STATIONS 1781+00 TO 1795+00
SOIL SAMPLING LOCATIONS

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

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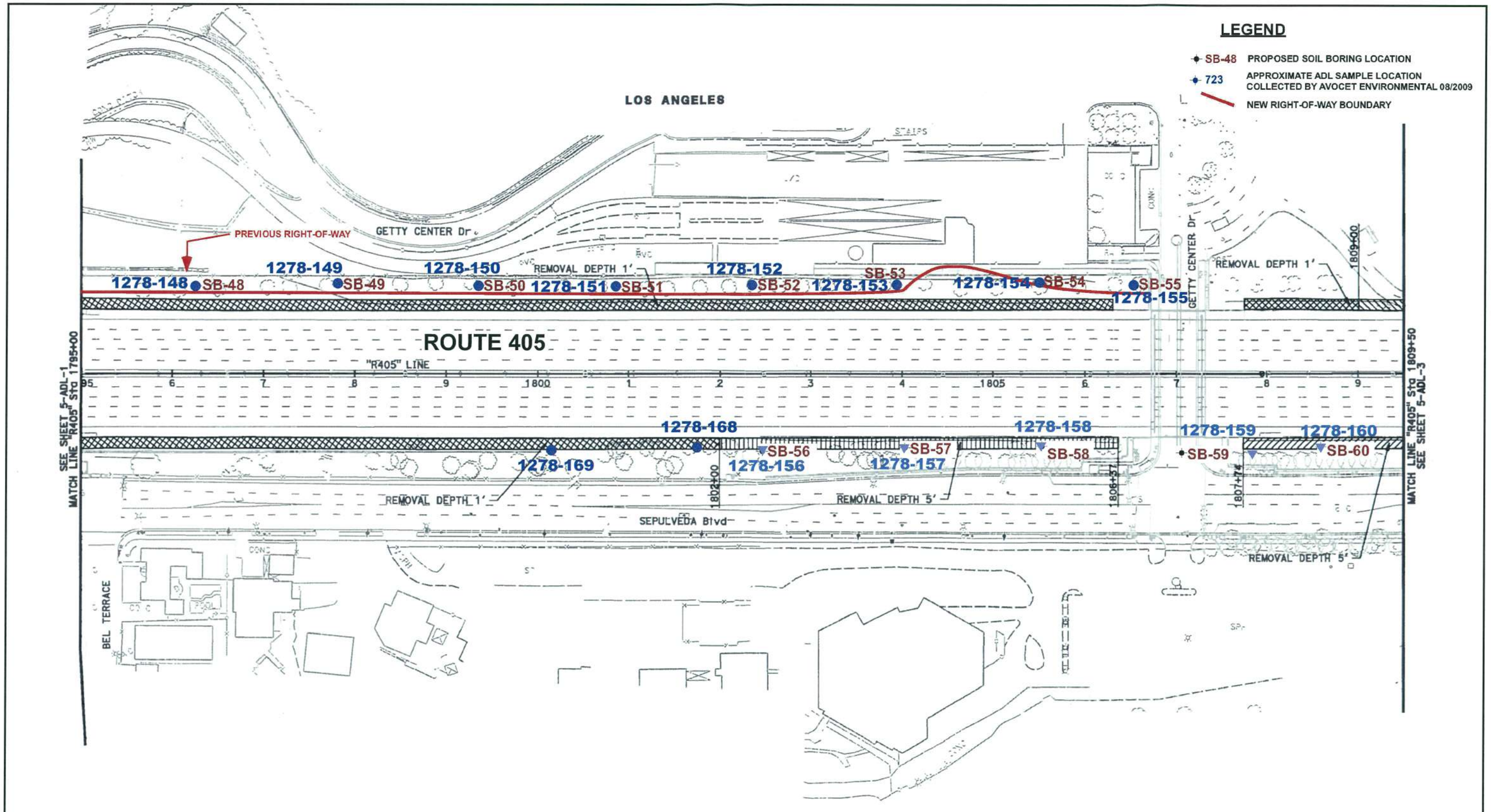

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LEGEND

- ● SAMPLE LOCATION
- ▼ LOCATION NOT SAMPLED

N

NOT TO SCALE

Stantec

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Thousand Oaks, CA 91361
PHONE: (805) 230-1266 FAX: (805) 230-1277

FOR:
Site Investigation
Agreement No. 07A3322
Task Order No. 23
LA-405, pm 28.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

SOUTHBOUND I-405
STRIP PARCEL 1795+00 TO 1806+60 AND
NORTHBOUND I-405 STUDY AREA
STATIONS 1795+00 TO 1809+50
SOIL SAMPLE LOCATIONS

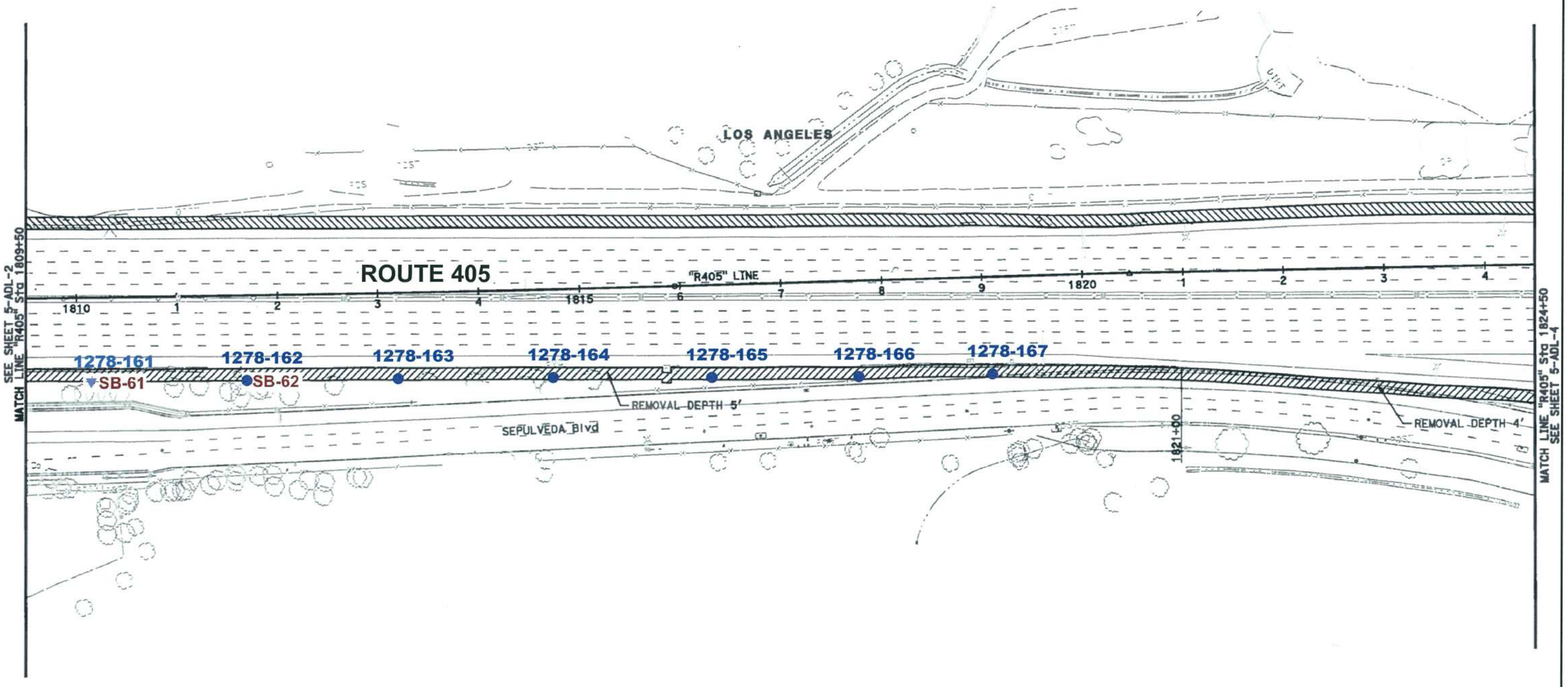
FIGURE: 7

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

FILEPATH:C:\CADD-37\Client\Caltrans\07A3322_TO23\07A3322_TO23.dwg|TRoman|May 22, 2015 at 9:32|Layout: F7

LEGEND

SB-61 PROPOSED SOIL BORING LOCATION



LEGEND

- ● SAMPLE LOCATION
- ▼ LOCATION NOT SAMPLED

NOT TO SCALE

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Thousand Oaks, CA 91361
PHONE: (805) 230-1266 FAX:(805) 230-1277

FOR:
Site Investigation
Agreement No. 07A3322
Task Order No. 23
LA-405, pm 28.8/39.0
PN/E-FIS: 0700000107 EA Number: 120301

NORTHBOUND STRIP PARCEL
STATIONS 1809+50 TO 1824+50
SOIL SAMPLING LOCATIONS

FIGURE: 8

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185832023	RAR	KE	KE	04/15/15

FILEPATH:C:\CADD-37\Client\Caltrans\07A3322_TO23\07A3322_TO23.dwg|TRoman|May 22, 2015 at 9:30|Layout: F8

APPENDIX A
HASP FIELD FORMS

Stantec

Purpose and Approval

Our work can be hazardous, and it is imperative that we never forget that! It is the purpose of this Health and Safety Plan (HASP) to proactively aid Stantec employees in:

- Identifying and understanding the potential risks/hazards they may encounter at the site.
- Mitigating those potential risks/hazards.

Stantec's policy is to complete our work on this site without any type of incident (injury, illness, impact to the environment, impact to property and equipment). In order to achieve this goal, the project team will work together to perform an effective hazard assessment. The team will then establish appropriate precautions and communicate these daily among project staff. Staff will be responsible for communicating changing field conditions to the project management so these conditions and appropriate precautions may be re-evaluated as needed. Staff will implement **STOP WORK AUTHORITY** at any time they believe that conditions may be inherently unsafe or might cause damage to property or harm to the environment. Staff may refuse to participate in work they believe will be unsafe. If it is believed that such conditions exist, staff will communicate immediately with the Project Manager to resolve the situation. We expect all subcontractors and project personnel to share this goal.

Client: The State of California, Department of Transportation – 07A3322

Site Name: Site Investigation HOV Lane Project, Location: LA-405, PM 28.8/39.0

Project Name: TASK ORDER NO. 23 – SITE INVESTIGATION

Project Number: 185832023

Start Date: February 13, 2015

End Date: May 1, 2015

Plan Review Date*: August 13, 2015

(*The Plan Review Date is the date the HASP would need to be re-reviewed to maintain current information is included should the Task Order be extended. The Plan Review date is *no longer than 6 months from the start of the Period of Performance – however, no reviews will be performed on the HASP outside of the Task Order Period of Performance.*).

Kevin Miskin Project Manager	Signature: for	Date: 2/20/15
Dan Feldt, MPH, CIH Health and Safety Manager, Certified Industrial Hygienist (CIH) HASP review	Signature:	Date: 2-18-15
StephAnnie Roberts Office Safety Environmental Coordinator (OSEC)	Signature:	Date: 02-18-15
Scott Edblad Site Health and Safety Officer (SHSO)	Signature:	Date: 02/20/15
Anne Perez Peer Reviewer	Signature: for Anne Perez	Date: 2/20/15
Kristy Edblad HASP Originator	Signature:	Date: 2-20-15

The health and safety guidelines in this HASP were prepared exclusively for this site. This HASP will be amended (with changes recorded on the Health and Safety Plan Modification Log that follows) if site conditions, scope of work, training dates, personnel, or other critical items change before the scheduled HASP review date above. This HASP is intended to be available on site.

Stantec

Acknowledgement and Agreement Form

"Zero Tolerance for Incidents of ANY Kind.
Work Together to Ensure a SAFE and High Quality Project"

All parties conducting site activities are required to coordinate their activities and practices with the Stantec Site Health and Safety Officer (SHSO). Stantec has provided a copy of this HASP to site contractors in the interest of disclosure of potential risks/hazards of which Stantec may be aware. Similarly, contractors shall inform Stantec of any potential site risks/hazards of which they are aware including the contractor's work, equipment, procedures and chemicals.

This HASP has been developed for the purpose of proactively aiding Stantec employees in identifying, understanding, and mitigating the potential risks/hazards they are may encounter at the site. This HASP may also be used as a reference document by properly trained and experienced Stantec subcontractors and clients. However, sub-contractors and other contractors at the site must develop their own HASP to address the potential risks/hazards faced by their own employees.

This HASP should NOT be understood by contractors or anyone other than Stantec employees to provide information on all of the potential risks/hazards to which they may be exposed as a result of their work. Stantec claims no responsibility for use of this HASP by others.

Your signature below confirms the following: that you have read and understand the potential risks/hazards identified by Stantec and the associated mitigation measures discussed in this HASP; that there may be additional risks or hazards that are not identified in this HASP; that you have received training and medical surveillance according to this HASP and the OSHA Standard on Hazardous Waste Operations and Emergency Response (29 CFR 1910.120); and that you understand that you could be prohibited by the Stantec Site Health and Safety Officer or other authorized Stantec personnel from working on this project for not complying with any aspect of this or any other applicable HASP.

**NOTE: OSHA (federal) is used interchangeably and equally with California OSHA (CalOSHA) in this document.

(All Stantec and subcontractor personnel must sign.)

Name	Signature	Company	Date
SCOTT EDBLAD		STANTEC	02/18/15
Jason Stagno		Stantec	02/18/15
Anuya Sawant		Stantec	2/24/15
Stephanie Roberts		Stantec	2.24.15
THOMAS WALSH		STANTEC	2/24/15
Thomas Fardis		Stantec	2/24/15
Nathan Chan		Caltrans	2/24/15

HEALTH, SAFETY, AND ENVIRONMENT

RMS2– FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 1 day

Stantec

Project: 70-23 405 FWY / GETTY Project No: 185832023

Client: CAL TRANS

Location: GETTY CENTER DR.

Start Date: _____

Work Description Provide A General Description Of The Work To Be Conducted.

- MARK / GPS / PHOTOGRAPH HAND AUGER BORING LOCATIONS
- DEFENSIVE DRIVING
- HIKING TO REMOTE LOCATIONS

Documentation and Procedure Review

1.	Risk Management Strategy (RMS1) form and/or Site Specific Health and Safety Plan signed and reviewed?	☒ Yes ☐ **No***
2.	Emergency Response Plan reviewed?	☐ Yes ☐ **No*** ☒ N/A
3.	Tested two-way communications (cell phone, satellite phone) and security measures?	☒ Yes ☐ **No***
4.	Attended Client Site Health and Safety meeting?	☐ Yes ☐ **No*** ☒ N/A
5.	Conducted Stantec site safety meeting with all workforces?	☐ Yes ☐ **No*** ☒ N/A
6.	Are there any new or unexpected hazards not identified in the RMS1/HASP? *If yes, include in the Job Safety Analysis (JSA).*	☐ Yes ☒ No
7.	Working alone or remote work? *If yes, complete call in/out process – Safe Work form must be completed.*	☐ Yes ☒ No

Notifications and Permits

8.	Are work permits required for this site? *If yes, have they been completed and submitted as required?*	☒ Yes ☐ No ☒ Yes ☐ **No***
9.	Are utility locates required for this site? *If yes, have they been completed and reviewed?*	☒ Yes ☐ No ☒ Yes ☐ **No***
10.	Does the Client require any notification prior to starting the work? *If yes, has the notification been provided?*	☒ Yes ☐ No ☒ Yes ☐ **No***

***Contact your Project Manager immediately.**

Personal Protective Equipment List specific PPE as needed. Verify type and inspect condition.

☒ Head Protection Type:	HARD HAT	☐ Hearing Protection:		☒ Gloves Type:	NITRILE / LEATHER
☒ Foot Protection Type:	STEEL TOE	☐ Respiratory Protection:		☐ Water Safety Gear:	
☒ Eye Protection Type:	SAFETY GLASS	☐ Fire Retardant Coveralls:		☐	
☒ High Visibility Vest:	REFLECTIVE	☐ Fall Protection:		☐	

Tools and Equipment List specific equipment to be used. Verify type and inspect condition.

☒ GPS	☒ FLAGGING / STAKES	☐
☒ CAMERA	☒ HAMMER	☐

HEALTH, SAFETY, AND ENVIRONMENT

RMS2– FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 1 day

Stantec

ily Tailgate Discussions/Subcontractor Input

Start	Time: 0530	Weather: ~~SUNNY~~ DARK
~~MARKED~~ - LOADED EQUIPMENT; REVIEWED MAPS		
Mid-Day	Time: 12.00	Weather: SUNNY
HIKING; REMOTE ACCESS TO SAMPLE LOCATIONS; SLIPS, TRIPS, FALLS		
Post-Day	Time: 1830	Weather: DARK
RELOCATED SAMPLE LOCATIONS; STEEP TERRAIN; CANCELLED LOCATIONS		

I know the hazards:

By signing here, you are stating the following:

1. I have been involved in the Job Safety Analysis and understand the hazards and risk control actions associated with each task I am about to perform.
2. I understand the permit to work requirements applicable to the work I am about to perform (if it includes permitted activities).
3. I am aware that no jobs or work (that is not risk-assessed) is to be performed.
4. I am aware of my obligation to "**Stop Work**" (*See Stop Work Section).*

I arrived and departed fit for duty:

5. I am physically and mentally fit for duty.
6. I am not under the influence of any type of medication, drugs or alcohol that could affect my ability to work safely.
7. I am aware of my responsibility to bring any illness, injury (regardless of where or when it occurred) or fatigue issue I may have to the attention of the Crew Lead.
8. I signed out uninjured unless I have otherwise informed the Crew Lead.

Insert fitness level under corresponding time column: Fit for Duty = F Alternate Plan = AP
Team Lead to contact Project Manager for any personnel identified as AP

Individual Name/Company Name/Signature	Time:	Time:	Time:
SCOTT EDBLAD / STANTEC / Scott Edblad	0530 F	1200 F	1830 F
Jason Stagno / Stantec /	0530 F	1200 F	1330 F

I will STOP the job any time anyone is concerned or uncertain about safety.

I will STOP the job if anyone identifies a hazard or additional mitigation not recorded.

I will be alert to any changes in personnel or their fitness level (AP), conditions at the work site or hazards.

If it is necessary to **STOP THE JOB**, I will reassess the task, hazards and mitigations; and then proceed only when safe to do so.

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

:lusion of day: I certify that the planned work activities are completed for the day and all injuries and first aids have been reported RMS3.

Signature of Crew Lead: Scott Edblad **Date:** 02/18/15

Health, Safety and Environment

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY)

Stantec

)b Safety Analysis (JSA) Must be completed for all field activities.

Basic Job Steps	Potential Hazards	Controls to Reduce or Eliminate Hazard	Person Responsible
DRIVING TO SITE DEPARTURE FROM SITE	ACCIDENTS; DEBRIS TRAFFIC	DEFENSIVE DRIVING	S. EDBLAD J. STAGNO
STAKE; FLAG; GPS LOCATIONS	SLIPS; TRIPS; FALLS; TRAFFIC; BIOLOGICAL HAZARDS	ENVIRONMENTAL AWARENESS; PROPER PPE	

Review the hazard categories below and check the mitigation measures applicable to the identified scope of work.

Environmental Hazards

1.	Work area clean	☐
2.	Material storage identified	☐
3.	Dust/Mist/Fume	☐
4.	Noise in area	☐
5.	Extreme temperatures	☐
6.	Spill potential	☐
7.	Waste containers needed	☐
8.	Waste properly disposed	☐
9.	Waste plan identified	☐
10.	Excavation permit required	☐
11.	Other workers in area	☐
12.	Weather conditions	☐
13.	MSDS reviewed	☐

Ergonomic Hazards

14.	Awkward body position	☒
15.	Over extension	☒
16.	Prolonged twisting/bending motion	☒
17.	Working in a tight area	☐
18.	Lift too heavy/awkward to lift	☒
19.	Parts of body in line of fire	☐
20.	Repetitive motion	☒
21.	Hands not in line of sight	☐
22.	Working above your head	☐

Access/Egress Hazards

23.	Aerial life/Man basket (inspected & tagged)	☐
24.	Scaffold (inspected & tagged)	☐
25.	Ladders (tied off)	☐
26.	Slips & trips	☐
27.	Hoisting (tools, equipment)	☐
28.	Evacuation (alarms, routes, ph. #)	☐
29.	Confined space entry permit required	☐

Are you ready to work safely?

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

Overhead Hazards

30.	Barricades & signs in place	☐
31.	Hole coverings identified	☐
32.	Harness/lanyard inspected	☐
33.	100% Tie-off with harness	☐
34.	Tie off points identified	☐
35.	Falling items	☐
36.	Foreign bodies in eyes	☐
37.	Hoisting or moving loads overhead	☐

Rigging & Hoisting Hazards

38.	Lift study required	☐
39.	Proper tools used	☒
40.	Tools inspected	☒
41.	Equipment inspected	☒
42.	Slings inspected	☐
43.	Others working overhead/below	☐
44.	Critical lift permit	☐

Electrical Hazards

45.	GFI test	☐
46.	Lighting levels too low	☐
47.	Working on/near energized equipment	☐
48.	Electrical cords condition	☐
49.	Electrical tools condition	☐
50.	Fire extinguisher	☐
51.	Hot work or electrical permit required	☐

Personal Limitations/Hazards

52.	Procedure not available for task	☐
53.	Confusing instructions	☐
54.	No training for task or tools to be used	☐
55.	First time performing the task	☐
56.	Micro break (stretching/flexing)	☐
57.	Report **all injuries** to your supervisor	☐

It is important that all relevant hazards have plans in place to reduce risk.
Be sure that all associated permits are closed off at the end of the job.

Remember: Stop and Think

Reviewed by Name and Signature: Scott Edblad SCOTT EDBLAD

HEALTH, SAFETY, AND ENVIRONMENT

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

Fit for Duty

Safety is influenced by many factors, but the most important is the health and well-being of Stantec's employees and partners. Physical and mental health are just as important as good tools, good practices, and good job planning.

This card is designed to help you do a quick self-assessment of your physical and mental health. Any concerns resulting from your assessment regarding your ability to carry out your job responsibilities safely and in good health need to be discussed with your supervisor before starting work.

- Am I feeling good today and ready to work at my typical level of physical activity and responsibility?
- Do I have any sprains/strains, areas of weakness or soreness?
- Am I managing multiple sources of stress?
- Am I well hydrated?
- Any physically-demanding activities recently (chores, sports, hobbies)?
- Am I well-rested with a good energy level? When did I eat last?
- Am I taking any medications that can make me drowsy or adversely affect my safe performance?
- Any cuts/scrapes are clean and bandaged?
- Did I remember to bring with me my health maintenance medications (blood pressure, diabetes, cholesterol, heart, etc.)?

If your answers to any of the questions above indicate that you may not be ready to work, contact your supervisor immediately to discuss a plan of action.

LAST-MINUTE RISK ASSESSMENT (LMRA)

1. STOP and Think

2. Look around

Is the work area safe?
Will my work endanger others?
Will other people pose risk?

3. Assess risk

Do I clearly understand the task?
Will lifting or manual handling be required?
Potential for slips, trips, or falls?
Are there driving or vehicle concerns?
Have I considered all underground services?
Moving or pressurized equipment?
What could go wrong?

4. Control risk

What can I do to control hazards?
Do I have the right tools?
Is the SWP (Safe Work Practice) appropriate?
Do I have the appropriate PPE?
Are emergency plans in place?

5. Begin/Resume work

If you're unsure, talk to your supervisor.

Are you ready to work safely?

HEALTH, SAFETY, AND ENVIRONMENT

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

Stantec

Project: TO-23 405 FWY/GETTY Project No: 185832023

Client: CAL TRANS

Location: GETTY CENTER OR. TO CHURCH LN

Start Date: 02/24/15

Documentation and Procedure Review

11.	Risk Management Strategy (RMS1) form and/or Site Specific Health and Safety Plan signed and reviewed?	☒ Yes ☐ **No***
12.	Emergency Response Plan reviewed?	☒ Yes ☐ **No*** ☒ N/A
13.	Tested two-way communications (cell phone, satellite phone) and security measures?	☒ Yes ☐ **No***
14.	Attended Client Site Health and Safety meeting?	☐ Yes ☐ **No*** ☒ N/A
15.	Conducted Stantec site safety meeting with all workforces?	☐ Yes ☐ **No*** ☒ N/A
16.	Are there any new or unexpected hazards not identified in the RMS1/HASP? *If yes, include in the Job Safety Analysis (JSA).*	☐ Yes ☒ No
17.	Working alone or remote work? *If yes, complete call in/out process – Safe Work form must be completed.*	☐ Yes ☒ No

Notifications and Permits

18.	Are work permits required for this site?	☒ Yes ☐ No
	If yes, have they been completed and submitted as required?	☒ Yes ☐ **No***
19.	Are utility locates required for this site?	☒ Yes ☐ No
	If yes, have they been completed and reviewed?	☒ Yes ☐ **No***
.0.	Does the Client require any notification prior to starting the work?	☒ Yes ☐ No
	If yes, has the notification been provided?	☒ Yes ☐ **No***

***Contact your Project Manager immediately.**

Work Description **Provide a general description of the work to be conducted.**

- HAND AUGER AND COLLECT SOIL SAMPLES
- TRAFFIC CONTROL SET
- DRIVE TO AND FROM SITE

Personal Protective Equipment **List specific PPE as needed. Verify type and inspect condition.**

☒ Head Protection Type:	HARD HAT	☐ Hearing Protection:		☒ Gloves Type:	NITRILE / LEATHER
☒ Foot Protection Type:	SAFETY TOED	☐ Respiratory Protection:		☐ Water Safety Gear:	
☒ Eye Protection Type:	SAFETY GLASSES	☐ Fire Retardant Coveralls:		☐	
☒ High Visibility Vest:	REFLECTIVE	☐ Fall Protection:		☐	

Tools and Equipment **List specific equipment to be used. Verify type and inspect condition.**

☒ HAND AUGER	☒ MALOT	☒ SNAKE GAITORS
☒ PID	☒ BACKPACK	☐

HEALTH, SAFETY, AND ENVIRONMENT

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

DAILY TAILGATE DISCUSSIONS/SUBCONTRACTOR INPUT

Date: 02/24/15	**Time:** 0615	**Weather:** SUNNY / WINDY
Start 0615	LOADING EQUIPMENT / DEFENSIVE DRIVING	
Mid-Day 1145	HIKING (BACKPACK) WITH EQUIPMENT / SUPPLIES - BIOLOGICAL HAZARDS	
Post-Day 1800	UNLOADING EQUIPMENT	
Date: 02/25/15	**Time:** 0600	**Weather:** SUNNY / WINDY
Start 0600	LOADING EQUIPMENT / DEFENSIVE DRIVING	
Mid-Day 1315	RELOCATING AND SAMPLE COLLECTION @ FINAL LOCATIONS	
Post-Day 1630	UNLOADING EQUIPMENT	
Date: 03/05/15	**Time:** 0530	**Weather:** SUNNY
Start 0630	LOADING EQUIPMENT / SAMPLE PREPARATION / DEFENSIVE DRIVING	
Mid-Day 1200	HIKING (BACKPACK); SLIPS, TRIPS, AND FALLS	
Post-Day 1700	UNLOAD EQUIPMENT; QAQC SAMPLES & COC	
Date: 03/10/15	**Time:** 0535	**Weather:** SUNNY / WARM
Start 0535	LOADING EQUIPMENT / SAMPLE PREPARATION / DEFENSIVE DRIVING	
Mid-Day 1215	BACKPACKING SUPPLIES / TRAFFIC PEDESTRIANS	
Post-Day 1755	UNLOADING EQUIPMENT; QAQC SAMPLES & COCS	
Date:	**Time:**	**Weather:**
Start		
Mid-Day		
Post-Day		

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

I know the hazards:

By signing here, you are stating the following:

9. I have been involved in the Job Safety Analysis (JSA) and understand the hazards and risk control actions associated with each task I am about to perform.
10. I understand the permit to work requirements applicable to the work I am about to perform (if it includes permitted activities).
11. I am aware that work that has not been risk–assessed must not be performed.
12. I am aware of my ability and obligation to **Stop Work** (*See below*).

I arrived and departed fit for duty (see Fit for Duty card for further information):

13. I am physically and mentally fit for duty.
14. I am not under the influence of any type of medication, drugs or alcohol that could affect my ability to work safely.
15. I am aware of my responsibility to bring any illness, injury (regardless of where or when it occurred), symptoms of soreness or discomfort, or fatigue issue I may have to the attention of the Crew Lead or Supervisor.
16. I sign out uninjured unless I have otherwise informed the Crew Lead or Supervisor.

Insert fitness level under corresponding time column: Fit for Duty = F Alternate Plan = AP
Team Lead to contact Project Manager for any personnel identified as AP

Individual Name/Company Name/Signature	Date: 02/24/15			Date: 02/25/15			Date: 03/05/15			Date: 03/10/15			Date:		
	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:
SCOTT EDBLAD/STANTEC	0615 F	1145 F	1800 F	0600 F	1315 F	1700 F	0530 F	1200 F	1700 F	0535 F	1215 F	1800 F			
Anuja Sawant/Stantec	0615 F	1145 F	1800 F				0530 F	1200 F	1700 F	0535 F	1215 F	1800 F			
Thomas Wisler/Stantec	0615 F	1145 F	1800 F												
Stephanie Roberts/Stantec	0615 F	1145 F	1800 F												
Tommy Fardig/Stantec	0615 F	1145 F	1800 F												
Jason Stayner/Stantec	0615 F	1145 F	1800 F				0530 F	1200 F	1700 F						
Nathan Chon/Caltrans	11:15														

I will STOP WORK any time anyone is concerned or uncertain about safety. **I will STOP WORK** if anyone identifies a hazard or additional mitigation not recorded. **I will** be alert to any changes in personnel or their fitness level (AP), conditions at the work site or hazards. If it is necessary to **STOP WORK**, I will reassess the task, hazards and mitigations; and then proceed only when safe to do so.

Conclusion of day: I certify that the planned work activities are completed for the day and all injuries and first aids have been reported via RMS3.

Signature of Crew Lead:	Scott Edblad	**Date:**	02/24/15
Signature of Crew Lead:	Scott Edblad	**Date:**	02/25/15
Signature of Crew Lead:	Scott Edblad	**Date:**	03/05/15
Signature of Crew Lead:	Scott Edblad	**Date:**	03/10/15
Signature of Crew Lead:		**Date:**	

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

HEALTH, SAFETY, AND ENVIRONMENT

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

Job Safety Analysis (JSA) Must be completed for all field activities.

Basic Job Steps	Potential Hazards	Controls to Reduce or Eliminate Hazard	Person Responsible
DRIVING TO SITE DEPARTURE FROM SITE	ACCIDENTS; DEERS; TRAFFIC	DEFENSIVE DRIVING	S. EDBLAD A SAWANT T. WALSH S. ROBERTS
TRAFFIC CONTROL SET	HIGH SPEED TRAFFIC; MUSCLE INJURY	WEAR PPE; PROPER LIFTING	T. PARDIG J. STAGNO
HAND AUGERING	UTILITIES; MUSCLE STRAIN; PINCH POINTS	USA MARKING; WEAR PPE; PROPER LIFTING; EYES ON HANDS/PATH	
COLLECTING SAMPLES	LEAD, TPH, HERBICIDES	WEAR PPE → PPE	
HIKING	BIOLOGICAL AND PHYSICAL (SLIPS; HEAT STRESS)	AVOID PLANTS AND ANIMALS; EYES ON PATH; WEAR BACK AND LIFT PROPERLY; DRINK LIQUIDS	

Review the hazard categories below and check the mitigation measures applicable to the identified scope of work.

Environmental Hazards
23. Work area clean
24. Material storage identified
25. Dust/Mist/Fume
26. Noise in area
27. Extreme temperatures
28. Spill potential
29. Waste containers needed
30. Waste properly disposed
31. Waste plan identified
32. Excavation permit required
33. Other workers in area
34. Weather conditions
35. MSDS reviewed

Ergonomic Hazards
36. Awkward body position
37. Over extension
38. Prolonged twisting/bending motion
39. Working in a tight area
40. Lift too heavy/awkward to lift
41. Parts of body in line of fire
42. Repetitive motion
43. Hands not in line of sight
44. Working above your head

Access/Egress Hazards
38. Aerial life/Man basket (inspected & tagged)
39. Scaffold (inspected & tagged)
40. Ladders (tied off)
41. Slips & trips
42. Hoisting (tools, equipment)
43. Evacuation (alarms, routes, ph. #)
44. Confined space entry permit required

Are you ready to work safely?

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

Overhead Hazards
45. Barricades & signs in place
46. Hole coverings identified
47. Harness/lanyard inspected
48. 100% Tie-off with harness
49. Tie off points identified
50. Falling items
51. Foreign bodies in eyes
52. Hoisting or moving loads overhead

Rigging & Hoisting Hazards
58. Lift study required
59. Proper tools used
60. Tools inspected
61. Equipment inspected
62. Slings inspected
63. Others working overhead/below
64. Critical lift permit

Electrical Hazards
65. GFI test
66. Lighting levels too low
67. Working on/near energized equipment
68. Electrical cords condition
69. Electrical tools condition
70. Fire extinguisher
71. Hot work or electrical permit required

Personal Limitations/Hazards
72. Procedure not available for task
73. Confusing instructions
74. No training for task or tools to be used
75. First time performing the task
76. Micro break (stretching/flexing)
77. Report **all injuries** to your supervisor

It is important that all relevant hazards have plans in place to reduce risk.
Be sure that all associated permits are closed off at the end of the job.

Remember: Stop and Think

Reviewed by Name and Signature: Seth Ellis 02/24/15

SITE-SPECIFIC HEALTH AND SAFETY PLAN (HASP)
TASK ORDER NO. 23 – SITE INVESTIGATION – I405

07A3322-23
Site Investigation for HOV Lane Project
Location: LA-405, PM 28.8/39.0
Los Angeles County, California
PN: 0700000107
EA: 120301

Prepared for:
The State of California, Department of Transportation
District 7 - North
Los Angeles, California
Contract # 07A3322

Submitted by:
Stantec Consulting Services Inc.
25864-F Business Center Dr.
Redlands, CA 92374

February 17, 2015

Stantec

Purpose and Approval

Our work can be hazardous, and it is imperative that we never forget that! It is the purpose of this Health and Safety Plan (HASP) to proactively aid Stantec employees in:

- Identifying and understanding the potential risks/hazards they may encounter at the site.
- Mitigating those potential risks/hazards.

Stantec's policy is to complete our work on this site without any type of incident (injury, illness, impact to the environment, impact to property and equipment). In order to achieve this goal, the project team will work together to perform an effective hazard assessment. The team will then establish appropriate precautions and communicate these daily among project staff. Staff will be responsible for communicating changing field conditions to the project management so these conditions and appropriate precautions may be re-evaluated as needed. Staff will implement **STOP WORK AUTHORITY** at any time they believe that conditions may be inherently unsafe or might cause damage to property or harm to the environment. Staff may refuse to participate in work they believe will be unsafe. If it is believed that such conditions exist, staff will communicate immediately with the Project Manager to resolve the situation. We expect all subcontractors and project personnel to share this goal.

Client: The State of California, Department of Transportation – 07A3322

Site Name: Site Investigation HOV Lane Project, Location: LA-405, PM 28.8/39.0

Project Name: TASK ORDER NO. 23 – SITE INVESTIGATION

Project Number: 185832023

Start Date: February 13, 2015

End Date: May 1, 2015

Plan Review Date*: August 13, 2015

(*The Plan Review Date is the date the HASP would need to be re-reviewed to maintain current information is included should the Task Order be extended. The Plan Review date is *no longer than 6 months from the start of the Period of Performance – however, no reviews will be performed on the HASP outside of the Task Order Period of Performance.*).

Kevin Miskin Project Manager	Signature: for	Date: 2/20/15
Dan Feldt, MPH, CIH Health and Safety Manager, Certified Industrial Hygienist (CIH) HASP review	Signature:	Date: 2-18-15
StephAnnie Roberts Office Safety Environmental Coordinator (OSEC)	Signature:	Date: 02-18-15
Scott Edblad Site Health and Safety Officer (SHSO)	Signature:	Date: 02/20/15
Anne Perez Peer Reviewer	Signature: for Anne Perez	Date: 2/20/15
Kristy Edblad HASP Originator	Signature:	Date: 2-20-15

The health and safety guidelines in this HASP were prepared exclusively for this site. This HASP will be amended (with changes recorded on the Health and Safety Plan Modification Log that follows) if site conditions, scope of work, training dates, personnel, or other critical items change before the scheduled HASP review date above. This HASP is intended to be available on site.

before the scheduled HASP review date above. This HASP is intended to be available on site. Contents of this binder are listed in Attachment 1. Elements of the HASP shall be reviewed during daily tailgate meetings conducted by the Site Health & Safety Officer.

Health and Safety Plan Modification Log

HASP Section	Description of Revision	Revision Date	Approved By

Stantec

Acknowledgement and Agreement Form

"Zero Tolerance for Incidents of ANY Kind.
Work Together to Ensure a SAFE and High Quality Project"

All parties conducting site activities are required to coordinate their activities and practices with the Stantec Site Health and Safety Officer (SHSO). Stantec has provided a copy of this HASP to site contractors in the interest of disclosure of potential risks/hazards of which Stantec may be aware. Similarly, contractors shall inform Stantec of any potential site risks/hazards of which they are aware including the contractor's work, equipment, procedures and chemicals.

This HASP has been developed for the purpose of proactively aiding Stantec employees in identifying, understanding, and mitigating the potential risks/hazards they are may encounter at the site. This HASP may also be used as a reference document by properly trained and experienced Stantec subcontractors and clients. However, sub-contractors and other contractors at the site must develop their own HASP to address the potential risks/hazards faced by their own employees.

This HASP should NOT be understood by contractors or anyone other than Stantec employees to provide information on all of the potential risks/hazards to which they may be exposed as a result of their work. Stantec claims no responsibility for use of this HASP by others.

Your signature below confirms the following: that you have read and understand the potential risks/hazards identified by Stantec and the associated mitigation measures discussed in this HASP; that there may be additional risks or hazards that are not identified in this HASP; that you have received training and medical surveillance according to this HASP and the OSHA Standard on Hazardous Waste Operations and Emergency Response (29 CFR 1910.120); and that you understand that you could be prohibited by the Stantec Site Health and Safety Officer or other authorized Stantec personnel from working on this project for not complying with any aspect of this or any other applicable HASP.

**NOTE: OSHA (federal) is used interchangeably and equally with California OSHA (CalOSHA) in this document.

(All Stantec and subcontractor personnel must sign.)

Name	Signature	Company	Date
SCOTT EDBLAD		STANTEC	02/18/15
Jason Stagno		Stantec	02/18/15
Anuya Jawant		Stantec	2/24/15
Stephannie Roberts		Stantec	2.24.15
Thomas Walsh		Stantec	2/24/15
Thomas Fardis		Stantec	2/24/15
Nathan Chan		Caltrans	2/24/15

Acknowledgement and Agreement Form, cont.

Name	Signature	Company	Date

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ATTACHMENTS

Attachment A Training Certificates
Attachment B Job Safety Analyses
Attachment C General Safety Information (for all Sites)
- Attachment 1 Stantec Field Binder Checklist and Project Applicable Forms
- Attachment 2 RMS-2 Fit for Duty
- Attachment 3 Driver's Fatigue Checklist /Safe Driving Vehicle Pre-Use Checklist
- Attachment 4 RMS-3 incident/Near Miss Investigation and Collision Kit

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1.0 Emergency Response

PHONE NUMBERS

The nearest telephone is: Scott Edblad (Stantec) for the SI crew at (661) 754-0862 (cell). There is no landline available for this project and cell phone and cell phone reception may be intermittent. Additional personnel, including the SHSO, who may be on-site are listed below:

1. Scott Edblad (SHSO): (661) 754-0862 (cell phone)
2. Jason Stagno (SI Crew): (805) 630-8648 (cell phone)
3. Anuya Sawant (SI Crew): (805) 341-9514 (cell phone)
4. StephAnnie Roberts (SI Crew): (805) 427-4873 (cell phone)
5. Tom Walsh (SI Crew): (805) 358-0094 (cell phone)
6. Tommy Fardig (SI Crew): (805) 341-2396 (cell phone)
7. Mark Mason (Backup SI Crew): (805) 341-1492 (cell phone)
8. Alex Gastelum (Backup SI Crew): (714) 650-0034 (cell phone)

Emergency Response			
Name		**Telephone**	**Verification**
Hospitals	Cedars-Sinai 8700 Beverly Blvd., Los Angeles, CA	**911** or Non-emergency 310-423-3277	2/17/2015
Ambulance	Impulse Ambulance 12531 Vanowen Street, Los Angeles, CA	**911** or Non-emergency 310-550-1233	2/17/2015
Police	West Los Angeles Police Department 1663 Butler Avenue, Los Angeles, CA	**911** or Non-emergency 310-444-0702	2/17/2015
Fire Department	Los Angeles Fire Department, Station 37 1090 Veteran Avenue, Los Angeles, CA	**911** or Non-emergency 310-575-8537	2/17/2015
Spill Response	Belshire Environmental	(800)-995-8220	2/17/2015
Environmental Response	National Response Center (24-hour hotline)	(800) 424-8802	2/17/2015
Environmental Protection	US Environmental Protection Agency (24-hour hotline)	(800) 424-9346	2/17/2015
Emergency Services	Office of Emergency Services (24-hour hotline)	(800) 852-7550	2/17/2015
Poison Control	California/U.S. National Poison Control Center (24-hour hotline)	(800) 222-1222	2/17/2015
Agency / Line Locator			
National Line Locator	National 811 Call-Before-You-Dig Hotline (24-hour hotline)	811	2/17/2015
Public Utility Locator	DIG ALERT	811	2/17/2015

Local office and additional contacts in case of an emergency or field questions regarding the Site:

1. **Kevin Miskin (Contract Manager) at 909-224-3406**
2. **Anne Perez (TO Support) at 951-255-8202**
3. **StephAnnie Roberts at 805-427-4873**

Flow charts for contacting additional departments in Stantec and official reporting protocol can be found in Section 1.4 of Attachment C.

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2.0 Project Team Information

Project Team Phone Numbers			
Project Role/Name		**Telephone**	**Verification**
Stantec Project/Contract Manager	Kevin Miskin	909-224-3406 (cell) 909-255-8210 (office)	2/17/2015
Field Staff #1: Stantec Site Health and Safety Officer (SHSO)	Scott Edblad	661-754-0862	2/17/2015
Field Staff #2: Stantec project Staff (SI)	Jason Stagno	805-630-8648	2/17/2015
Field Staff #3: Stantec project Staff (SI)	Anuya Sawant	805-341-9514	2/17/2015
Field Staff #4: Stantec project Staff (SI)	StephAnnie Roberts	805-427-4873	2/17/2015
Field Staff #5: Stantec project Staff (SI)	Tom Walsh	805-358-0094	2/17/2015
Field Staff #6: Stantec project Staff (SI)	Tommy Fardig	805-341-2396	2/17/2015
Field Staff #7: Stantec project Staff (SI Backup)	Mark Mason	805-341-1492	2/17/2015
Field Staff #8: Stantec project Staff (SI Backup)	Alex Gastelum	714-650-0034	2/17/2015
Field Staff #9:			
Stantec Business Unit Leader	Kyle Emerson	951-315-0534 (cell) 909-335-6116 (office)	2/17/2015
Senior Certified Industrial Hygienist (CIH)	Dan Feldt	414-305-1984	2/17/2015
Stantec West Region Health, Safety, Environment (HSE) Coordinator	Clint Reuter	818.395.8556 Cell 949.923.6258 Office	2/17/2015
Stantec Human Resources Representative	Peggy Ramos	949-923-6061	2/17/2015
OSEC (Stantec Office Safety & Environmental Coordinator)	StephAnnie Roberts	805-427-4873	2/17/2015

(Note: The Field Staff will be on-Site. All others are Stantec employees supporting all Stantec staff and not necessarily charging time to the Task Order.)

TRAINING

Site personnel will be trained and certified in hazardous waste operations and emergency response as follows:

- 40-Hour HAZWOPER Training;
- OSHA Respiratory Protection (29 CFR 1910.134)
- Annual 8-Hour Refresher [29 CFR 1910.120€(8)];
- First Aid/CPR Training;
- Physical examination consistent with 29 Code of Federal Regulations (CFR) 1910.120 (and 8 California Code of Regulations (CCR) 5192, if applicable);

- Supervisory 8-hour Training [29 CFR 1910.120€(4)] for the Site Manager/SHSO; and
- Additional training specific to the job being performed (e.g., Fall Protection, Lock Out/Tag Out, Hot Work, Confined Space, etc.).

In addition to the above-mentioned trainings, Stantec personnel are required to have training in a behavior-based safety program and defensive driving. Fit tests are also required for respirator use.

Client-Specific Safety Procedures:
Caltrans does not have any additional required safety programming or expectations, thus Stantec staff will comply with state, federal and local regulations, and Stantec policies, procedures and expectations.

Site specific staff safety training certification information is listed on the following page.

SITE SPECIFIC STAFF TRAINING
(Includes personnel that could potentially visit the Site)

Name	40Hr HAZWOPER	8Hr HAZWOPER Refresher	CPR / First Aid	Annual Physical	Defensive Driver Training	Respirator Fit Test
FIELD STAFF: Scott Edblad	11/04/2000	02/17/2015	06/14/2013	12/22/2014	09/12/2013	12/22/2014
FIELD STAFF: Jason Stagno	07/07/2004	09/17/2014	06/14/2013	12/18/2014	09/06/2012	12/18/2014
FIELD STAFF: Anuya Sawant	07/30/2010	07/23/2014	06/14/2013	08/26/2014	09/28/2011	08/26/2014
FIELD STAFF: StephAnnie Roberts	11/13/1998	04/16/2014	06/14/2013	04/17/2014	08/31/2011	04/17/2014
FIELD STAFF: Tom Walsh	07/12/2006	02/18/2015	05/12/2012	11/06/2014	02/08/2012	11/06/2014
FIELD STAFF: Tommy Fardig	03/15/2012	03/07/2014	06/14/1013	06/12/2014	--	06/12/2014
FIELD STAFF: Mark Mason (Backup)	07/17/2001	02/12/2015	06/13/2013	08/14/2014	06/18/2012	08/14/2014
FIELD STAFF: Alex Gastelum (Backup)	01/08/2004	05/11/2014	01/30/2014	08/15/2013	09/11/2012	09/11/2013
List Staff Changes/Additions Below						

Copies of the OSHA 8-Hour Refresher Certificates are included in Attachment A.

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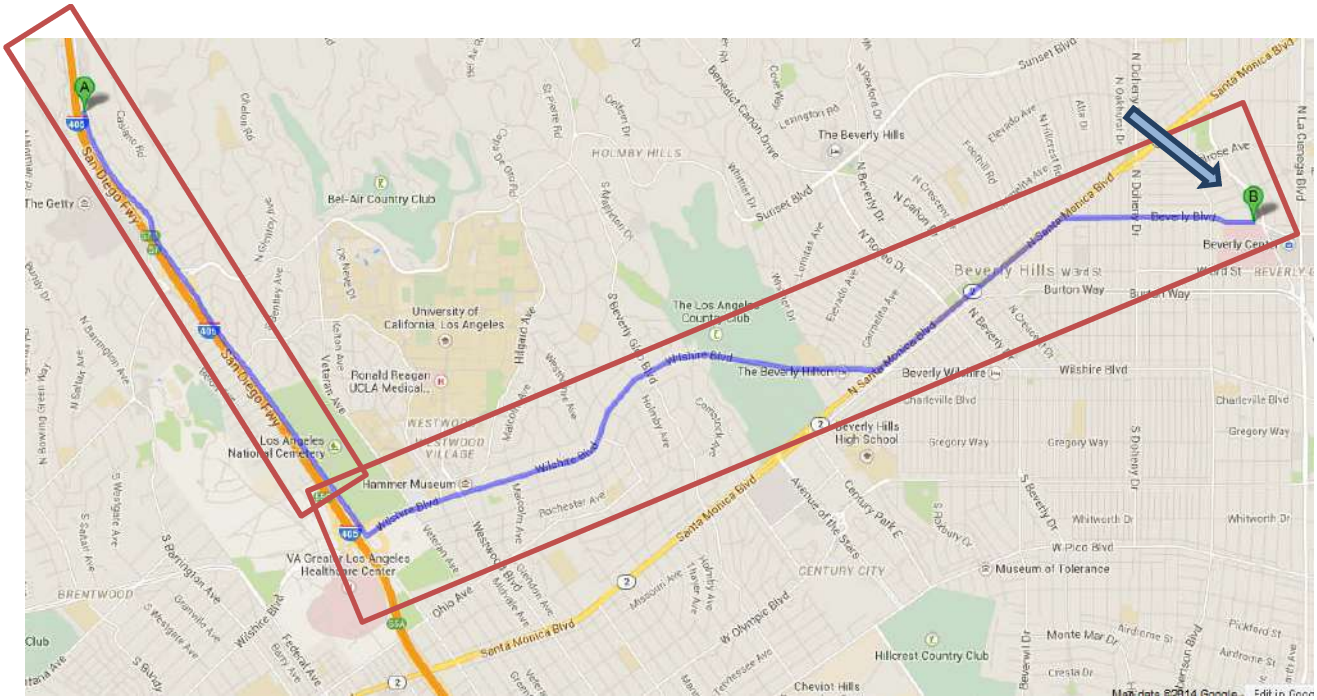
DIRECTIONS AND MAP TO THE HOSPITAL

The SHSO will verify and validate the route to the hospital by driving it before work begins. The work area has been outlined in red, with the hospital indicated by the arrow:

I-405



Cedars-Sinai
8700 Beverly Boulevard
Los Angeles, CA

A N Sepulveda Blvd

1.	Head **south** on **N Sepulveda Blvd** toward **Casiano Rd** About 4 mins	go 2.3 mi total 2.3 mi
2.	Turn left onto **Wilshire Blvd** About 7 mins	go 2.6 mi total 5.0 mi
3.	Slight left onto **N Santa Monica Blvd** About 3 mins	go 1.1 mi total 6.1 mi
4.	Slight right onto **Beverly Blvd** Destination will be on the right About 3 mins	go 0.9 mi total 7.0 mi

B **Cedars-Sinai Medical Center**
8700 Beverly Blvd, Los Angeles, CA 90048

3.0 Scope of Work

The scope of this project is described in the Site Investigation Proposal, dated February 12, 2015. The field activities are summarized below

1. **Field Sampling**
   As directed the Task Order No. 23 request, Stantec proposes to advance up to 62 borings as outlined in the attachments in the Task Order request.

   A. North Canyon (Staging Area) Soil Sampling
   Soil Samples will be collected from 10 soil borings in the North Canyon Area as illustrated on Figure 2. The staging area is used for heavy equipment storage during demolition activities of the Mulholland Bridge. For each boring, soil samples should be collected from surface, 1.5 feet, and 3.5 feet bgs. The samples (20 total) taken from surface and 1.5 feet bgs will be submitted for laboratory analyses. The samples (10 total) from 3.5 feet bgs will be submitted to laboratory and placed on hold pending results of the prior samples.

   B. North-North Canyon (Debris Area) Soil Sampling
   Soil Samples will be collected from nine soil borings in the North-North Canyon Area as illustrated on Figure 3. The debris area is associated with the demolition of the Mulholland Bridge. For each boring, soil samples should be collected from surface, 1.5 feet, and 3.5 feet bgs. The samples (18 total) taken from surface and 1.5 feet bgs will be submitted for laboratory analyses. The samples (9 total) from 3.5 feet bgs will be submitted to laboratory and placed on hold pending results of the prior samples.

   C. Southbound I-405 between Church Lane to Getty Center Drive
   Soil samples are intended to be collected from 36 soil borings along the southbound side of the I-405 between the previous and the new right-of-way extending from Church Lane to Getty Center Drive as illustrated on Figures 4 through 7. For each boring, soil samples should be collected from surface, 1.5 feet, and 3.5 feet bgs. The samples (72 total) taken from surface and 1.5 feet bgs will be submitted for laboratory analyses. The samples (36 total) from 3.5 feet bgs will be submitted to laboratory and placed on hold pending results of the prior samples.

   D. Northbound I-405 between stations 1802+48 to 1811+00
   Soil samples are intended to be collected from seven soil borings along the northbound I-405 between stations 1802+48 to 1811+00 as illustrated on Figures 7 and 8. For each boring, soil samples should be collected from surface, 1.5 feet, and 3.5 feet bgs. The samples (14 total) taken from surface and 1.5 feet bgs will be submitted for laboratory analyses. The samples seven (7 total) from 3.5 feet bgs will be submitted to laboratory and placed on hold pending results of the prior samples.

   Sample intervals will consist of 0 to 0.5-feet bgs (surface), 1.5 to 2.0 feet bgs (1.5-foot), and 3.5 to 4.0 feet (3.5-feet).

   Approximately 124 samples will be collected and analyzed at a stationary laboratory. Approximately 62 samples from the 3.5-feet sampling interval will be submitted to the laboratory and placed on hold pending results of prior samples. No borings will be advanced outside of the existing right of way or in existing paved areas.

Soil samples will be collected directly from the hand auger bailer, discharged to a clean ziplock one (1) gallon bag, collect samples via EPA Method 5035, then discharged to eight-ounce laboratory certified clean glass jars. All soil sampling equipment will be decontaminated before the collection of each sample at each depth using the three bucket system. Each sample will be labeled with unique sample identification along with the borehole ID, sample depth, sample date, and sample time. All samples will be annotated on chain-of-custody forms and delivered to a laboratory certified by the California Department of Health Services Environmental Laboratory Accreditation Program for the analyses indicated herein.

Decontamination and disposal of investigation derived wastes will be conducted in accordance with the Task Order No. 23 Request.

2. GPS Data Collection

All sample locations (x and y coordinates) will be surveyed with a hand-held global positioning system unit (GPS) as outlined in the Task Order request.

3. Laboratory Analysis

According to the Task Order No. 23 request, soil samples shall be analyzed as follows:

North Canyon (Staging Area) Soil Sampling

- Total Petroleum Hydrocarbons (TPHs) calculated as gasoline and extended carbon chain by EPA Method 8015M.
- Volatile Organic Compounds (VOCs) by EPA Method 8260B/5035.
- Total Lead by EPA Method 6010B.

North-North Canyon (Debris Area) Soil Sampling

- TPHs calculated as gasoline and extended carbon chain by EPA Method 8015M.
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270B.
- Title 22 Metals (including total lead) by EPA Method 6010B/7471A.
- Polychlorinated Biphenyls (PCBs) by EPA Method 8081A.
- Asbestos Containing Material by polarized light microscopy (PLM).

Southbound I-405 between Church Lane to Getty Center Drive and
Northbound I-405 between stations 1802+48 to 1811+00

- TPHs calculated as gasoline and extend carbon chain by EPA Method 8015M.
- VOCs by EPA Method 8260B/5035.
- Title 22 Metals (including total lead) by EPA Method 6010B/7471A.
- Twenty percent (20%) of the total number of collected surface sample shall be tested for Chlorinated Herbicides by EPA Method 8151A.

To summarize, and for purposes of preparing the cost proposal, Stantec is estimating that out of 186 samples collected, the following will be analyzed by the laboratory:

- 124 samples for TPH;
- 106 samples for VOCs;
- 20 samples for total lead;
- 18 samples for SVOCs;
- 104 samples for Title 22 Metals;
- 18 samples for PCBs;

- 18 samples for ACM; and
- 9 samples for chlorinated herbicides.

The following QA/QC samples will be collected and analyzed as part of this project:

- Equipment Blanks: As directed in the Task Order request, equipment (decontamination) blank samples, one for every ten (10) samples collected (approximately 19 total), will be analyzed for TPH, VOCs, SVOCs, Title 22 metals, PCBs, ACM, and chlorinated herbicides.

If the number of analyses exceeds these estimates, Caltrans will be informed prior to ordering additional analyses. A cost adjustment will be submitted for additional analyses approved by Caltrans.

Stantec will inform the laboratory that samples are to be analyzed on a normal 5-day turn-around-time schedule. In addition, the laboratory limit on the analysis should be reported as Method Detection Limit (MDL) and as Practical Quantification Limit (PQL), and as directed in the Task Order No. 23 request and Agreement 07A3322.

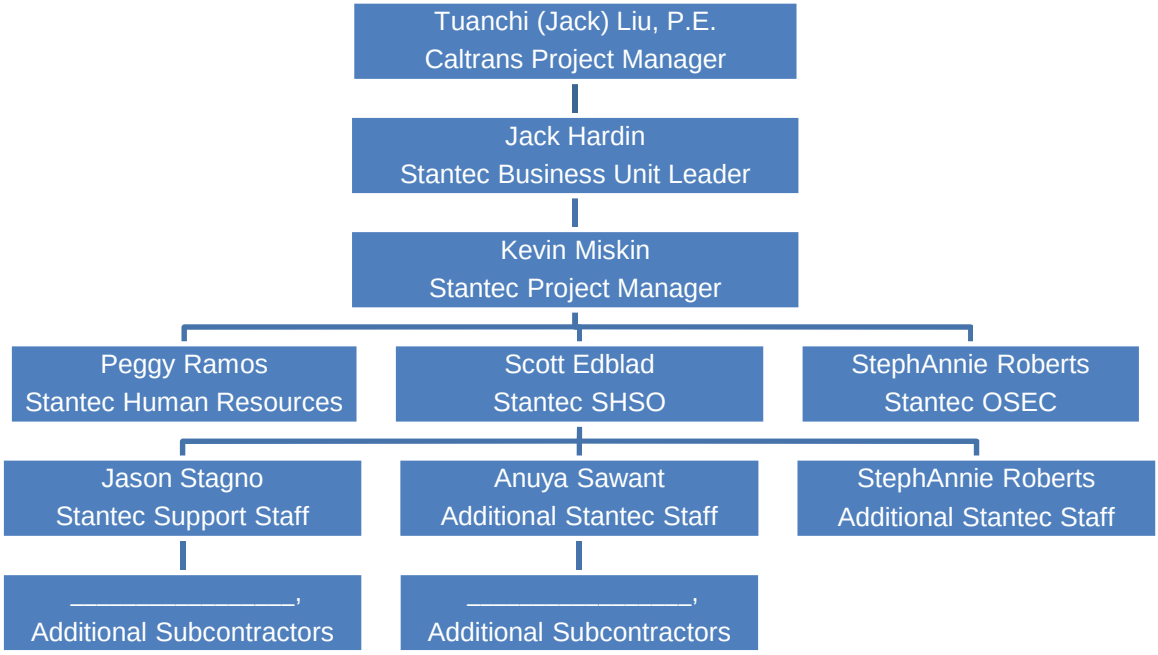
The scope of work for the SI will be conducted by two teams each with two field staff. Both teams will conduct their respective sampling at different locations simultaneously. A buddy system will be implemented during the sampling activities as a secondary measure for protection against traffic.

The scope of work will be conducted in a manner consistent with the methods and assumptions outlined in **TASK ORDER NO. 23.**

All work plans referenced in this HASP will be available for Stantec personnel on site. The field staff may also call the Project Manager, Kevin Miskin (909-224-3406) or Task Manager, Kristy Edblad (661-754-0863), or StephAnnie Roberts (805-427-4873) should they have any questions that are not specifically addressed in the HASP or the work plan.

4.0 Organization and Responsibilities

An organization chart for site-specific project personnel is provided below.



A table summarizing responsibilities for project personnel is provided below.

Project Job Title	General Project Responsibilities
Stantec Project Manager	Overall financial and logistics. Contact client and subs to understand all hazards. Discuss with SHSO. Follow-up all incidents upon notice.
Stantec Site Health and Safety Officer	Conduct Site Safety Meeting (tailgate) and fieldwork in accordance with JSA and this HASP. Report all incidents and near misses immediately to Project Manager.
Stantec Support/Project Staff	Assist Stantec Site Health and Safety Officer in implementing site scope of work
Stantec Business Unit Leader	Provide immediate support at notice of all incidents
Stantec Sr. Certified Industrial Hygienist	Respond with corporate resources to all incidents as appropriate. Assist in HASP review. Assist in incident investigation.
Stantec Human Resources	Assist with incident review, recordkeeping.
Stantec Office Safety and Environment Coordinator	Manage Health and Safety responsibilities for personnel in Office. Assist employees with setting up training and attending/completing necessary courses.
Caltrans Project Manager	Provide all known analytical data gathered by others and notice of hazards. Provide access to site and available emergency response capabilities.

5.0 Site Background, Potential Hazards and Mitigation Measures

PROJECT BACKGROUND INFORMATION

The Site background is described in the Task Order request, dated February 6, 2015, and summarized below.

Project Background

According to the Caltrans Task Order No. 23 request, this SI will evaluate if chemicals impacts are present in these area that could require further investigation and affect safety of the Getty's workers during maintenance or improvement activities. Caltrans will use the analytical results of the soil samples to determine the proper management of excavated soil, if any. Stantec will report the analytical results only and will not issue any recommendations based on the findings of the SI. The SI results will assist the Contractor in developing appropriate health and safety plan and training program for the field staff as required per Title 8 of the California Code of Regulations (8CCR) and Cal-OSHA Construction Safety Order.

POTENTIAL HAZARDS

Chemical:
No historical reports were provided indicating that specific chemical hazards have been discovered at the Site during previous investigations. However, potential chemical hazards at this site may include:

- Aerially deposited lead (ADL) and other heavy metals in soil.
- TPH
- VOCs
- SVOCs
- PCBs
- Asbestos
- Chlorinated herbicides

Physical:
The project area is located along the I-405 through areas of Los Angeles County (within Caltrans Right-of-Way (LA-405, PM 28.8/39.0). Other potential site specific hazards may include:

- Traffic
  - Set cones up in your immediate work area to provide visibility to the vehicles traveling in the area of the work zone. Don't turn your back to traffic.
  - Use the work vehicle as an added buffer for your work area (DO NOT BLOCK TRAFFIC), and consider a closure of the immediately adjacent lane with proper signage.
- Wind/debris
  - Should weather conditions change and become a hindrance to performing the task safely, stop work and contact the project manager.

- Heat
  - Be sure to drink plenty of liquids, be sure your co-worker is drinking enough liquids. The site appears to have access to areas that do provide a lot of shade so be sure to take breaks to cool down.

- Trips/falls
  - To protect yourself, always look before you step. Work will be done around the highway and along the highway slopes under bridges. Take care walking and standing working in all areas of the site.

- Noise
  - The Site is adjacent to Highway lanes – wear the proper hearing protection if found to be necessary.

- PPE
  - Wear the proper PPE for the tasks involved – minimum: gloves, hard hat, safety glasses, steel toed boots, high-viz safety vest, and when appropriate, a dust mask (see below). Additional safety wear may need to be used if site conditions change.

HAZARD MITIGATION

Attachment A provides information for on avoiding, monitoring and mitigating chemical and physical hazards, including general hazards that can potentially be encountered on any project site (earthquakes, bees, etc). As described, proper hygiene and personal protective equipment (PPE) shall be required including,

- Washing hands before eating, smoking and always after sample collection is completed, and
- Donning hard hats, reflective high visibility vests, steel toed shoes, and disposable sampling gloves.

Project work will be near the lanes of a busy highway. Traffic control will be essential for safety. To improve worker safety, traffic warning signage, cones and truck flashers will be provided to alert drivers to workers along the shoulders. Traffic control will consist of the following elements:

- W21-5 "Shoulder Work" signs will be placed in the area ahead of each borehole. The signs will be moved as work progresses to assure that the signage follows the work. Signs will be placed appropriately to improve visibility to drivers. Lane closure should be considered dependent on proximity and speed of traffic and perceived risk.

- High visibility reflective cones will be placed along the pavement edge ahead of and next to the work area.

- Work trucks will have flashing yellow strobe lights and will be positioned, preferably at a slight diagonal to the pavement edge, as safety barriers between workers and oncoming traffic.

Protect yourself, always look before you step and wear proper PPE for the task being performed.

6.0 Potential Airborne Concerns and Air Monitoring Action Levels

An air purifying respirator or masking with high-efficiency particulate air (HEPA) filtering capability shall be used while sampling suspect ACM materials. Given that the proposed work will take place adjacent to Highway I-405, the following is a list of chemicals that may be present in the work area but are not planned to be monitored on a continual basis given that no soil disturbance is planned.

The list below includes lead, TPH-oil, TPH-diesel, arsenic and volatile organic vapors.

Potential Airborne Concerns						
Chemical (Or Class)	**OSHA PEL ACGIH TLV**	**Other Pertinent Limits**	**Warning Properties**	**Routes of Exposure or Irritation**	**Acute Health Effects**	**Chronic Health Effects/Target Organs**
Lead	OSHA PEL: 8 hr. TWA 0.050 mg/m3 ACGIH TLV: 8 hr. TWA 0.050 mg/m3	NIOSH REL, 0.05 mg/m3 8 hr. TWA	A heavy, ductile, soft, gray solid	Inhalation, ingestion, skin and/or eye contact.	Effects of overexposure to lead - (1) Short term (acute) overexposure. Lead is a potent, systemic poison that serves no known useful function once absorbed by your body. Taken in large enough doses, lead can be fatal in a matter of days. A condition affecting the brain called acute encephalopathy may arise which develops quickly to seizures, coma, and death from cardiorespiratory arrest. A short term dose of lead can lead to acute encephalopathy. Short term occupational exposures of this magnitude are highly unusual, but not impossible.	Similar forms of encephalopathy may, however, arise from extended, chronic exposure to lower doses of lead. There is no sharp dividing line between rapidly developing acute effects of lead, and chronic effects which take longer to acquire. Lead can potentially adversely affect numerous body systems, and can cause forms of health impairment and disease which arise after periods of exposure as short as days or as long as several years. See note below table

Potential Airborne Concerns						
Chemical (Or Class)	**OSHA PEL ACGIH TLV**	**Other Pertinent Limits**	**Warning Properties**	**Routes of Exposure or Irritation**	**Acute Health Effects**	**Chronic Health Effects/Target Organs**
Carbon Monoxide	CalOSHA PEL 25 ppm 8 hr. TWA CalOSHA 200 ppm-C ACGIH TLV 25 ppm 8 hr. TWA	NIOSH REL = 35 ppm 8 hr. TWA IDLH = 1200 ppm	Colorless, odorless gas	Inhalation	headache, drowsiness, lassitude (weakness, exhaustion), narcosis; dyspnea, heart palpitation, unconsciousness, death	None established
TPHo	FedOSHA PEL 5 mg/m3 TLV 5 mg/m3 ACGIH TLV: TWA 5.0 mg/m3		Brown-to-black, oily liquid (used) Amber colored liquid with petroleum odor (new)	Inhalation, ingestion, skin and/or eye contact.	Slightly irritated noses, throats, and eyes, diarrhea, anemia and tremors, nausea. Irritated skin.	Respiratory system, skin epidermis.
TPHd	FedOSHA PEL 15 mg/m3 mg (total carbon) FedOSHA PEL, and ACGIH TLV 0.2 mg/m3 total coal tar volatiles		Yellowish to light brown liquid	Inhalation, skin absorption, ingestion, skin and/or eye contact.	Nausea, eye irritation, increased blood pressure, headache, light-headedness, loss of appetite, poor coordination, and difficulty concentrating. [Potential occupational carcinogen	Kidneys, circulatory system
Benzene 1910.1028	FedOSHA PEL 1.0 ppm; FedOSHA 15 min-STEL 5.0 ppm ACGIH-TLV TWA 0.5 ppm (skin)	NIOSH REL 0.1 ppm IDLH 500 ppm	Benzene odor.	Inhalation, dermal, ingestion, eyes.	Skin (dermatitis), eye, respiratory tract irritant, headache, dizziness, nausea.	Carcinogen, CNS, eye damage, bone marrow, blood, skin, leukemia.
Toluene	CalOSHA PEL 10 ppm; 15 min-STEL 150 ppm 500 ppm (C) ACGIH-TLV 50 ppm	NIOSH REL 100 ppm TWA 50 ppm STEL ILDH 500 ppm	Sweet, pungent, benzene-like odor.	Inhalation, dermal, ingestion, eyes.	Skin (dermatitis) eye, respiratory tract irritant, headache, dizziness, weakness, and fatigue.	CNS, liver, kidneys, skin.

Potential Airborne Concerns						
Chemical (Or Class)	**OSHA PEL ACGIH TLV**	**Other Pertinent Limits**	**Warning Properties**	**Routes of Exposure or Irritation**	**Acute Health Effects**	**Chronic Health Effects/Target Organs**
Ethyl-benzene	CalOSHA PEL 5 ppm; 30 ppm 15-min STEL ACGIH-TLV 100 ppm; 15-min STEL 125 ppm	NIOSH REL 100 ppm REL-STEL 125 ppm IDLH 800 ppm	Pungent aromatic odor.	Inhalation, dermal, ingestion, eyes.	Skin/eye/mucous membrane irritant, headache, dizziness, drowsiness.	Eyes, respiratory tract, skin, CNS, blood, kidneys, liver.
Total Xylenes	FedOSHA PEL 100 ppm; 300 ppm-C ACGIH-TLV 100 ppm;15-min STEL 150 ppm	NIOSH REL 100 ppm NIOSH REL 15 min STEL 150 ppm IDLH 900 ppm	Aromatic odor.	Inhalation, dermal, ingestion, eyes.	Throat and skin irritant (dermatitis), headache, nausea, drowsiness, fatigue.	Carcinogen, CNS, liver, kidneys, skin, gastrointestinal damage, eye damage.

Abbreviation	Explanation
PEL	Permissible Exposure Limit set by OSHA (8 hour time-weighted average/TWA)
REL	Recommended Exposure Limit (set by National Institute of Occupational Safety & Health-NIOSH)
C	Ceiling Limit (airborne concentration not to be exceeded for any period of time)
STEL	15-minute Short Term Exposure Limit (unless other time period specifically identified)
IDLH	Immediately Dangerous to Life or Health
TWA	8 hour time-weighted average (PEL, TLV, REL)
TLV	Threshold Limit Value set by the American Conference of Governmental Industrial Hygienists (ACGIH) 8 hr. TWA
AIHA WEEL	Workplace Environmental Exposure Level (set by the AIHA-American Industrial Hygiene Association)
SKIN	Skin Absorption is significant contributor to total exposure
NIOSH	National Institute of Occupation Safety and Health
CNS	Central Nervous System
CVS	Cardiovascular System

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7.0 Site-Specific Control and Safety Procedures

Procedures described in this section are site specific procedures intended to aid Stantec personnel in mitigating site risks/hazards.

HASP Inspections

The site-specific HASP should be inspected in the field by the SHSO or other Stantec personnel to determine the effectiveness of the plan. Any deficiencies should be corrected and changes will be recorded on the HASP Modification Log.

Job Safety Analysis

Job Safety Analyses (JSAs) will be prepared or revised prior to mobilizing to the field. Applicable JSAs will be reviewed in detail on a daily basis by all affected on-site workers and/or visitors. Any revisions to the JSAs will be hand written into the JSAs, forwarded to the project manager, and communicated to during Daily Production Health and Safety Briefings. JSAs are located in Attachment B.

Permits

The approved/signed Task Order for the project is the permit to work on Caltrans right-of-way and must be available onsite at all times. The signed approved task order will serve as the general permit to work for this site.

Public Questions and Press

Questions about the site posed by neighbors, the press, or other interested parties will be directed to the **Caltrans Project Manager Tuanchi (Jack) Liu at (213) 897-1350**.

Work Hours

Work on this project will be conducted between the hours of 0700 to 1800.

Waste Management

A. Waste Generation (Type(s)/Quantities Expected): Unknown

Anticipated (YES/NO): ***NO***

Types: __ Liquid _Solid __ Sludge ____ Other (describe) _____

Quantity (Expected Volume): Unknown

B. Characteristics (Expected): ***NA FOR TO23 SCOPE***

Corrosive _____ Flammable/Combustible ____ Radioactive _____ Toxic ___

Reactive _____ Unknown ____

Other (specify) _____

C. Packaging Requirements for Waste Material (Expected): ***NA FOR TO23 SCOPE***

- DOT-approved Drums _
- Baker Tanks (possibly tankers if trucked off-site) _____
- Lined Waste Bins ____
- Temporary Stockpile _____

D. Disposal and/or Treatment Methods Proposed (Expected): ***NA FOR TO23 SCOPE***

There are no waste materials expected to be generated during the SI sampling work.

When/If applicable: All wastes will be labeled, sampled, and analyzed for all applicable chemicals of potential concern and physical properties (e.g., pH, vapor pressure, etc.) to ensure proper waste characterization. Results of analysis will determine how and where impacted materials may be disposed. Belshire Environmental will be responsible for the categorization and transportation of all solid waste generated on this Site, if any. All materials will be disposed of or treated in accordance with federal, state and local regulations as selected and arranged by Stantec.

8.0 Journey Management Plan

PURPOSE

The purpose of this Journey Management Procedure (JMP) is to prevent losses associated with motor vehicle related incidents including: injuries to drivers, passengers and pedestrians, damage to motor vehicles and damage to third party property. By communicating potential safety risks before mobilizing to a site, a motor vehicle operator will be able to prepare for and avoid potential hazards.

These JMPs apply to all vehicles assigned for the support of site operations, including company owned and personal use vehicles. This JMP does not apply to vendors (such as UPS, FedEx. etc.) not under contract with Stantec or their supplier. This JMP does not address hazards that are external to the site access/egress and on the onsite project operations.

Site Specific JMP

General Vehicle Hazards

Highways approaching/near the project site are typically congested – allow extra time and space, slow down, and watch for vehicles.

Site Specific Potential Vehicle Hazards

Heat, traffic, winds. Watch for debris along the roadway. Highway adjacent – watch for traffic. If parking along the shoulder, watch for traffic before exiting vehicle. Use the vehicle to provide a buffer between you and the traffic, where possible. Watch for dips, debris, bushes. **SHOULDER CLOSURE of immediately adjacent shoulder to work activity should be considered utilizing cones and signage**

Directions: Access to the Site

The Site is located along the right-of way of Interstate 405 near the Getty Center, in Los Angeles County. Access may be gained along the highway or from the applicable streets adjacent to where the samples are being collected. Access to the areas along the on-off-ramps will be evaluated in order to take the safest exit into the shoulder which may be in a location off the ramps but the sampling area accessed by walking to it. Cones should be carried to the work area.

Directions: Leaving the Site

Site Specific Restrictions and Controls

None noted

This Journey Management Plan is approved for use:

From: 2/17/2015	Time: 0500	To: 5/1/15	Time: 1900

Journey Management Plan Maintained by

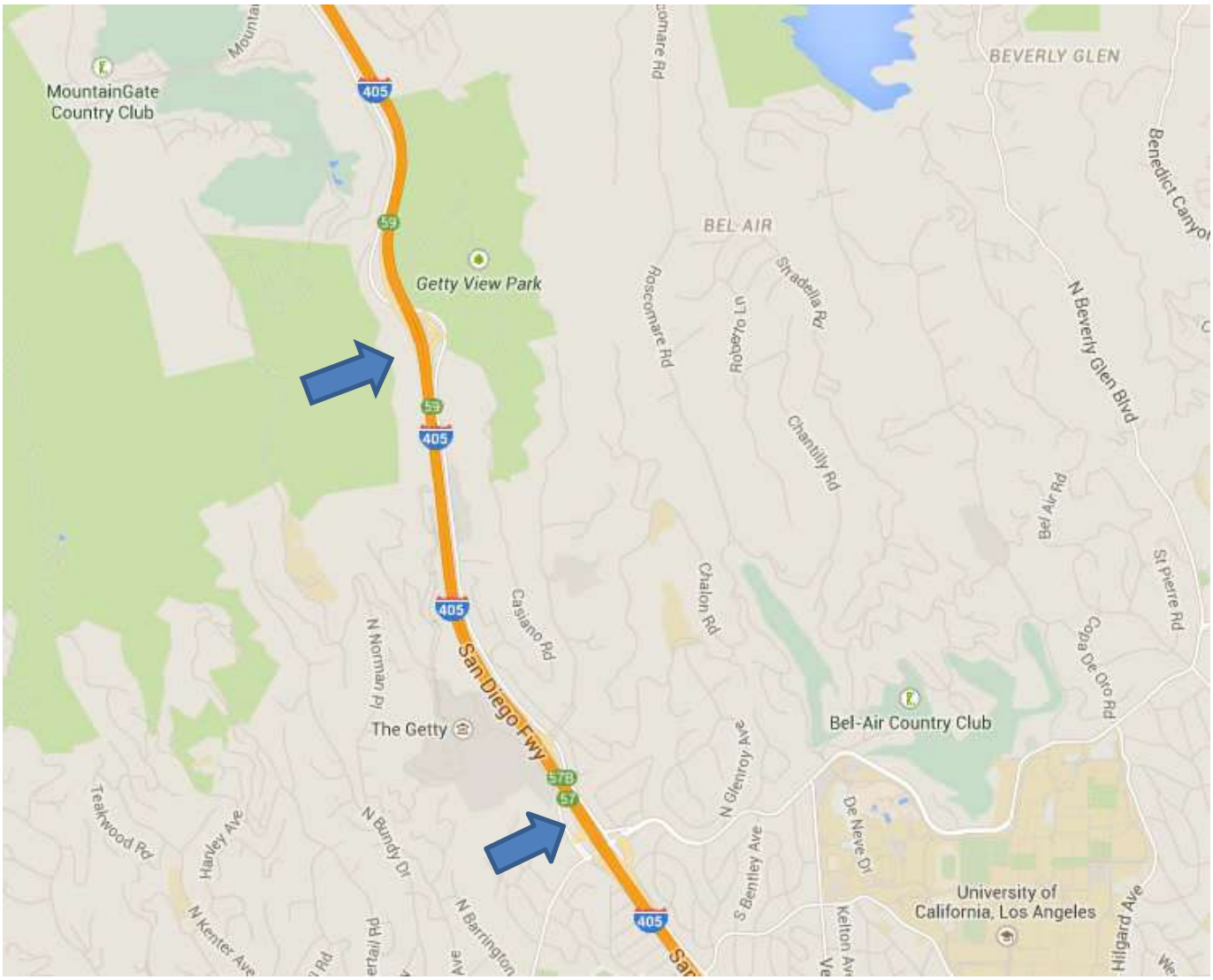
Field Manager : Scott Edblad	Cell: 661-754-0862
Contract Project Manager: Kevin Miskin	Cell: 909-224-3406

Should an incident occur, refer to Attachment C, Section 1.4 and Attachment 4 for Stantec's procedures of notifications and reporting.

SITE MAP/SKETCH

It can be helpful in clarifying access/egress routes, parking and positioning of equipment, traffic cones and other delineators.

Site Sketch



The area of the SI is located along Interstate 405, approximately located between the two blue arrows on the figure above.

Access entry locations will vary at each of the SI since they are not grouped together.

(Site view provided from Google Maps, 2015.)

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CHANGES TO THE JOURNEY MANAGEMENT PLAN

Date	Name	Change/Comment (be specific)

Attachment A

Training Certificates

Certificate of Completion

Presented to

Scott Edblad

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Dated: **02-17-2015**

Certificate of Completion

Presented to

Anuya Sawant

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Dated: **07-23-2014**

Certificate of Completion

Presented to

Jason Stagno

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Dated: **09-07-2014**

Certificate of Completion

Presented to

StephAnnie Roberts

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Michael P. Weber

Dated: **4/24/2014**

Certificate of Completion

Presented to

Thomas Fardig

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Manjinath Venkat
Senior Biologist

Dated: **3/7/2014**

Certificate of Completion

Presented to

Thomas Walsh

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Dated: **02-18-2015**

Certificate of Completion

Presented to

Alejandro Gastelum

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Dated: **5/7/2014**

MONICA C. ARAGON

Certificate of Completion

Presented to

Mark Mason

of

Stantec Consulting Services Inc.

for successful completion of

Stantec Hazwoper Refresher Course v3, PS4 eLesson

Dated: **02-12-2015**

Attachment B

Job Safety Analyses

1. Driving to/from the job Site (with no trailer) Job Safety Analysis (JSA)

POC	Development Team	Position/Title	Date	Reviewed By	Position/Title
X	Michael Philipp	West Region Health and Safety Manager	10/04/2006		
			05/27/2008	Michael Philipp	West Region Health and Safety Manager
		Site specific edits to this JSA were made by	09/12/2014	Monica L. Aragon	OSEC
If most recent review date is more than six months old, then this JSA must be updated and reviewed again to remain current					
POC is the JSA development 'Point Of Contact'					

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each workday. Last-Minute Risk Assessment (LMRA) procedures must be used throughout the project. Weather conditions (heat, cold, rain, and lightening) must also be considered. Each employee is empowered, expected, and has the responsibility to stop the work performed by him/herself or another co-worker if the working conditions or behaviors are considered unsafe. All employees should act proactively to identify and mitigate hazards to the safest extent of their ability. Use Stop Work Authority as needed.

Job Steps	Personal Protective Equipment	Potential Hazard	Critical Actions
Perform LMRA procedures.	Wear reflective vest for traffic, steel toed shoes, long sleeve shirt, hardhat, safety glasses with side shields, and high visibility work gloves.	Slip/trip/falls, struck by traffic	● Assess the potential hazards. Analyze how to reduce the risk. – STANTEC_____. ● Review JSA – STANTEC_____.
Verify Journey Management Plan is complete and current		Unexpected traffic detours	● Assure directions are available and understood prior to commencing travel – STANTEC_____. ● Pull the vehicle into a safe location if additional directions must be confirmed – STANTEC_____. ● Increase following distance to allow extra time to stop if you are in

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Job Steps	Personal Protective Equipment	Potential Hazard	Critical Actions
			unfamiliar territory - STANTEC_____.
Verify a Vehicle Collision Kit, a 3-lb type ABC fire extinguisher, and other as needed emergency equipment is in the vehicle.	Safety vest, high visibility work gloves, steel-toe/shank boots, safety glasses, long-sleeved shirt	Struck by another vehicle, pinch points, falling equipment	• Verify prepared field kit is in the vehicle. Inventory of the kit should include first aid kit, blood borne pathogen kit, fire extinguisher, collision kit, flashlight, etc. – STANTEC_____. • For cold weather areas the inventory should also include a bag of sand, a bag of salt, gloves, wool socks, wool caps, wool blankets, tire chains, small shovel and matches – STANTEC_____.
Perform perimeter walk around of vehicle for damage or unusual conditions, and complete the SWP-124a - Vehicle Pre-Use Checklist.	Safety vest, high visibility work gloves, steel-toe/shank boots, safety glasses, long-sleeved shirt	Getting hit by a car, pinch points, slip/trip/fall, chemical contacts (grease or oil from car), overheated engine or break-down due to lack of critical fluids.	• Complete the SWP-124a - Vehicle Pre-Use Checklist prior to travel – STANTEC_____ • Wear safety vest and watch for cars during walk around– STANTEC_____. • Address all questionable items prior to departure – STANTEC_____. • Assure tires are properly inflated – STANTEC_____. • Assure there are no cuts or bulges in the sidewalls – STANTEC_____. • Assure windshield and window glass is clean and not cracked or crazed – STANTEC_____. • Lift wiper arms and check wiper blades for damage or deterioration – STANTEC_____. • Check behind vehicle for obstructions – STANTEC_____. • Check under vehicle engine for evidence of fluid leaks – STANTEC_____. • Check fluid levels– STANTEC_____. • Wear Nitrile gloves when checking under hood – STANTEC_____. • Verify all traffic control equipment is removed/safely stowed away – STANTEC_____. • Look for and identify possible slip, trip, fall, and pinch point hazards –

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Job Steps	Personal Protective Equipment	Potential Hazard	Critical Actions
			STANTEC_____. ● Do not touch metal with moist or wet skin – STANTEC_____. ● Scrape windows, front and rear windshields – STANTEC_____.
Enter and prepare to start vehicle	**SEAT BELT**, sunglasses if needed	Back or body strain, slip/trip/fall, blind spots, inability to signal intentions, streaking windshield, impaired vision.	● Be aware of footing, handholds, and head room when entering vehicle – STANTEC_____. ● Adjust seat so back is fully supported, upper arms close to body, and pedals within easy reach – STANTEC_____. ● Lower steering wheel so hands are below shoulders and shoulders are relaxed – STANTEC_____. ● Check mirror adjustments each time vehicle is re-started – STANTEC_____. ● Locate and test operations of front and rear turn signals, headlamps, wipers, and washer fluid – STANTEC_____. ● Verify proper operation of climate controls – STANTEC_____. ● Fasten seat belt – STANTEC_____. ● Lock doors – STANTEC_____. ● Driver's cell phone shall be turned off – STANTEC_____. ● Turn on headlights if vehicle is not equipped with day-time running lights – STANTEC_____.

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Job Steps	Personal Protective Equipment	Potential Hazard	Critical Actions
Start engine and let vehicle warm up.	**SEAT BELT**, sunglasses if needed	Unexpected movement.	• Assure that transmission is in Park, or in neutral if a manual transmission, and that parking brake is set – STANTEC_____. • Refer to Manufacturers vehicle manual for warm up times – STANTEC_____. • Assure there is sufficient gas, oil and other critical fluids – STANTEC_____. • Check for proper function of warning lights – STANTEC_____. • Make any other necessary adjustments prior to driving – STANTEC_____.
Pull out of parking space.	**SEAT BELT**, sunglasses if needed	Collision with other vehicles, pedestrians, or stationary objects.	• Check mirrors and over shoulder in all directions prior to pulling out of parking space – STANTEC_____. • Give two short blasts on the horn and while looking over your shoulder – STANTEC_____. • Slowly pull out of the parking space being prepared to apply the brakes if needed – STANTEC_____. • Signal if parallel parked along a street – STANTEC_____. • Avoid reversing when possible – STANTEC_____. • If reversing with 2 or more personnel in the vehicle, then at least 1 person must exit the vehicle and act as a spotter. If alone, before getting in the car, assess the area for approaching pedestrians and vehicles – STANTEC_____.
Drive a motor vehicle	**SEAT BELT**, sunglasses if needed	Collision, injury or death to occupants or other parties.	• Use the Stantec safe driving techniques – STANTEC_____. • **Scan** – Scan your horizon – STANTEC_____. • **Timing** – Do you have enough time to stop – STANTEC_____. • **Alert** – Don't drive when you are tired – STANTEC_____. • **Next** – Anticipate what could happen next – STANTEC_____. • **Team** – Passengers need to assist – STANTEC_____. • **Elevate** – Elevate your line of site – STANTEC_____.

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each workday. Last-Minute Risk Assessment (LMRA) procedures must be used throughout the project. Weather conditions (heat, cold, rain, and lightening) must also be considered. Each employee is empowered, expected, and has the responsibility to stop the work performed by him/herself or another co-worker if the working conditions or behaviors are considered unsafe. All employees should act proactively to identify and mitigate hazards to the safest extent of their ability. Use Stop Work Authority as needed.

Job Steps	Personal Protective Equipment	Potential Hazard	Critical Actions
			• **Courteous** – Don't be the driver others dislike – STANTEC_____. • Driver's cell phone shall be turned off – STANTEC_____. • Scan major and minor intersections before entry (left-right-left) – STANTEC_____. • Scan mirrors frequently, at least one mirror every 5-8 seconds – STANTEC_____. • Avoid staring while evaluating road conditions – STANTEC_____. • Maintain adequate spacing between your vehicle and the vehicle in front of you (Rule of thumb is 1 second for every 10 miles per hour – STANTEC_____. • After stopping, allow vehicle in front to move for 3 seconds before accelerating – STANTEC_____. • Evaluate approaching merge before you reach them – STANTEC_____. • Avoid being boxed in by other vehicles – STANTEC_____. • Seek eye contact with other drivers – STANTEC_____. • Before changing lanes, signal well in advance, check mirrors and over shoulder, and allow adequate space before changing lanes – STANTEC_____. • Avoid blind spots – STANTEC_____. • Increase the distance between your vehicle and the vehicle in front of you at night and in inclement weather. – STANTEC_____
Pauses in travel	Safety vest, high visibility work gloves, steel-toe/shank boots, safety glasses, long-sleeved shirt, cell phone.	Struck by another vehicle, insecure connections	• If there is a pause in travel (i.e. rest stop, gas station) do another walk around the vehicle prior to resuming travel – STANTEC_____. • Be aware of nefarious characters – STANTEC_____.

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Job Steps	Personal Protective Equipment	Potential Hazard	Critical Actions
Reversing the vehicle	**SEAT BELT**, sunglasses if needed	Collision, injury or death to occupants or other parties.	• Make all backing maneuvers slowly and cautiously – STANTEC_____. • Check mirrors and over shoulders – STANTEC_____. • If reversing with 2 or more personnel in the vehicle, then at least 1 person must exit the vehicle and act as a spotter. If alone, before getting in the car, assess the area for approaching pedestrians and vehicles – STANTEC_____.
Parking	**SEAT BELT**, sunglasses if needed	Collision, injury or death to occupants or other parties.	• Park away from other cars when possible and when safe. – STANTEC_____ • Look for pull-through parking to avoid reversing – STANTEC_____. • Back into parking spot when possible and safe and legal – STANTEC_____. • If reversing with 2 or more personnel in the vehicle, then at least 1 person must exit the vehicle and act as a spotter. If alone, before getting in the car, assess the area for approaching pedestrians and vehicles – STANTEC_____. • Maintain cushion of safety from fixed objects – STANTEC_____. • Set parking brake – STANTEC_____.
POST-TRIP		Conditions worsen leading to mechanical failure possibly resulting in accident, injury, or death.	• Report vehicle problems immediately to company representative or rental car agency – STANTEC_____. • Schedule a tune-up or repair if necessary – STANTEC_____ .

Task. The following table addresses the concerns with hand augering for the collection of soil samples.

POC	Development Team	Position/Title	Date	Reviewed By	Position/Title
	Michael Allen Philipp	West Region Health and Safety Manager	09/23/05		
			02/02/06	Michael Allen Philipp	West Region Health and Safety Manager
Site specific edits to this JSA were made on and by			01/8/2015	Kristy Edblad	HASP Originator
If most recent review date is more than six months old, then this JSA must be updated and reviewed again to remain current					
POC is the JSA development 'Point Of Contact'					

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each workday. Last-Minute Risk Assessment (LMRA) procedures must be used throughout the project. Weather conditions (heat, cold, rain, and lightning) must also be considered. Each employee is empowered, expected, and has the responsibility to stop the work performed by him/herself or another co-worker if the working conditions or behaviors are considered unsafe. All employees should act proactively to identify and mitigate hazards to the safest extent of their ability.

❶ Job Steps	❷ Personal Protective Equipment	❸ Potential Hazard	❹ Critical Actions
Clear hand augering locations.	Wear reflective vest for traffic, steel toed and shank shoes, hardhat, safety glasses with side shields, and leather gloves as necessary.	Traffic hazards, overhead and underground installations, product releases, property damage, dealer inconvenience.	• Reference SWP-213a Pre-Ground Disturbance Worksheet and Approval Form and SWP-213b Ground Disturbance Form • Coordinate with Site Manger (or designee) to minimize potential conflicts. • Review proposed locations against available construction drawings and known utilities, tanks, product lines, etc. • Mark out the proposed borehole locations. • Call underground utility locating service for public line location clearance and get list of utilities being contacted. If necessary, coordinate private line locator for private property. • Develop a traffic guidance and control plan with the client and local agencies as applicable. Plan may include use of delineators, barrier tape, jersey barriers, construction fence, etc. *(Refer to* **Section 4.0***)*. • **It is the responsibility of the SHSO to annotate the Site Plan with the Traffic Guidance and Control configuration if a formally developed Traffic Guidance and Control Plan is not available.**
Mobilize with proper equipment/supplies for hand augering/soil	Gather necessary PPE. Reflective vest for traffic, steel toed and shank shoes, hard hat, safety glasses with	Vehicle accident. Lifting hazards. Delay or improper performance of	• Start project with Production Safety Meeting (**RMS2 Fit for Duty**). • Follow safe driving procedures.

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each workday. Last-Minute Risk Assessment (LMRA) procedures must be used throughout the project. Weather conditions (heat, cold, rain, and lightning) must also be considered. Each employee is empowered, expected, and has the responsibility to stop the work performed by him/herself or another co-worker if the working conditions or behaviors are considered unsafe. All employees should act proactively to identify and mitigate hazards to the safest extent of their ability.

❶ Job Steps	❷ Personal Protective Equipment	❸ Potential Hazard	❹ Critical Actions
sampling.	side shields, ear plugs/muffs, leather gloves for the non-chemical aspects of work as necessary; Wear an air purifying respirator with combination organic vapor/P-100 cartridges, and other PPE as needed. (*Use a North 7700 series half-face respirator or its equivalent. Best brand nitrile gloves or their equivalent. Howard Leight Max foam earplugs with an NRR of 33 or their equivalent. Tyvek, poly-coated chemical resistant suit or its equivalent).*	work due to improper equipment onsite.	• Employ safe lifting procedures. • Review permit conditions (if applicable).
Visually clear proposed hand augering/soil sampling locations.	Wear reflective vest for traffic, steel toed and shank shoes, hardhat, safety glasses with side shields, and leather gloves as necessary.	Underground installations.	• Complete Pre-Mobilization section of SWP-213a Pre-Ground Disturbance Worksheet and Approval Form and SWP-213b Ground Disturbance Form and adjust hand augering locations as necessary.
Set up necessary traffic guidance and control equipment. See **Section 4.0** for detailed plan.	Wear reflective vest for traffic, steel toed and shank shoes, hardhat, safety glasses with side shields, and leather gloves as necessary.	Struck by vehicle during placement. Vehicle accident as a result of improper traffic guidance and control equipment placement.	• Use buddy system for placing traffic guidance and control equipment. • Implement traffic guidance and control plan such as setting out delineators, construction fence and caution tape defining safety area. • Adhere to approved Traffic Guidance and Control Plans when working in roadways. • **It is the responsibility of the SHSO to annotate the Site Plan with the Traffic Guidance and Control configuration if a formally developed Traffic Guidance and Control Plan is not available.**
Set up exclusion zone(s) and workstations (hand augering and logging/sample collection).	Wear reflective vest for traffic, steel toed and shank shoes, hardhat, safety glasses with side shields, and leather gloves as necessary.	Struck by vehicle during set up. Slip, trip and fall hazards.	• Implement exclusion zone set-up. • **It is the responsibility of the SHSO to annotate the Site Plan with the Exclusion Zone set up.** • Set up workstations with clear walking paths to and from hand augering location. • Use delineators, construction fence, and/or safety tape as required.

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each workday. Last-Minute Risk Assessment (LMRA) procedures must be used throughout the project. Weather conditions (heat, cold, rain, and lightning) must also be considered. Each employee is empowered, expected, and has the responsibility to stop the work performed by him/herself or another co-worker if the working conditions or behaviors are considered unsafe. All employees should act proactively to identify and mitigate hazards to the safest extent of their ability.

❶ Job Steps	❷ Personal Protective Equipment	❸ Potential Hazard	❹ Critical Actions
			• If utilizing Visqueen, (sheet plastic), for sampling area, completely secure Visqueen to the pavement, dirt, etc. with duct tape, delineators, etc. Do not use objects that are hard to notice or could become a trip hazard themselves.
Commence hand augering .	Don required PPE as appropriate for this step: steel toed and shank shoes, hard hat, safety glasses with side shields, hearing protection, reflective safety vest, and leather gloves for the non-chemical aspects of work as necessary. Wear chemical resistant gloves during handling of soil. Wear a half-face air-purifying respirator/mask with combination organic vapor/P-100 cartridges, and other PPE as needed. (*Use a North 7700 series half-face respirator or its equivalent. Best brand nitrile gloves or their equivalent. Howard Leight Max foam earplugs with an NRR of 33 or their equivalent. Tyvek poly-coated suit or its equivalent).*	Back strain, exposure to chemical hazards, hitting an underground utility, repetitive motion.	• Initiate air quality monitoring as outlined in **Section 2.0 if required.** • Have appropriate respirator with combination organic vapor/P-100 cartridges within 3-5 feet of work area, readily available. • Stand upwind to avoid exposure whenever possible. • Use the organic vapor monitor aggressively to track the airborne concentration of contaminants close to potential sources such as the core as it is being raised from the hole, the core is opened, etc. • Evaluate any soil samples inside a Ziploc bag at arm's length. DO NOT EVALUATE THE SAMPLE WITH THE BAG OPEN. THIS WILL AVOID UNNECESSARY EXPOSURE. • Use proper lifting techniques and tools. • Complete the Pre-Drilling section of the Borehole Clearance Review form. • Decontaminate sampling equipment after collecting a sample and decontaminate hand augering equipment after each borehole. • Avoid twisting back during the operation; Decontaminate equipment after use. Decontamination will be accomplished by an Alconox wash with tap water rinse followed by a de-ionized or distilled water rinse. Collect rinse water in 5 gallon buckets and transfer to 55-gallon drums and stage drums in a location agreed upon by the SHSO and the Property/Station Owner/Manager.
Collect samples in accordance with sampling plan.	Steel toed and shank shoes, hardhat, safety glasses with side shields, hearing protection, reflective safety vest, and leather gloves for the non-chemical aspects of work as necessary. Wear appropriate air purifying respirator with combination organic vapor/P-	Cross-contamination, improper labeling or storage, exposure to site contaminants.	• Evaluate any soil samples inside a Ziploc bag at arm's length. DO NOT EVALUATE THE SAMPLE WITH THE BAG OPEN. THIS WILL AVOID UNNECESSARY EXPOSURE. • Decontaminate sampling equipment between each sampling run. Label samples in accordance with sampling plan. • Keep samples stored in proper containers, at correct temperature, and away from work area.

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each workday. Last-Minute Risk Assessment (LMRA) procedures must be used throughout the project. Weather conditions (heat, cold, rain, and lightning) must also be considered. Each employee is empowered, expected, and has the responsibility to stop the work performed by him/herself or another co-worker if the working conditions or behaviors are considered unsafe. All employees should act proactively to identify and mitigate hazards to the safest extent of their ability.

❶ Job Steps	❷ Personal Protective Equipment	❸ Potential Hazard	❹ Critical Actions
	100 cartridges if needed.		• Conduct air monitoring as outlined in **Section 2.0**. • Have appropriate respirator with combination organic vapor/P-100 cartridges within 3-5 feet of work area, readily available.
Proper clean up and disposal of broken sample container.	Safety glasses Long sleeved shirts Leather Work Gloves Hand Broom and Dust Pan A receptacle for the broken glass (something to contain the broken glass (double garbage bag, a box, or bucket).	Exposure to broken glass and acid (from water preservation acids) Injury	• Isolate area where broken glass is located - STANTEC/Contractor. • Determine if the sample container was preserved (did it have acid in it?) - STANTEC. • Determine what to contain the broken glass in, and where to dispose of the broken glass before beginning to pick up the glass - STANTEC. • Collect equipment needed to clean up and contain the broken glass - STANTEC/Contractor. • Minimize "picking up" broken glass pieces with your gloved hands. Use a dust pan if possible/practical - STANTEC/Contractor. • If broken glass is located inside a container (i.e. box), to the extent practical, leave glass inside box and put entire box into a garbage bag. Double bag if warranted. Place into dumpster - STANTEC/Contractor. • If broken glass is inside a cooler, remove all other sample containers and place in a safe location, then use hand broom and dust pan to sweep up glass in cooler - STANTEC. • After cleanup is complete, contact your Project Manager to report this Loss/Incident - STANTEC.
Supervisor/SHSO must confirm all boreholes are closed, filled in and/or capped.		Possible injuries and damage to property due to stepping into or driving over the well.	• Visually inspect each and every borehole.

Perform personal decontamination procedures.	As worn in exclusion zone.	Slips/trips/falls. Splashes, chemical contamination. Contact with contaminated materials.	• Perform personal (dry) decontamination procedures – STANTEC/Contractor.
			  ▪ Drop off tools and perform equipment decontamination procedures on the equipment - STANTEC/Contractor.
			  ▪ Perform a "dry" decontamination on boots using a stiff bristle fiberglass long handled brush - STANTEC/Contractor.

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each workday. Last-Minute Risk Assessment (LMRA) procedures must be used throughout the project. Weather conditions (heat, cold, rain, and lightning) must also be considered. Each employee is empowered, expected, and has the responsibility to stop the work performed by him/herself or another co-worker if the working conditions or behaviors are considered unsafe. All employees should act proactively to identify and mitigate hazards to the safest extent of their ability.

❶ Job Steps	❷ Personal Protective Equipment	❸ Potential Hazard	❹ Critical Actions
			▪ Remove inner/outer gloves and dispose of properly - STANTEC/Contractor. ● Wash hands, face, arms and neck (any exposed skin) using sink or bottled water. If water isn't available, use baby wipes or a similar product - STANTEC/Contractor.
Clean site/demobilize.	Steel toed and shank shoes, hardhat, safety glasses with side shields, hearing protection, reflective safety vest, and leather gloves for the non-chemical aspects of work as necessary.	Traffic. Safety hazard left on site. Lifting hazards.	● Use buddy system as necessary to remove traffic guidance and control equipment. ● Leave site clean of refuse and debris. ● Clearly mark/barricade any borings that need later topping off or curing. ● Notify site personnel of departure, final well locations and any cuttings/purge water left onsite. ● Use proper lifting techniques
Package and deliver samples to lab.		Bottle breakage, back strain.	● Handle and pack bottle carefully (bubble wrap bags are helpful). Use proper lifting techniques.

Attachment C

General Safety Information for ALL SITES

1.0 General Safety Information

1.1 Emergency Response Procedures: Evacuation

In the event of an on-site or off-site emergency requiring site evacuation (e.g., fire, release, explosion, etc), the following procedures will be followed:

- Stop Work and notify the SHSO.
- Evacuate the site and go to the emergency meeting location if safe conditions exist. The evacuation point is shown in the sketch below or following this page. If safe conditions prevent evacuation to this location, move upwind, away from the source of the emergency. Maintain a safe distance from the source.
- Check in with the SHSO at the emergency meeting location. The SHSO will take attendance once all personnel have gathered.
- Dial the appropriate emergency response number(s). State the problem clearly and completely and remain on the line until dismissed by the operator.
- Only attempt extinguishing small fires with portable dry chemical (A-B-C) extinguishers on-hand. When in doubt, emergency response personnel shall be notified.
- Do not reenter the emergency site without specific approval from emergency response personnel.

Randomly scheduled evacuation drills may be conducted at any time during field activities.

1.2 Emergency Response Procedures: Injury or Illness

If an injury or illness occurs, take the following action:

- Stop Work, stabilize the situation, and secure the site.
- Administer First Aid for the person immediately using a first aid and blood-borne pathogens kit.
- Determine if emergency response (fire/ambulance) is necessary. If so, call appropriate emergency response numbers on closest available phone. Provide the location of the injured person and other details as requested. Drive the individual to the hospital only if it makes sense.
- If emergency decontamination is required:
    - Immediately remove any contaminated personal protective equipment (PPE) or clothing. (EXCEPTION: if the person has been burned, only emergency medical services (EMS) personnel should remove any clothing)
    - If possible, wash contaminated area with mild soap and water.
    - Use eyewash station if necessary.
    - Personnel assisting the contaminated individual will don the proper PPE to avoid exposure.
- For all injuries or illness, even minor cuts, scratches, and bruises, notify the SHSO immediately. The SHSO is responsible for initiating incident reporting procedures immediately after the victim(s)/site have been stabilized. The SHSO will assume responsibility during a medical emergency until more qualified EMS personnel arrive at the site as needed.
- As promptly as possible following an injury or illness, the Project Manager or designee shall ensure appropriate notification has been made to the family of the individual involved.
- Please see Section 1.6 for incident reporting procedures.

1.2.1 Injuries or Illnesses Requiring Hospital Service WITHOUT Ambulance Service

Injuries or illnesses requiring hospital service without ambulance services include minor lacerations, minor sprains, etc. The following procedures will be taken immediately:

- The SHSO will ensure prompt transportation of the injured person to a physician or hospital.
- A representative of Stantec will always drive the injured employee to the medical facility and remain at the facility until the employee is ready to be discharged.
- If the driver of the vehicle is not familiar with directions to the hospital, a second person shall accompany the driver and the injured employee and navigate the route to the hospital.
- If it is necessary for the SHSO to accompany the injured employee, provisions will be made to have another employee, properly trained and certified in First Aid, to act as the temporary SHSO.
- If the injured employee is able to return to the job site the same day, he/she will bring a statement from the doctor containing such information as:
  - Date
  - Employee's name
  - Diagnosis
  - Date he/she is able to return to work, regular or light duty
  - Date he/she is to return to doctor for follow-up appointment, if necessary
  - Signature and address of doctor
- As promptly as possible following an injury or illness, ensure appropriate notification has been made to the family of the individual involved.
- Please see Section 1.6 for incident reporting procedures.

If the injured employee is unable to return to the job site the same day, the employee who transported him will bring this information back to the job site and report it to the Project Manager, office OSEC, Clint Reuter, Stantec's Practice and Risk Management (PRM), and their regional Human Resources Specialist.

1.2.2 Injuries or Illnesses Requiring Hospital Service WITH Ambulance Service

Injuries or illnesses requiring transport by ambulance include life-threatening conditions such as severe head injuries, amputations, heart attacks, heat stroke, etc. The following procedures will be taken immediately:

- Call for ambulance service and notify the SHSO.
- Administer First Aid until ambulance service arrives or until relieved by EMS personnel.
- While the injured employee is being transported, the SHSO will contact the medical facility to be utilized.
- One designated representative will accompany the injured employee to the medical facility and remain at the facility until final diagnosis and other relevant information is obtained.
- As promptly as possible following an injury or illness, ensure appropriate notification has been made to the family of the individual involved.
- Please see Section 1.6 for incident reporting procedures.

1.2.3 Death of an Individual or Hospitalization of Three or More Employees

The emergency response procedures above will be followed. If the injured person dies, follow the incident reporting procedures. PRM will notify the Human Resources Department, local law enforcement officials immediately. Human Resources will notify the local OSHA office within 8 hours of a fatality or the hospitalization of three or more employees.

1.3 Emergency Response Procedures: Spills or Cut Lines

Prevent problems by documenting the location of underground lines (e.g., product, sewer, electrical, gas, telephone, fiber optic) before starting site work. If a line or tank is drilled through, or a leak occurs, document the event as soon as possible using the Incident Investigation Report.

In the event of a spill/release, follow this plan:

- Stop Work, stabilize the situation, and secure the site.
- Stay upwind of the spill/release.
- Wear appropriate PPE.
- Turn off equipment and other sources of ignition, but only from a safe distance.
- Turn off pumps and shut valves to stop the flow/leak, but only from a safe distance.
- Plug the leak or collect drippings, when possible, if you can do this safely and within your level of training.
- Use sorbent pads to collect product and impede its flow, if possible and only if you can do it safety and within your level of training.
- Call Fire Department immediately if fire or explosion risk is involved (i.e. natural gas involved).
- Notify the SHSO to begin the incident reporting procedures. All spills/releases will be reported to the Client Project Manager within 24 hours.
- Determine if the client wants Stantec to repair the damage or if the client will use an emergency repair contractor of their choice.
- Based on agreements, contact emergency spill contractor for containment of free product. The contacts for this project will be the local fire department.
- Advise the client of spill discharge notification requirements and determine who will complete and submit forms. *(Do not submit or report to agencies without the client's consent.)* Document each interaction with the client and regulators and note, in writing; name, title, authorizations, refusals, decisions, and commitments to any action.
- Do not transport or approve transportation of contaminated soils or product until proper manifests have been completed and approved. Be aware that soils/product may meet criteria for hazardous waste.
- Do not sign manifests as generator of wastes unless you have been given appropriate training and approval for signing on behalf of the generator; contact Project Manager or Waste Compliance Manager to discuss waste transportation.
- If the spill extends into waterways, the Coast Guard and the National Response Center shall be notified immediately by the client (or by the Stantec Project Manager with the client's permission).

The Project Manager will involve the client/generator in any Incident Investigation process. The client/generator is under obligation to report to the proper government agencies.

1.4 Incident Reporting Procedures

This section outlines the procedures that will be followed in the event of an incident. A flowchart and a table with necessary contact information (phone numbers, fax numbers, and email addresses) for incident reporting are also provided.

In the event of an incident:

1. Stop Work, stabilize the situation, and secure the site.

2. Report all incidents, injuries, spills, non-conformance events, permit exceedances and potential incidents (near losses) immediately to the SHSO, who will then notify the Stantec Project Manager. **If you are unsure whether or not something should be reported, Stop Work and proceed with notification anyway.**

3. The Stantec Project Manager will make internal notifications* to the following:
   - Office OSEC
   - At least one Stantec Senior HSE Team Member (Clint Reuter, Tony Wong);
   - The Account Manager (Jack Hardin)
   - **If a team member does not answer, leave a detailed message with a number at which you can be reached, and follow-up with another call later.**

*Internal notification is a Stantec requirement. Internal reporting requirements were established primarily to provide a pathway for employees to obtain the assistance of company health and safety experts during an incident or significant near loss. Secondary to obtaining expert assistance, internal notification is required to help Stantec track injuries and near losses that occur to our employees. The data captured during the reporting process is then used to identify trends that can be pro-actively addressed to improve overall health and safety within our company. This helps everyone go home safely.

4. The Stantec Project Manager will obtain concurrence from at least one of Stantec's HSE Team Members and the Account Manager regarding Caltrans' reporting requirements.

5. A: If the incident is determined to not be reportable to Caltrans, the SHSO, office OSEC, and Stantec Project Manager will submit an initial copy of the Stantec Incident Investigation/Near Loss Investigation (IINLI) report to Stantec's PRM group in Edmonton (via phone and fax), and Clint Reuter within 24 hours of the event. The final report is due within 5 business days.

   B: If the incident is determined to be reportable to Caltrans, the Stantec Project Manager and Account Manager will:
   - Notify Caltrans and also provide a written report of the incident on a Stantec IINLI form to Stantec's PRM group (via fax and phone), and Clint Reuter within 24 hours and a final report within 5 business days.

Stantec Energy & Resources Incident Reporting

Incident occurs:
Stop work, stabilize the situation, secure the site & provide immediate care. Stantec employee or contractor must immediately report the incident the Stantec Project Lead. Injured personnel requiring medical attention will transport the injured person to medical care and remain until released.

Site Lead or Contractor Supervisor notifies Project Manager & Stantec Area HS Lead Verbal notification and email an **INCIDENT QUICK REPORT** notification within **1 hour**. **Client Reporting Schedule Starts (next Page**

HSE TEAM:
Doug Schaefer (1-780-235-3557)
doug.schaefer@stantec.com
Tony Wong (1-805-234-6227)
tony.wong@stantec.com)
Terry Arseneau (1-403-702-6686)
terry.arseneau@stantec.com
Scott Purves (1-403-542-9751)
scott.purves@stantec.com
Adam Taylor (1-403-585-3238)
adam.taylor@stantec.com-
Marty Ringen (1-780-862-3470)
marty.ringen@stantec.com
Don Johnson (1-778-385-5846)
don.johnson@stantec.com

HIGH POTENTIAL INCIDENT

YES

Conference Call Review YES or NO

Senior Management Team
4-Hour HPI Flash Alert Notice Team
(Email-description, classification & path forward)
Rocco Meraglia (1-403-619-9863)
rocco.meraglia@stantec.com
Bob Seager (1-403-540-0259)
bob.seager@stantec.com
Don Belliveau (1-506-471-3238)
don.belliveau@stantec.com
Kirk Morrison (1-403-650-3402
kirk.morrison@stantec.com
Nick Poushinsky (1-250-413-7404)
nick.poushinsky@stantec.com
Tino Di Manno (403-716-8202)
tino.dimanno@stantec.com
Peter Salusbury (1-778-837-0096)
peter.salusbury@stantec.com

NO

Stantec Site Lead, Project Manager or Contractor Supervisor issues RMS 3 Incident Report within 24- hours.

Finalized RMS 3 forwarded to Corporate HSE

HSE develops Lessons Learned Report for corporate-wide / client distribution

Stantec Site Lead & Area HSE Lead conducts investigation following the corporate investigation process. A report is issued within 5 days to the Stantec Energy & Resources Sr. Mgt. Team identifying root causes and implementing barriers to prevent re-occurrence. Senior Management Team signs off on the Incident report.

Based on clients expectations a more formal Incident Cause and Analysis Method may <u>also</u> be used to support for the investigation.

Stantec Site Lead, Project Manager or Contractor Supervisor issues RMS 3 Incident Report within 24-hours.

Client Reporting Schedule
"No client requirements"

Notifications

Stantec Account and HSE Support Contacts - notify within 1 hour
See Project Team Phone Numbers for
National Account Manager (NAM)
Alternate NAM
Health and Safety Coordinator

Client - notify within 24 hours unless high potential (notify within 1 hour) :
See Project Team Phone Numbers for
Client

Incident Investigation Report within 5 days
See Project Team Phone Numbers for
Client

Incident Type	Definition (Current Stantec Corporate Definitions)
Report Only	An employee needs to document a happening which may be relevant in the future. Examples include: witnessing an accident or a non-work-related injury, an incident on a worksite not involving Stantec personnel, physical signs and symptoms related to workstation ergonomics and/or materials handling
Incident	Any unplanned event that adversely affects our employees, our business, its physical assets, the clients we serve, or the environment.
Serious Incident	Any work-related incident where there is property damage greater than $5000, employee hospitalization, fatality, facility/site shutdown, or involves a third party (public). A near miss with the potential for any of the above consequences would also be considered a serious incident.
Near-Miss	Any event that could adversely affect our employees, our business, its physical assets, the customers we serve, or the environment, given any change in circumstances.
Hazard Identification	The identification of a condition or practice that has the potential for an incident or loss.
Property Damage (Vehicle)	Damage to any vehicle used for Stantec business, includes normal wear and tear (e.g. tire damage, minor scratches, stone chips to paint or windshield, mechanical wear), whether the vehicle is attended or not.
Property Damage (Other)	Damage to equipment, materials, etc., excluding vehicle damage.
Theft	Theft of any property under the care and control of Stantec.
Non-compliance	Where an employee or project is identified as operating outside the parameters of Stantec policy and/or legislative requirements.

Incident Type	Definition (Current Stantec Corporate Definitions)
***Near Miss - Injury**	An employee reports physical symptoms related to work activities which have not yet resulted in treatment of any type, nor have they impacted the employee's working ability.
First Aid	An injury or illness requires first aid treatment only
Medical Treatment	Medical treatment above and beyond first aid, without loss of work time beyond the day of injury or illness.
Restricted Work	Change in job duties and/or shortened work day resulting from a work-related injury or illness, affecting the employee's ability to engage in one or more routine work activities (i.e. an activity carried out at least once per week).
Lost Time	Health care professional recommends one or more days away from work due to a work-related injury or illness.
Fatality	Work related fatality.
Motor Vehicle Incident	An incident involving a vehicle driven by an employee, whether on or off the road, that has resulted in damage to assets, the environment or Stantec's reputation, irrespective of cost or responsibility for cause. This does not include damage as a result of normal wear and tear (see Property Damage – Vehicle).
Spill or Release	Discharge of material or substance which is reportable to a third party such as a regulatory agency or a client, or which may expose an employee to a health risk.
Contractor Recordable Injury	Definitions as above, including Medical Aid – No Lost Time, Restricted Work, Lost Time or Fatality) but applied to a Stantec subcontractor.
Fire / Explosion / Flood	A natural or man-made hazard including fire, explosion or flood that causes damage or injury.
Violence or Harassment	Any act in which a person is abused, threatened, intimidated or assaulted in the course of their employment.
3rd Party Incident	Incident involves someone who is not party to the work being completed, but may be impacted. Example: Member of the public.
Utility Strike	Compromising or disrupting of service to buried and/or overhead utility service lines, municipal or third party owned utility services, UST system components and other subsurface property service lines or systems
Work Refusal	An employee has enacted their legislated Right to Refuse dangerous work.
Stop Work Authority	An employee has enacted Stantec's Stop Work Authority provisions upon observing the presence of unsafe conditions associated with Stantec work activities. All employees have the right to stop or refuse work when they perceive an immediate danger to their health and safety or that of their colleagues.
	For Consideration
High Potential Incident	A Near Miss, First Aid injury, Medical Aid injury, Modified Work injury or Lost Time injury can often have the potential to be a fatality or a Significant Injury with disability if the circumstances would have been slightly different. For example, a Lost Time incident due to a back soft tissue injury would only be counted as a Lost Time with low potential for a serious injury, whereas a First Aid incident involving a remotely operated machine striking a worker and imparting a small cut would be counted as a First Aid incident with high potential for a Fatality or a Significant Injury. Any incident with energy exchange that had the potential to be a Fatality or a Significant Injury if the circumstances would have been slightly different should be counted as High Potential; all others should be counted as low potential and reported as normal incidents (see above). In terms of Risk Assessment language when the exposure, probability and consequence of the hazard(s) that created the injury calculate to a High or Extreme Risk Level, the incident should be counted as a High Potential; all others should be counted as low potential.

Incident Type	Definition (Current Stantec Corporate Definitions)
Critical Risk Control	**TBA** 1. Vehicles and Mobile Equipment 2. Hazardous Materials Management 3. Equipment Safeguarding 4. De-Energization, Isolation, Lock-Out, and Tagging 5. Working at Heights 6. Lifting Operations 7. Confined Space 8. Excavations and Trenching 9. Ergonomic & Manual Handling 10. Working on Ice or water 11. Wildlife Interactions

3.0 Other Potential Site Hazards

3.1 Physical Hazards

Physical hazards may include traffic, uneven terrain, sharp debris, fencing, holes, noise, etc. Thusly, a constant awareness of one's location is paramount to your personal safety. However, knowing where you are, the level of noise produced by associated machinery and hearing protection may hinder your ability to hear vocal warnings. "Keep your head on a swivel" as the order of the day.

Be aware of the location of all of the equipment activities in your work area.

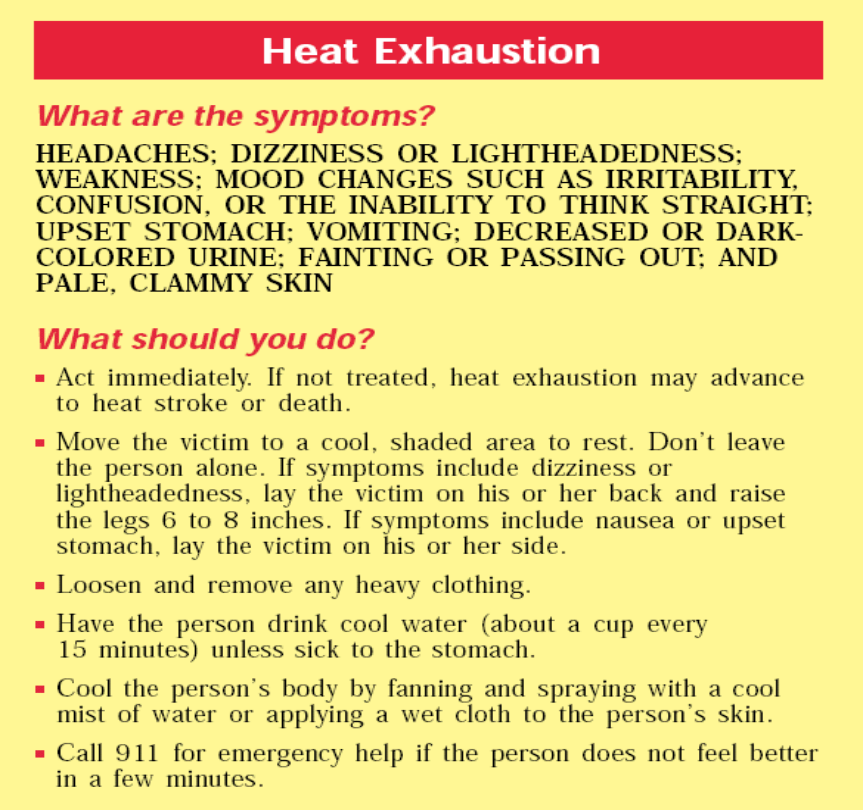
To protect yourself, always look before you step and wear proper PPE for the task being performed.

3.2 Weather and Natural Disasters

Hazards associated with weather and natural disasters may include, but are not limited to, effects of extreme heat (heat exhaustion, heat stroke), effects of extreme cold (hypothermia, frostbite), high winds, heavy rain, lightning, heavy snow, ice, earthquakes, landslides, flooding, etc.

The most likely hazards at the site are effects of extreme heat (heat exhaustion, heat stroke) and earthquakes.

To protect yourself from heat, perform the heaviest work during the coolest part of the day; drink plenty of cool water; wear light, loose-fitting, breathable clothing; and take frequent, short breaks in the shade. Certain medications, having a previous heat-related illness, and wearing PPE such as a respirator or protective suit can increase risk.



Heat Exhaustion

What are the symptoms?

HEADACHES; DIZZINESS OR LIGHTHEADEDNESS; WEAKNESS; MOOD CHANGES SUCH AS IRRITABILITY, CONFUSION, OR THE INABILITY TO THINK STRAIGHT; UPSET STOMACH; VOMITING; DECREASED OR DARK-COLORED URINE; FAINTING OR PASSING OUT; AND PALE, CLAMMY SKIN

What should you do?

- Act immediately. If not treated, heat exhaustion may advance to heat stroke or death.
- Move the victim to a cool, shaded area to rest. Don't leave the person alone. If symptoms include dizziness or lightheadedness, lay the victim on his or her back and raise the legs 6 to 8 inches. If symptoms include nausea or upset stomach, lay the victim on his or her side.
- Loosen and remove any heavy clothing.
- Have the person drink cool water (about a cup every 15 minutes) unless sick to the stomach.
- Cool the person's body by fanning and spraying with a cool mist of water or applying a wet cloth to the person's skin.
- Call 911 for emergency help if the person does not feel better in a few minutes.

Stantec

Heat Stroke–A Medical Emergency

What are the symptoms?

DRY, PALE SKIN WITH NO SWEATING; HOT, RED SKIN THAT LOOKS SUNBURNED; MOOD CHANGES SUCH AS IRRITABILITY, CONFUSION, OR THE INABILITY TO THINK STRAIGHT; SEIZURES OR FITS; AND UNCONCIOUSNESS WITH NO RESPONSE

What should you do?

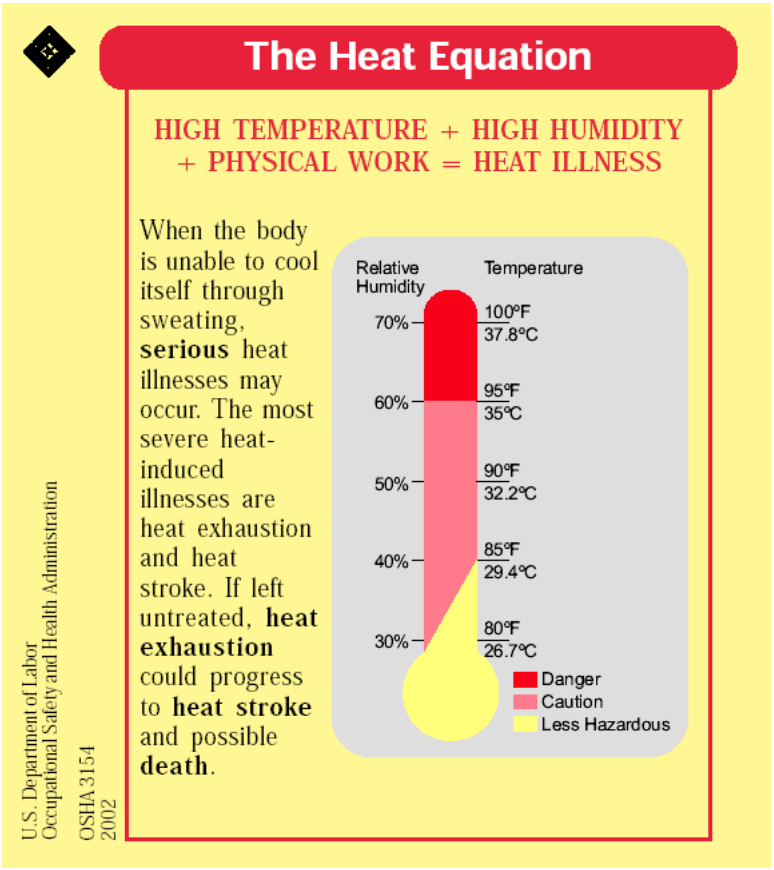
- Call 911 for emergency help immediately.
- Move the victim to a cool, shaded area. Don't leave the person alone. Lay the victim on his or her back. Move any nearby objects away from the person if symptoms include seizures or fits. If symptoms include nausea or upset stomach, lay the victim on his or her side.
- Loosen and remove any heavy clothing.
- Have the person drink cool water (about a cup every 15 minutes) if alert enough to drink something, unless sick to the stomach.
- Cool the person's body by fanning and spraying with a cool mist of water or wiping the victim with a wet cloth or covering him or her with a wet sheet.
- Place ice packs under the armpits and groin area.

How can you protect yourself and your coworkers?

- Learn the signs and symptoms of heat-induced illnesses and how to respond.
- Train your workforce about heat-induced illnesses.
- Perform the heaviest work during the coolest part of the day.
- Build up tolerance to the heat and the work activity slowly. This usually takes about 2 weeks.
- Use the buddy system, with people working in pairs.
- Drink plenty of cool water, about a cup every 15 to 20 minutes.
- Wear light, loose-fitting, breathable clothing, such as cotton.
- Take frequent, short breaks in cool, shaded areas to allow the body to cool down.
- Avoid eating large meals before working in hot environments.
- Avoid alcohol or beverages with caffeine. These make the body lose water and increase the risk for heat illnesses.

What factors put you at increased risk?

- Taking certain medications. Check with your health-care provider or pharmacist to see if any medicines you are taking affect you when working in hot environments.
- Having a previous heat-induced illness.
- Wearing personal protective equipment such as a respirator or protective suit.



HEAT STRESS

INTRODUCTION

Operations involving high air temperatures, radiant heat sources, high humidity, direct physical contact with hot objects, or strenuous physical activities have a high potential for inducing heat stress in employees engaged in such operations. Outdoor operations conducted in hot weather, such as construction, refining, asbestos removal, and hazardous waste site activities, especially those that require workers to wear semi-permeable or impermeable protective clothing, are also likely to cause heat stress among exposed workers.

CAUSAL FACTORS

Age, weight, degree of physical fitness, degree of acclimatization, metabolism, use of alcohol or drugs, and a variety of medical conditions such as hypertension all affect a person's sensitivity to heat. However, even the type of clothing worn must be considered. Prior heat injury predisposes an individual to additional injury. It is difficult to predict just who will be affected and when, because individual susceptibility varies. In addition, environmental factors include more than the ambient air temperature. Radiant heat, air movement, conduction, and relative humidity all affect an individual's response to heat.

DEFINITIONS

The American Conference of Governmental Industrial Hygienists (2002) states that workers should not be permitted to work when their deep body temperature exceeds 100.4°F (38 °C).

Heat is a measure of energy in terms of quantity.

A **calorie** is the amount of heat required to raise 1 gram of water 1°C (based on a standard temperature of 16.5 to 17.5°).

Conduction is the transfer of heat between materials that contact each other. Heat passes from the warmer material to the cooler material. For example, a worker's skin can transfer heat to a contacting surface if that surface is cooler, and vice versa.

Convection is the transfer of heat in a moving fluid. Air can be described as a fluid. Air flowing past the body can cool the body if the air temperature is cool. On the other hand, air that exceeds 35°C (95°F) can increase the heat load on the body.

Evaporative cooling takes place when sweat evaporates from the skin. High humidity reduces the rate of evaporation and thus reduces the effectiveness of the body's primary cooling mechanism.

Radiation is the transfer of heat energy through space. A worker whose body temperature is greater than the temperature of the surrounding surfaces radiates heat to these surfaces. Hot surfaces and infrared light sources radiate heat that can increase the body's heat load.

Globe temperature is the temperature inside a blackened, hollow, thin copper globe.

Metabolic heat is a by-product of the body's activity.

Natural wet bulb (NWB) temperature is measured by exposing a wet sensor, such as a wet cotton wick fitted over the bulb of a thermometer, to the effects of evaporation and convection. The term natural refers to the movement of air around the sensor.

Dry bulb (DB) temperature is measured by a thermal sensor, such as an ordinary mercury-in-glass thermometer, that is shielded from direct radiant energy sources.

HEAT DISORDERS AND HEALTH EFFECTS

HEAT STROKE

Heat Stroke occurs when the body's system of temperature regulation fails and body temperature rises to critical levels. This condition is caused by a combination of highly variable factors, and its occurrence is difficult to predict. **Heat stroke is a medical emergency.** The primary signs and symptoms of heat stroke are confusion; irrational behavior; loss of consciousness; convulsions; a lack of sweating (usually); hot, dry skin; and an abnormally high body temperature, e.g., a rectal temperature of 41°C (105.8°F). If body temperature is too high, it causes death. The elevated metabolic temperatures caused by a combination of workload and environmental heat load, both of which contribute to heat stroke, are also highly variable and difficult to predict. If a worker shows signs of possible heat stroke, professional medical treatment should be obtained immediately. The worker should be placed in a shady area and the outer clothing should be removed. The worker's skin should be wetted and air movement around the worker should be increased (as long as the temperature of the air is less than 95° F) to improve evaporative cooling until professional methods of cooling are initiated and the seriousness of the condition can be assessed. Fluids should be replaced as soon as possible.

The medical outcome of an episode of heat stroke depends on the victim's physical fitness and the timing and effectiveness of first aid treatment. Regardless of the worker's protests, no employee

suspected of being ill from heat stroke should be sent home or left unattended unless a physician has specifically approved such an order.

HEAT EXHAUSTION
The signs and symptoms of heat exhaustion are headache, nausea, vertigo, weakness, thirst, and giddiness. Fortunately, this condition responds readily to prompt treatment. Heat exhaustion should not be dismissed lightly, however, for several reasons. One is that the fainting associated with heat exhaustion can be dangerous because the victim may be operating machinery or controlling an operation that should not be left unattended; moreover, the victim may be injured when he or she faints. Also, the signs and symptoms seen in heat exhaustion are similar to those of heat stroke, a real potential medical emergency.

Workers suffering from heat exhaustion should be removed from the hot environment and given fluid replacement. They should also be encouraged to get adequate rest.

HEAT CRAMPS
Heat Cramps are usually caused by performing hard physical labor in a hot environment. These cramps have been attributed to an electrolyte imbalance caused by sweating. It is important to understand that cramps can be caused by both too much and too little salt. Cramps appear to be caused by the lack of water replenishment. Because sweat is a hypotonic solution (±0.3% sodium chloride), excess salt can build up in the body if the water lost through sweating is not replaced.

Thirst cannot be relied on as a guide to the need for water; instead, water must be taken every 15 to 20 minutes in hot environments. Under extreme conditions, such as working for 6 to 8 hours in heavy protective gear, a loss of sodium may occur. Studies have shown that drinking commercially available carbohydrate-electrolyte replacement liquids is effective in minimizing physiological disturbances during recovery.

HEAT COLLAPSE
Heat Collapse ("Fainting"). In heat collapse, the brain does not receive enough oxygen because blood pools in the extremities. As a result, the exposed individual may lose consciousness. This reaction is similar to that of heat exhaustion and does not affect the body's heat balance. However, the onset of heat collapse is rapid and unpredictable. To prevent heat collapse, the worker should gradually become acclimatized to the hot environment.

HEAT RASHES
Heat Rashes are the most common problem in hot work environments. "Prickly heat", as heat rashes are sometimes called, is manifested as red papules on the skin and usually appears in areas where the clothing is restrictive. As sweating increases, these papules give rise to a prickling sensation. Prickly heat occurs in skin that is persistently wetted by unevaporated sweat, and heat rash papules may become infected if they are not treated. In most cases, heat rashes will disappear when the affected individual returns to a cool environment.

HEAT FATIGUE
A factor that predisposes an individual to heat fatigue is lack of acclimatization. The use of a program of acclimatization and training for work in hot environments is advisable. Acclimatization can take several weeks depending on the individual involved and the difference in temperature between the location from which the person is coming and the temperature to which he/she is going. The signs and symptoms of heat fatigue include impaired performance of skilled sensorimotor, mental, or vigilance

jobs. There is no treatment for heat fatigue except to remove the heat stress before a more serious heat-related condition develops.

CONTROL MEASURES FOR HEAT STRESS

Ventilation, air-cooling, fans, shielding, and insulation are the five major types of engineering controls used to reduce heat stress in hot work environments. Heat reduction can also be achieved by using power assists and tools that reduce the physical demands placed on a worker.

However, for this approach to be successful, the metabolic effort required for the worker to use or operate these devices must be less than the effort required without them. Another method is to reduce the effort necessary to operate power assists. Workers should be allowed to take frequent rest breaks in a cooler environment.

ACCLIMATIZATION

The human body can adapt to heat exposure to some extent. This physiological adaptation is called acclimatization. After a period of acclimatization, the same activity will produce fewer cardiovascular demands. The worker will sweat more efficiently (causing better evaporative cooling), and thus will more easily be able to maintain normal body temperatures.

FLUID REPLACEMENT

Cool (50°-60°F) water or any cool liquid (except alcoholic beverages, tea and coffee) should be made available to workers to encourage them to drink small amounts frequently, e.g., one cup every 20 minutes. Ample supplies of liquids should be placed close to the work area. Although some commercial replacement drinks contain salt, this is not necessary for acclimatized individuals because most people add enough salt to their summer diets.

GENERAL VENTILATION

General ventilation is used to dilute hot air with cooler air (generally cooler air that is brought in from the outside). This technique clearly works better in cooler climates than in hot ones. A permanently installed ventilation system usually handles large areas or entire buildings. Portable or local exhaust systems may be more effective or practical in smaller areas.

AIR TREATMENT/AIR COOLING

Air treatment/air cooling differs from ventilation because it reduces the temperature of the air by removing heat (and sometimes humidity) from the air.

Air conditioning is a method of air-cooling, but it is expensive to install and operate. An alternative to air conditioning is the use of chillers to circulate cool water through heat exchangers over which air from the ventilation system is then passed; chillers are more efficient in cooler climates or in dry climates where evaporative cooling can be used.

Local air cooling can be effective in reducing air temperature in specific areas. Two methods have been used successfully in industrial settings. One type, cool rooms, can be used to enclose a specific workplace or to offer a recovery area near hot jobs. The second type is a portable blower with built-in air chiller. The main advantage of a blower, aside from portability, is minimal set-up time.

Another way to reduce heat stress is to increase the airflow or convection using fans, etc. in the work area (as long as the air temperature is less than the worker's skin temperature). Changes in air speed can help workers stay cooler by increasing both the convective heat exchange (the exchange between the skin surface and the surrounding air) and the rate of evaporation. Because this method does not actually cool the air, any increases in air speed must impact the worker directly to be effective.

If the outdoor air temperature (i.e. the dry bulb temperature) is higher than 95°F (35 °C) the hot air passing over the skin can actually make the worker hotter (i.e. add to the overall body heat load). When the temperature is >95°F and the air is dry, evaporative cooling may be improved by air movement, although this improvement will be offset by the convective heat. When the temperature exceeds 95°F and the relative humidity is 100%, air movement will make the worker hotter. Increases in air speed have no effect on the body temperature of workers wearing vapor-barrier clothing.

HEAT CONDUCTION

Heat conduction methods include insulating the hot surface that generates the heat and changing the surface itself.

Simple engineering controls, such as shields, can be used to reduce radiant heat i.e. heat coming from hot surfaces within the worker's line of sight. Surfaces that exceed 95°F, and this is very common on hot summer days, are sources of infrared radiation that can add to the worker's heat load. Flat black surfaces absorb heat more than smooth, polished ones. Having cooler surfaces surrounding the worker, assists in cooling because the worker's body radiates heat toward them.

With some sources of radiation, such as heating pipes, it is possible to use both insulation and surface modifications to achieve a substantial reduction in radiant heat. Instead of reducing radiation from the source, shielding can be used to interrupt the path between the source and the worker. Polished surfaces make the best barriers, although special glass or metal mesh surfaces can be used if visibility is a problem.

Shields should be located so that they do not interfere with airflow, unless they are also being used to reduce convective heating. The reflective surface of the shield should be kept clean to maintain its effectiveness.

ADMINISTRATIVE CONTROLS/SAFE WORK PRACTICES

Training is the key to good work practices. Unless all employees understand the reasons for using new, or changing old, work practices, the chances of such a program succeeding are greatly reduced. NIOSH (1986) states that a good heat stress training program should include least the following components:

- Knowledge of the hazards of heat stress;
- Recognition of predisposing factors, danger signs, and symptoms;
- Awareness of first-aid procedures for, and the potential health effects of, heat stroke and heat exhaustion;

- Employee responsibilities in avoiding heat stress;
- Dangers of using drugs, including therapeutic ones, and alcohol in hot work environments;
- Use of protective clothing and equipment; and
- Purpose and coverage of environmental and medical surveillance programs and the advantages of worker participation programs.

Hot jobs should be scheduled for the cooler part of the day when possible, and routine maintenance and repair work in hot areas should be scheduled for the cooler seasons of the year.

Measurement is often required of those environmental factors that most nearly correlate with deep body temperature and other physiological responses to heat. At the present time, the Wet Bulb Globe Temperature Index (WBGT) is the most used technique to measure these environmental factors. WBGT values are calculated by the following equations:

WET BULB GLOBE TEMPERATURE INDEXES (WBGI)

Indoor or outdoors with no solar load

$$WBGT = 0.7NWB + 0.3GT$$

Outdoors with solar load

$$WBGT = 0.7NWB + 0.2GT + 0.1DB$$

Where: WBGT = Wet Bulb Globe Temperature Index
NWB = Natural Wet Bulb Temperature
DB = Dry Bulb (air) Temperature
GT = Globe Thermometer Temperature

The determination of WBGT requires the use of a black globe thermometer, a natural (static) wet-bulb thermometer, and a dry-bulb thermometer. The measurement of environmental factors shall be performed as follows:

1. The range of the dry and the natural wet-bulb thermometers should be -5°C to +50°C, with an accuracy of ±0.5°C. The dry bulb thermometer must be shielded from the sun and the other radiant surfaces of the environment without restricting the airflow around the bulb. The wick of the natural wet bulb thermometer should be kept wet with distilled water for at least one-half hour before the temperature reading is made. It is not enough to immerse the other end of the wick into a reservoir of distilled water and wait until the whole wick becomes wet by capillarity. The wick must be wetted by direct application of water from a syringe one-half hour before each reading. The wick must cover the bulb of the thermometer and an equal length of additional wick must cover the stem above the bulb. The wick should always be clean, and new wicks should be washed before using.

2. A globe thermometer, consisting of a 15 cm (6-inch) in diameter hollow copper sphere painted on the outside with a matte black finish, or equivalent, must be used. The bulb or sensor of a thermometer (range -5°C to +100°C with an accuracy of ±0.5°C) must be fixed in the center of the sphere. The globe thermometer should be exposed at least 25 minutes before it is read.

3. A stand should be used to suspend the three thermometers so that they do not restrict free airflow around the bulbs and the wet-bulb and globe thermometer are not shaded.

4. It is permissible to use any other type of temperature sensor that gives a reading similar to that of a mercury thermometer under the same conditions.

5. The thermometers must be placed so that the readings are representative of the employee's work or rest areas, as appropriate.

Once the WBGT has been estimated, employers can estimate workers' metabolic heat load and use the ACGIH method to determine the appropriate work/rest regimen, clothing, and equipment to use to control the heat exposures of workers in their facilities.

PERSONAL PROTECTIVE EQUIPMENT

REFLECTIVE CLOTHING

Reflective clothing, which can vary from aprons and jackets to suits that completely enclose the worker from neck to feet, can stop the skin from absorbing radiant heat. However, since most reflective clothing does not allow air exchange through the garment, the reduction of radiant heat must more than offset the corresponding loss in evaporative cooling. For this reason, reflective clothing should be worn as loosely as possible. In situations where radiant heat is high, auxiliary-cooling systems can be used under the reflective clothing.

AUXILIARY BODY COOLING

1. Commercially available **ice vests**, though heavy, may accommodate as many as 72 ice packets, which are usually filled with water. Carbon dioxide (dry ice) can also be used as a coolant. The cooling offered by ice packets lasts only 2 to 4 hours at moderate to heavy heat loads, and frequent replacement is necessary. However, ice vests do not encumber the worker and thus permit maximum mobility. Cooling with ice is also relatively inexpensive.

2. **Wetted clothing** is another simple and inexpensive personal cooling technique. It is effective when reflective or other impermeable protective clothing is worn. The clothing may be wetted terry cloth coveralls or wetted two-piece, whole-body cotton suits. This approach to auxiliary cooling can be quite effective under conditions of high temperature and low humidity, where evaporation from the wetted garment is not restricted.

3. **Water-cooled garments** range from a hood, which cools only the head, to vests and "long johns," which offer partial or complete body cooling. Use of this equipment requires a battery-driven circulating pump, liquid-ice coolant, and a container.

   Although this system has the advantage of allowing wearer mobility, the weight of the components limits the amount of ice that can be carried and thus reduces the effective use time. The heat transfer rate in liquid cooling systems may limit their use to low-activity jobs; even in such jobs, their service time is only about 20 minutes per pound of cooling ice. To keep outside heat from melting the ice, an outer insulating jacket should be an integral part of these systems.

4. **Circulating air** is the most highly effective, as well as the most complicated, personal cooling system. By directing compressed air around the body from a supplied air system, both evaporative and convective cooling is improved. The greatest advantage occurs when circulating air is used with impermeable garments or double cotton overalls.

   One type, used when respiratory protection is also necessary, forces exhaust air from a supplied-air hood ("bubble hood") around the neck and down inside an impermeable suit. The air then escapes through openings in the suit. Air can also be supplied directly to the suit without using a hood in three ways:

   - by a single inlet;
   - by a distribution tree; or
   - by a perforated vest.

   In addition, a vortex tube can be used to reduce the temperature of circulating air. The cooled air from this tube can be introduced either under the clothing or into a bubble hood. The use of a vortex tube separates the air stream into a hot and cold stream; these tubes also can be used to supply heat in cold climates. Circulating air, however, is noisy and requires a constant source of compressed air supplied through an attached air hose.

One problem with this system is the limited mobility of workers whose suits are attached to an air hose. Another is that of getting air to the work area itself. These systems should therefore be used in work areas where workers are not required to move around much or to climb. Another concern with these systems is that they can lead to dehydration. The cool, dry air feels comfortable and the worker may not realize that it is important to drink liquids frequently.

RESPIRATOR USAGE

The use of any kind of respiratory protection device increases stress on a worker, and this stress contributes to overall heat stress. Chemical protective clothing such as totally encapsulating chemical protection suits will also add to the heat stress problem.

SUMMARY

Heat stress offers significant challenges when work needs to be performed under hot ambient conditions. However, a well thought-out program can substantially reduce the chances of heat stress. A combination of engineering and administrative controls along with effective use of personal protective equipment can protect employees from suffering the effects of heat stress

EARTHQUAKES

Earthquakes can last just a few seconds or as long as several minutes. Safety precautions include (as amended from http://safety.lovetoknow.com/Earthquake_Safety_Precautions):

- Before an earthquake:
  - Store heavy items or glassware on low shelves so they do not become dangerous projectiles. Secure large equipment with straps, bolts, or other stabilizing methods.
  - Know the emergency meeting location at the site.

- During an earthquake:
  - Immediately seek a safe location such as in a doorway, beneath a table or desk, or along an interior wall away from windows or hazardous objects.
  - Cover the back of your head and your eyes to minimize injury from flying debris
  - Do not take elevators during an earthquake.
  - If outdoors, stay in open areas away from buildings, power lines, trees, and other potential hazards.
  - If driving, stop quickly but safely and stay in the vehicle. Do not stop near power lines, bridges, overpasses, or other potentially dangerous locations.
  - Stay calm and brace yourself to keep your balance. Sit if possible.

- After an earthquake:
  - Be prepared for aftershocks, which may be stronger than the initial jolt.
  - Administer First Aid and summon emergency assistance if necessary.
  - Wear PPE (boots, gloves) to avoid getting cut by broken glass.
  - Turn off gas, electricity, and water if damage is suspected or if advised to do so by authorities.
  - Be cautious opening cabinets, cupboards, and closets in case items are poised to fall.
  - Keep phone lines clear for emergency use.
  - Be patient: it may take hours or days to restore all services depending on the severity of the quake.

1.3 Biological Hazards

Biological hazards may include, but are not limited to, bees/wasps, spiders, snakes, stray dogs, rats and poisonous/allergenic plants.

Bee/Wasp Precautions

Purpose

Bees and similar organisms such as wasps, hornets and yellow jackets can cause significant injury, pain and/or discomfort during our work. This precaution has been developed to help avoid injury.

We can encounter these organisms during a number of our tasks such as:

- Opening well vault covers
- Opening core or sample boxes
- Performing O & M in system compounds
- Working in tall grass, weeds and brush
- Performing site assessments (indoors and outdoors)

Yellow Jackets

Yellow Jackets are found throughout the United States. Yellow Jackets feed on insects, spiders and a wide variety of other food items. They are medium-sized, stout-bodied, and black with bright yellow bands. Yellow-jackets construct globular paper nests, usually in underground cavities. Favorite nesting places include rodent burrows, compost piles and wall voids.

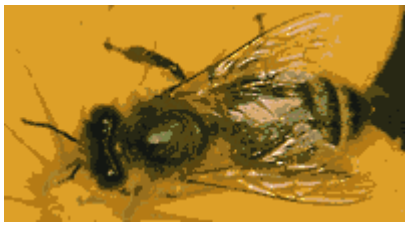
Yellow Jackets are scavengers and frequently are found foraging around compost piles and garbage receptacles. Their activity can be discouraged in the vicinity of patios, parks, picnic and other recreational areas by covering all food and disposing of waste in covered containers.

Paper Wasps

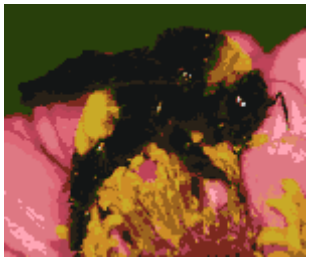
Paper wasps are about 1" in length, have a spindle-shaped body and are marked with a brown and yellow pattern. Paper wasps construct umbrella-shaped, single-layered nests with exposed cells. Nests may be built in trees and shrubs but frequently are found under building overhangs, in attics, barns, garages and sheds. These wasps are not considered overly aggressive and usually pose a threat only when their nests are disturbed. However, foraging wasps can cause considerable annoyance as they fly in and about entrances of buildings.

Honey Bees

Honey bees may become troublesome when they swarm or build colonies in or near residential areas. Honeybees occasionally invade homes and establish a colony, building combs of wax containing honey, pollen and brood in wall spaces. Once established, a colony is difficult to remove because it usually involves structural modification of the building. To be effective, the honey and wax should be removed along with the bees or the site will remain attractive to other swarms.



Bumble Bees



These bees most commonly become a problem when they establish nests close to a sidewalk or near building foundations. Bumble bees are large, robust bees covered with dense black and yellow hairs. They commonly reach one inch in length. Bumble bees usually are not overly aggressive, but will sting if molested. To avoid confrontations with bumble bees, stay clear of patches of flowers visited by adults. These bees can be controlled by spraying or dusting insecticides into their nests. Retreatment may be necessary.

What to do?

Naturally, there are many kinds of bees, and other insects for that matter, about which we should be concerned. The following are some good rules of thumb to keep in mind.

To mitigate hazards associated with bees/wasps:

- Avoid known locations of bees/wasps.
- Keep your eyes and ears open for swarms.
- Look for insects flying in and out of openings such as a crack in the wall, an open pipe end, or a well vault lid.
- Be cautious of tall grass as some bees build their hives at ground level.
- Be cautious of pointed structures, especially in barns, storage sheds, and outbuildings as bees often build hives in those structures.
- Avoid wearing citrus or floral aftershaves or perfumes as bees/wasps may be attracted to these odors.
- Wear light colored clothing as insects are generally attracted to dark colors.
- Fill in cracks or crevices and close open ends of pipes when bees/wasps are not around.
- Leave the area as quickly as possibly if a nest has been disturbed. Do not retrieve nearby belongings. Do not stand still. Do not try to fight them.

If stung by a bee or wasp, wash the area with soap and water. If you have been stung over 15 times or are having symptoms other than pain and swelling, seek emergency medical assistance immediately. Staff that are allergic will carry an EpiPen® as prescribed by a doctor. The SHSO, OSEC and Project Manager should be made aware of this prior to the start of the project.

Insect Sting Reactions

Insect sting reactions can be classified into three types - a normal reaction, a toxic reaction, and an allergic reaction. A normal reaction, lasts only a few hours, involves pain, redness, swelling, itching, and warmth at the site of the sting. A toxic reaction lasts for several days, results from multiple stings and causes muscle cramps, headache, fever, and drowsiness. An allergic reaction is similar to a toxic reaction but is triggered with only one sting.

An allergic reaction can involve one or more of the following: hives, itching, and swelling in areas other than the sting site; tightness in the chest and difficulty in breathing; a hoarse voice or swelling of the tongue; dizziness or a sharp drop in blood pressure; and unconsciousness or cardiac arrest.

4.0 Site Control and Safety Procedures

Procedures described in this section are intended to aid Stantec personnel in mitigating site risks/hazards.

Video Cameras

Prior to using a camera or other electronic recording devices on this site, all on-site personnel and/or visitors will obtain approval from the Project Manager.

Daily Production Health and Safety Briefings

A safety meeting will be conducted twice daily and as needed at the site to discuss the health and safety issues for the activities to be conducted that day. The topics of the meeting will include, at a minimum, general health and safety procedures, reviewing health and safety policies and reviewing the job hazard analyses for the tasks to be conducted. Additional safety meetings may be conducted if the scope of work changes during the day, or if other health and safety issues are identified. The meetings can be documented in using the RMS-2 Fit for Duty Forms included in Attachment 2.

Driving

- Review the Stantec Safe Driving Procedures provided on-site.
- Utilize the Journey Hazard Assessment Card to identify potential driving/journey/traffic hazards before each trip.
- The Daily Vehicle Checklists should be used at least once a day for each vehicle driven for Stantec business to identify potential vehicle issues/hazards. Copies of the Daily Vehicle Inspection Checklist are included in this HASP as Attachment 3.
- Have each team member who will travel to/from the site review the site-specific Journey Management Plan (JMP) before traveling to identify routes of travel and potential driving/journey/traffic hazards. JMP(s) will be kept with each traveling employee throughout the entire course of travel.
- A Stantec Vehicle Collision Kit will be kept in every vehicle used for Stantec project work. A Stantec Vehicle Collision Kit is included in this HASP as Attachment 4.

Drug and Alcohol Testing

Following an incident, Stantec will follow the incident reporting procedures. If appropriate, Stantec will include drug and alcohol testing, consistent with Stantec's Policies and Procedures, as well as the client's contractual requirements for testing.

Exclusion Zone and Decontamination (as applicable)

No eating, drinking, smoking or raw tobacco use is permitted in the exclusion zone. These activities will be conducted only in designated areas of the site. Use of PDAs, cell phones, pagers, or other electrical devices (with the exception of intrinsically safe devices) are prohibited in the exclusion zone. Personnel will properly decontaminate after leaving an exclusion zone. Decontamination procedures may involve disposing of Tyveks, latex gloves, etc. in a decontamination zone located immediately outside of the exclusion zone. At a minimum, personnel will wash any exposed skin before leaving a site using soap and water or pre-moistened cleansing towels. Stantec will evaluate the hazards and develop site-specific decontamination procedures to address the chemical hazards at each site. These procedures can be found in the job safety analyses.

Jewelry

Jewelry can be dangerous and shall not be worn during field activities. Large earrings, long necklaces, loose-fitting bracelets, rings, watches, etc. can become entangled in machinery and cause traumatic amputation of limbs, as well as be conductive of electricity.

Material Safety Data Sheets (a.k.a. Safety Data Sheets/GHS)

Material Safety Data Sheets (MSDSs) will be available in the Stantec HASP &/or in the sub-contractor's HASP for chemicals on site (including chemicals brought on site by on-site personnel and/or visitors).

Personal Protective Equipment

PPE is identified in JSAs. PPE listed in each JSA is specific to the task outlined in the JSA and is consistent with either OSHA 1910.132 or Appendix B of 29 CFR 1910.120. PPE is to be used in accordance with manufacturers' recommendations and employee training. Minimum PPE at the site includes steel toe/steel shank boots, high visibility work gloves, hi-viz safety vest, long sleeve shirt, pants, safety glasses with side shields, and a hard hat.

Pre-entry Briefing

All on-site workers and visitors will receive a pre-entry briefing prior to accessing work areas of the site. The briefing will include reviewing contents of the HASP, signing the Acknowledgement and Agreement Form. The briefing for visitors may be abbreviated to be fit-for-purpose based on the intent of the visit.

Shutoff Valves/Switches

(IF NEEDED) The SHSO will identify the location of shutoff valves and switches for utilities and products on the Site Plan and disseminate this information to all site personnel and visitors as appropriate.

Site Access and Layout

Before mobilizing to the site for an event, the property owner(s) will be notified.

Site Security

Security of our staff, subcontractors, equipment, and the public is of paramount importance to Stantec. Employees are trained in hazard recognition and will follow standard policies and procedures to report and mitigate site security issues/hazards if identified. Note that security consideration is different than traffic guidance and control, which also impacts security to some extent. Security refers to personal safety and freedom from theft or violence. The following items will be evaluated when considering security measures at the site:

- Recent criminal activity at the site and nearby areas (ask site owner/operator and the police);
- Work hours (security concerns may be different depending on the time of day); and
- Lighting at the site (thieves are generally dissuaded from stealing on well lighted sites).

Standard security measures will be implemented on site to minimize the potential for loss at the site. Standard security measures include properly maintained lighting, functioning locks for windows/doors/equipment storage areas, and maintaining control of tools and equipment when not in use. Security may be implemented in a variety of ways:

- Orange construction fence (minimal security);
- Chain link fencing;
- Extra lighting;

- Specialized locks; and/or
- Contract security.

Traffic Guidance and Control

Incidents on sites have shown the need for a site-specific Traffic Guidance and Control Plan. The SHSO and project staff will develop a Traffic Guidance and Control Plan and disseminate this information to all site personnel. This plan will consider the amount of traffic at a site and provide for the safety of all workers. Equipment and resources to be considered as part of traffic guidance and control include:

- Vehicle hazard lights (tail and headlights)
- Cones/Delineators
- Placement of vehicles as barriers between workers and traffic
- Rotating amber hazard lights that can be placed on top of vehicles
- Signage advising drivers of shoulder work.

Other considerations for the Traffic Guidance and Control Plan include:

- Lane closures with proper signing
- Requiring personal vehicles (that aren't being used as barriers) to park as far away from potential traffic as possible.
- Cordoning off as much space as is necessary to ensure our safety.
- Identifying traffic flow routes and parking areas for heavy equipment (e.g., vacuum trucks, drill rigs, etc.) and establishing site speed limits.
- Reviewing local regulations for: formally developed traffic guidance and control plans signed by licensed individuals, police details, flagmen, hours of activity, closure of streets, etc.

Attachment 1

Stantec Field Binder Checklist and Project Applicable Forms

Stantec Field Binder Checklist

INCLUDED			FORMS	Qty.	COMMENTS
YES	NO	N/A			
PROJECT DOCUMENTS					
			Kick-off Meeting Materials	1	
X			Site-Specific Workplan / Written Scope	1	
			Project Management Checklist	1	
			Field and Safety Supplies Checklist	5	
X			Sampling Procedures	1	
			Permits	1	
			Traffic Control Plans	1	
STANTEC ENVIRONMENTAL SERVICES SECTOR					
Field Notes and Logs					
			Site Observation Report	20	
			Borehole/Well Construction Logs	10	
			Gauging Logs	5	
			Purge Groundwater Sampling Logs	10	
			Grab Groundwater Sample Log	10	
			Non-Aqueous Phase Liquid Bailing Sheets	5	
			O&M Field Data Log	20	
			Waste Management Form	10	
Oil & Gas Subsector					
HSE Monitoring					
X			Equipment Calibration Sheet	5	
X			Air Monitoring Logs	10	
			HSE Opportunity Card	5	
			SAFE Observation Remedial System	1	
			SAFE Observation Emergency Drill	1	
			SAFE Observation Groundwater	1	
			SAFE Observation Drilling	1	
			SAFE Observation Excavation	1	
			SAFE Observation Heavy Equipment	1	
STANTEC CORPORATE HEALTH SAFETY AND ENVIRONMENT					
Hazard Assessment					
X			RMS2– FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 1 day	20	
X			RMS2– FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 days	10	
			RMS 7 - Quantified Hazard Assessment		
			SWP 102a - Workplace Violence	1	

Stantec Field Binder Checklist

INCLUDED			FORMS	Qty.	COMMENTS
YES	NO	N/A			
			Inspection Form		
			SWP 105a - Hazard Assessment for PPE Assessment Form	1	
HSE Monitoring and Incident Report					
			RMS 5 - Worksite Inspection - Field	1	
X			RMS 3 - Incident Report	1	To be used as needed
Driving Safety and JMP					
X			SWP 124a - Vehicle Pre-Use Checklist	20	
			SWP 124b - Journey Management Plan	1	
Ground Disturbance					
X			SWP 213a - Pre-Ground Disturbance Worksheet Approval	1	
X			SWP 213b – Ground Disturbance Form	1	
			SWP 213d - Backfill Inspection Form	1	
Electrical Work					
			SWP 406a - Electrical Job Brief Hazard Assessment	1	
			SWP 406b - Energized Work Permit	1	
			SWP 408a - LTT Permit	1	
			SWP 408b - Emergency LTT Removal	1	
			SWP 408c - LTT Periodic Audit	1	
Confined Space					
			SWP 411a - Confined Space Entry Permit	1	
			SWP 411b - Alternate Entry Permit	1	
Lifting Operations					
			SWP 217a - Forklift Pre-Operational Checklist	1	
CLIENT-SPECIFIC DOCUMENTS					

Instructions: Review your Stantec Field Binder prior to starting work and ensure applicable contents are included. Sign and date the checklist. Your signature indicates your acknowledgement that you will maintain the field binder with forms required for your work.

Signature	Date:

HEALTH, SAFETY AND ENVIRONMENT

SAFE WORK PRACTICE
PRE-GROUND DISTURBANCE WORKSHEET & APPROVAL FORM
SWP-213a

Stantec

** Form to be completed by Project Manager or Designate*

Section One: Project Information

Project Number:	Project Name:
Project Manager:	
Client:	
Location:	
Planned Excavation Method: ☐ Mechanical ☐ Hand	Planned Excavation Depth: ☐ <30 cm / 1 ft and/or ☐ >30cm /1 ft
Work Description: (provide detail information as to what work is planned and how it will be executed):	
Information provided/completed by: ☐ Client ☐ Stantec	

Section Two: Utilities Location and Verification

1. Review location description provided by client.	Yes ☐ *(circle all that apply)* Green Field / Brown Field / White Zone / Other No ☐ N/A ☐ Justification:	
2. Identify and confirm land use.	Yes ☐ *(circle all that apply)* Ag Land / Urban / Municipal Urban / Native Forest / Industrial No ☐ N/A ☐ Justification:	
3a. Full-sweep line locate required	Yes ☐ No ☐ N/A ☐ Justification:	
3b. Point-specific line locates	Yes ☐ No ☐ N/A ☐ Justification:	
3c. Quote required and authorized (prior to location activities started)	Yes ☐ Provided by: Client Name: Date: No ☐ N/A ☐ Justification:	
4. Utility locates have been performed by public utility company(s) within required timeframe. Locates are clear/visible. *for multiple utility companies, please note dates and contact information using questions 5-15	Yes ☐ Contact Date: Ticket Number: Contact Person: Alternate Contact: Proposed Meet Date: Meet Time: No ☐ N/A ☐ Justification: Ticket Expiration Date:	
5. Private locate company has been contacted and is an approved utility locating contractor. *Markings are clear and visible.*	Yes ☐ Contact Name: Contact Number: Meet Date: Meet Time: No ☐ N/A ☐ Justification:	

HEALTH, SAFETY AND ENVIRONMENT

SAFE WORK PRACTICE
PRE-GROUND DISTURBANCE WORKSHEET & APPROVAL FORM
SWP-213a

Stantec

6. Site access/permission has been secured. *Land owner/tenant has been contacted.*	Yes ☐	Land Owner Name: Contact Number: Permit/Authorization Number: Land Agent Name: Contact Number: ** Attach Access Agreement and Permit Authorization*
	No ☐	N/A ☐ Justification:
7. Work discussed with owner/tenant.	Yes ☐	Owner Name: Tenant Name:
	No ☐	N/A ☐ Justification:
8a. All crossing agreements for third party and owner facilities are in place and conditions have been met.	Yes ☐	Crossing or proximity agreements: 1. 2. 3. ** Attach crossing agreements with conditions*
	No ☐	N/A ☐ Justification:
8b. Have third party line owners been given 48 hours' notice to crossing or encroachment?	Yes ☐	
	No ☐	N/A ☐ Justification:
9. Is owner's representative required to be present when exposing or excavating near/across lines?	Yes ☐	
	No ☐	N/A ☐ Justification:
10a. Reviewed site information to identify subsurface structures relevant to planned site activities. *Review easements, right of ways, historical plot plans, previous site investigation, soil surveys, boring logs, etc.*		*Check all that apply:* ☐ 3rd party identified ☐ Recent high pressure plots reviewed? ☐ Recent low pressure plots reviewed? ☐ Land title search reviewed? ☐ Land Standing Report reviewed? ☐ Previous Site Investigations?
	No ☐	N/A ☐ Justification: ☐ Other
10b. Most recent as-built drawings and/or site plans surveys obtained. *Including UST, product and vent lines, building layout.*	Yes ☐ No ☐	N/A ☐ Justification:
10c. Municipal utilities drawings.	Yes ☐ No ☐	N/A ☐ Justification:
11. All applicable local, provincial and federal permits have been obtained.	Yes ☐	Local/City Permit Number: Provincial/State Permit Number: Other: Other: ** Copy attached and on site*
	No ☐	N/A ☐ Justification:

Approval to Proceed with Field Activities

Client Approval:

Print Name: Signature: Date:

Project Manager/Designate Approval:

Print Name: Signature: Date:

HEALTH, SAFETY AND ENVIRONMENT

SAFE WORK PRACTICE
GROUND DISTURBANCE FORM
SWP-213b

Stantec

Ground Disturbance Form

Field Activity				
1. Copy of current locates and drawings on site.	Yes ☐ No ☐ N/A ☐ Justification:			
2. All site personnel involved in ground disturbance activities have been briefed on clearance protocols, line locations and signed off on work plan	Yes ☐ No ☐ N/A ☐ Justification:			
3a. Work area is secured.	Yes ☐ No ☐ N/A ☐ Justification:			
3b. Site work permits have been obtained.	Yes ☐ No ☐ N/A ☐ Justification:			
3c. Emergency shut-off switch is located for all impacted equipment.	Yes ☐ No ☐ N/A ☐ Justification:			
3d. Fire extinguishers/warning sign/ barriers are present.	Yes ☐ No ☐ N/A ☐ Justification:			
3e. Signage in place for overhead power lines.	Yes ☐ No ☐ N/A ☐ Justification:			
3f. Specify other safety equipment as needed.	☐ ☐		☐ ☐	
4. Location of area lights/signs and associated subsurface lines identified. Ticket/Confirmation No:	Yes ☐ No ☐	Located by: Company/Utility: N/A ☐ Justification:	Phone:	Date:
5a. Location of all telecommunication and associated subsurface lines identified. Ticket/Confirmation No:	Yes ☐ No ☐	Located by: Company/Utility: N/A ☐ Justification:	Phone:	Date:
5b. Fiber optic lines identified. Ticket/Confirmation No:	Yes ☐ No ☐	Located by: Company/Utility: N/A ☐ Justification:	Phone:	Date:
6. Location of drains and associated Inter-connecting lines identified.	Yes ☐ No ☐	Located by: Company/Utility: N/A ☐ Justification:	Phone:	Date:
7. Location of all electrical junction boxes and associated interconnecting lines identified.	Yes ☐ No ☐ N/A ☐ Justification: Status: Live ☐ Shut-off and locked out ☐ Removed from service ☐ Confirmation of status: Name: * Maintain minimum safe distance of > 7 m/23 ft.	Located by:	Phone:	Date: Date:

HEALTH, SAFETY AND ENVIRONMENT

SAFE WORK PRACTICE
GROUND DISTURBANCE FORM
SWP-213b

8. Location of natural gas meters or connections and all interconnecting lines identified.	Yes ☐ Located by: Company/Utility:	Phone:	Date:
	No ☐ N/A ☐ Justification:		
	Status: Live ☐ Shut-off and locked out ☐ Removed from service ☐		
	Confirmation of status: Name:		Date:
9. Location of Cable lines.	Yes ☐ Located by: Company/Utility:	Phone:	Date:
	No ☐ N/A ☐ Justification:		
10. Location of Water lines.	Yes ☐ Located by: Company/Utility:	Phone:	Date:
	No ☐ N/A ☐ Justification:		
11. Presence and tracing of process/storm sewers identified /understood *If other concrete, fiberglass, untraced PVC lines are potentially in the ground disturbance area, identify means of identification in comments section.*	Yes ☐ Located by: Company/Utility:	Phone:	Date:
	No ☐ N/A ☐ Justification:		
	Comments (need to comment on water sewer line):		
12. Presence of underground pipelines associated with pumps and pump galleries, manifolds, tank fields, compressors, production wells, loading racks and equipment identified.	Yes ☐ Located by: Company/Utility:	Phone:	Date:
	No ☐ N/A ☐ Justification:		
13. Location of all aboveground indicators of subsurface utilities/services that may be leading to or from buildings within planned work area are Identified.	Yes ☐		
	No ☐ N/A ☐ Justification:		
14a. Orientation, arrangement, location, sizes of tanks, STP and extractor covers identified.	Yes ☐		
	No ☐ N/A ☐ Justification:		
14b. Burial depth of tank determined if relevant	Yes ☐ Depth:		
	No ☐ N/A ☐ Justification:		
14c. Presence of underground lines for instrumentation, process analyzer, and motor-operated valves are inspected/identified.	Yes ☐		
	No ☐ N/A ☐ Justification:		
15. Location of other pertinent features surface or sub-surface that may be of relevance to work scope has been identified.	Yes ☐		
	No ☐ N/A ☐ Justification:		
16. Are all buried lines and utilities that are identified on all drawing sources staked or marked in the ground disturbance zone plus a 30 m /100 ft. buffer?	Yes ☐		
	No ☐ N/A ☐ Justification:		

HEALTH, SAFETY AND ENVIRONMENT

SAFE WORK PRACTICE
GROUND DISTURBANCE FORM
SWP-213b

Stantec

17. Critical zones have been identified. *5 m / 16.5 ft. of pipeline crossing area, or the distance defined in the pipeline crossing agreement. 3 m / 10 ft. distance from edge of tank, pumps and pump galleries, manifolds, on/below grade transformers, compressors, production wells, flow lines, loading racks, other process equipment, operating dispenser islands and suspected hazardous/critical utilities, product lines, other subsurface structures, and entire area between tank field and dispensers at retail sites*	Yes ☐ Identify critical zones: No ☐ N/A ☐ Justification:
18. Has the owner/representative inspected the crossings or encroachment areas prior to beginning work?	Yes ☐ No ☐ N/A ☐ Justification:
19. Are all conditions of the Crossing Agreements being met?	Yes ☐ No ☐ N/A ☐ Justification:
20. Are all operators aware of the mechanical excavation zone as discussed in the tailgate meeting?	Yes ☐ No ☐ N/A ☐ Justification:
21. Location of surface features indicative of product lines or other subsurface structures identified	*Check all that apply:* ☐ Pipe marker signs present ☐ Surface scaring present ☐ Ground depressions present ☐ Water cc's identified ☐ Cut lines observed ☐ Vegetation distressed Other: No ☐ N/A ☐ Justification:
22. Road and pipeline crossing zones identified.	Yes ☐ No ☐ N/A ☐ Justification:
23. If subsurface structures exposed, extra precautions have been taken to ensure structural integrity.	Yes ☐ Describe: No ☐ N/A ☐ Justification:

Comments / Findings	Actions to Close Out Items	Person Completing	Date Completed

HEALTH, SAFETY AND ENVIRONMENT

SAFE WORK PRACTICE
GROUND DISTURBANCE FORM
SWP-213b

Completed by: (print name)	Company:
Signature	Date:

Attachment 2

RMS-2 Fit for Duty

HEALTH, SAFETY, AND ENVIRONMENT

RMS2– FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 1 day

Stantec

Project: 10-23 405 FWY / GETTY Project No: 185832023

Client: CAL TRANS

Location: GETTY CENTER DR.

Start Date:

Work Description **Provide A General Description Of The Work To Be Conducted.**

- MARK / GPS / PHOTOGRAPH HAND AUGER BORING LOCATIONS
- DEFENSIVE DRIVING
- HIKING TO REMOTE LOCATIONS

Documentation and Procedure Review

1. Risk Management Strategy (RMS1) form and/or Site Specific Health and Safety Plan signed and reviewed? ☒ Yes ☐ No*
2. Emergency Response Plan reviewed? ☐ Yes ☐ No* ☒ N/A
3. Tested two-way communications (cell phone, satellite phone) and security measures? ☒ Yes ☐ No*
4. Attended Client Site Health and Safety meeting? ☐ Yes ☐ No* ☒ N/A
5. Conducted Stantec site safety meeting with all workforces? ☐ Yes ☐ No* ☒ N/A
6. Are there any new or unexpected hazards not identified in the RMS1/HASP? ☐ Yes ☒ No
   If yes, include in the Job Safety Analysis (JSA).
7. Working alone or remote work? ☐ Yes ☒ No
   If yes, complete call in/out process – Safe Work form must be completed.

Notifications and Permits

8. Are work permits required for this site? ☒ Yes ☐ No
   If yes, have they been completed and submitted as required? ☒ Yes ☐ No*
9. Are utility locates required for this site? ☒ Yes ☐ No
   If yes, have they been completed and reviewed? ☒ Yes ☐ No*
10. Does the Client require any notification prior to starting the work? ☒ Yes ☐ No
    If yes, has the notification been provided? ☒ Yes ☐ No*

***Contact your Project Manager immediately.**

Personal Protective Equipment List specific PPE as needed. Verify type and inspect condition.

☒ Head Protection Type: HARD HAT	☐ Hearing Protection:		☒ Gloves Type: NITRILE / LEATHER		
☒ Foot Protection Type: STEEL TOE	☐ Respiratory Protection:		☐ Water Safety Gear:		
☒ Eye Protection Type: SAFETY GLASS	☐ Fire Retardant Coveralls:		☐		
☒ High Visibility Vest: REFLECTIVE	☐ Fall Protection:		☐		

Tools and Equipment List specific equipment to be used. Verify type and inspect condition.

☒ GPS	☒ FLAGGING / STAKES	☐
☒ CAMERA	☒ HAMMER	☐

HEALTH, SAFETY, AND ENVIRONMENT

RMS2– FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 1 day

Stantec

ıily Tailgate Discussions/Subcontractor Input

Start	Time: 0530	Weather: ~~SUNNY~~ / DARK
~~MARKED~~ - LOADED EQUIPMENT; REVIEWED MAPS		
Mid-Day	Time: 12.00	Weather: SUNNY
HIKING; REMOTE ACCESS TO SAMPLE LOCATIONS; SLIPS, TRIPS, FALLS		
Post-Day	Time: 1830	Weather: DARK
RELOCATED SAMPLE LOCATIONS; STEEP TERRAIN; CANCELLED LOCATIONS		

I know the hazards:

By signing here, you are stating the following:

1. I have been involved in the Job Safety Analysis and understand the hazards and risk control actions associated with each task I am about to perform.
2. I understand the permit to work requirements applicable to the work I am about to perform (if it includes permitted activities).
3. I am aware that no jobs or work (that is not risk-assessed) is to be performed.
4. I am aware of my obligation to "**Stop Work**" (*See Stop Work Section).*

I arrived and departed fit for duty:

5. I am physically and mentally fit for duty.
6. I am not under the influence of any type of medication, drugs or alcohol that could affect my ability to work safely.
   I am aware of my responsibility to bring any illness, injury (regardless of where or when it occurred) or fatigue issue I may have to the attention of the Crew Lead.
8. I signed out uninjured unless I have otherwise informed the Crew Lead.

Insert fitness level under corresponding time column: Fit for Duty = F Alternate Plan = AP
Team Lead to contact Project Manager for any personnel identified as AP

Individual Name/Company Name/Signature	Time:	Time:	Time:
SCOTT EDBLAD / STANTEC / Scott Edblad	0530 F	1200 F	1830 F
Jason Stagno / Stantec /	0530 F	1200 F	1330 F

I will STOP the job any time anyone is concerned or uncertain about safety.

I will STOP the job if anyone identifies a hazard or additional mitigation not recorded.

I will be alert to any changes in personnel or their fitness level (AP), conditions at the work site or hazards.

If it is necessary to **STOP THE JOB**, I will reassess the task, hazards and mitigations; and then proceed only when safe to do so.

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

:lusion of day: I certify that the planned work activities are completed for the day and all injuries and first aids have been reported via RMS3.

Signature of Crew Lead: Scott Edblad **Date:** 02/18/15

Health, Safety and Environment

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY)

Stantec

Job Safety Analysis (JSA) Must be completed for all field activities.

Basic Job Steps	Potential Hazards	Controls to Reduce or Eliminate Hazard	Person Responsible
DRIVING TO SITE DEPARTURE FROM SITE	ACCIDENTS; DEBRIS TRAFFIC	DEFENSIVE DRIVING	S. EDBLAD J. STAGNO
STAKE; FLAG; GPS LOCATIONS	SLIPS; TRIPS; FALLS; TRAFFIC; BIOLOGICAL HAZARDS	ENVIRONMENTAL AWARENESS; PROPER PPE	

Review the hazard categories below and check the mitigation measures applicable to the identified scope of work.

Environmental Hazards

1.	Work area clean	☐
2.	Material storage identified	☐
3.	Dust/Mist/Fume	☐
4.	Noise in area	☐
5.	Extreme temperatures	☐
6.	Spill potential	☐
7.	Waste containers needed	☐
8.	Waste properly disposed	☐
9.	Waste plan identified	☐
10.	Excavation permit required	☐
11.	Other workers in area	☐
12.	Weather conditions	☐
13.	MSDS reviewed	☐

Ergonomic Hazards

14.	Awkward body position	X
15.	Over extension	X
16.	Prolonged twisting/bending motion	X
17.	Working in a tight area	☐
18.	Lift too heavy/awkward to lift	X
19.	Parts of body in line of fire	☐
20.	Repetitive motion	X
21.	Hands not in line of sight	☐
22.	Working above your head	☐

Access/Egress Hazards

23.	Aerial life/Man basket (inspected & tagged)	☐
24.	Scaffold (inspected & tagged)	☐
25.	Ladders (tied off)	☐
26.	Slips & trips	☐
27.	Hoisting (tools, equipment)	☐
28.	Evacuation (alarms, routes, ph. #)	☐
29.	Confined space entry permit required	☐

Are you ready to work safely?

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

Overhead Hazards

30.	Barricades & signs in place	☐
31.	Hole coverings identified	☐
32.	Harness/lanyard inspected	☐
33.	100% Tie-off with harness	☐
34.	Tie off points identified	☐
35.	Falling items	☐
36.	Foreign bodies in eyes	☐
37.	Hoisting or moving loads overhead	☐

Rigging & Hoisting Hazards

38.	Lift study required	☐
39.	Proper tools used	X
40.	Tools inspected	X
41.	Equipment inspected	X
42.	Slings inspected	☐
43.	Others working overhead/below	☐
44.	Critical lift permit	☐

Electrical Hazards

45.	GFI test	☐
46.	Lighting levels too low	☐
47.	Working on/near energized equipment	☐
48.	Electrical cords condition	☐
49.	Electrical tools condition	☐
50.	Fire extinguisher	☐
51.	Hot work or electrical permit required	☐

Personal Limitations/Hazards

52.	Procedure not available for task	☐
53.	Confusing instructions	☐
54.	No training for task or tools to be used	☐
55.	First time performing the task	☐
56.	Micro break (stretching/flexing)	☐
57.	Report **all injuries** to your supervisor	☐

It is important that all relevant hazards have plans in place to reduce risk.
Be sure that all associated permits are closed off at the end of the job.

Remember: Stop and Think

Reviewed by Name and Signature: Scott Edblad SCOTT EDBLAD

HEALTH, SAFETY, AND ENVIRONMENT

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

Fit for Duty

Safety is influenced by many factors, but the most important is the health and well-being of Stantec's employees and partners. Physical and mental health are just as important as good tools, good practices, and good job planning.

This card is designed to help you do a quick self-assessment of your physical and mental health. Any concerns resulting from your assessment regarding your ability to carry out your job responsibilities safely and in good health need to be discussed with your supervisor before starting work.

- Am I feeling good today and ready to work at my typical level of physical activity and responsibility?
- Do I have any sprains/strains, areas of weakness or soreness?
- Am I managing multiple sources of stress?
- Am I well hydrated?
- Any physically-demanding activities recently (chores, sports, hobbies)?
- Am I well-rested with a good energy level? When did I eat last?
- Am I taking any medications that can make me drowsy or adversely affect my safe performance?
- Any cuts/scrapes are clean and bandaged?
- Did I remember to bring with me my health maintenance medications (blood pressure, diabetes, cholesterol, heart, etc.)?

If your answers to any of the questions above indicate that you may not be ready to work, contact your supervisor immediately to discuss a plan of action.

LAST-MINUTE RISK ASSESSMENT (LMRA)

1. STOP and Think

2. Look around

Is the work area safe?
Will my work endanger others?
Will other people pose risk?

3. Assess risk

Do I clearly understand the task?
Will lifting or manual handling be required?
Potential for slips, trips, or falls?
Are there driving or vehicle concerns?
Have I considered all underground services?
Moving or pressurized equipment?
What could go wrong?

4. Control risk

What can I do to control hazards?
Do I have the right tools?
Is the SWP (Safe Work Practice) appropriate?
Do I have the appropriate PPE?
Are emergency plans in place?

5. Begin/Resume work

If you're unsure, talk to your supervisor.

Are you ready to work safely?

HEALTH, SAFETY, AND ENVIRONMENT
RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

Stantec

Project: TO-23 405 FWS/GETTY Project No: 185832023

Client: CAL TRANS

Location: GETTY CENTER OR. TO CHURCH LN

Start Date: 02/24/15

Documentation and Procedure Review

11.	Risk Management Strategy (RMS1) form and/or Site Specific Health and Safety Plan signed and reviewed?	☒ Yes ☐ No*
12.	Emergency Response Plan reviewed?	☒ Yes ☐ No* ☒ N/A
13.	Tested two-way communications (cell phone, satellite phone) and security measures?	☒ Yes ☐ No*
14.	Attended Client Site Health and Safety meeting?	☐ Yes ☐ No* ☒ N/A
15.	Conducted Stantec site safety meeting with all workforces?	☐ Yes ☐ No* ☒ N/A
16.	Are there any new or unexpected hazards not identified in the RMS1/HASP? *If yes, include in the Job Safety Analysis (JSA).*	☐ Yes ☒ No
17.	Working alone or remote work? *If yes, complete call in/out process – Safe Work form must be completed.*	☐ Yes ☒ No

Notifications and Permits

18.	Are work permits required for this site?	☒ Yes ☐ No
	If yes, have they been completed and submitted as required?	☒ Yes ☐ No*
19.	Are utility locates required for this site?	☒ Yes ☐ No
	If yes, have they been completed and reviewed?	☒ Yes ☐ No*
20.	Does the Client require any notification prior to starting the work?	☒ Yes ☐ No
	If yes, has the notification been provided?	☒ Yes ☐ No*

***Contact your Project Manager immediately.**

Work Description **Provide a general description of the work to be conducted.**

- HAND AUGER AND COLLECT SOIL SAMPLES
- TRAFFIC CONTROL SET
- DRIVE TO AND FROM SITE

Personal Protective Equipment **List specific PPE as needed. Verify type and inspect condition.**

☒ Head Protection Type:	HARD HAT	☐ Hearing Protection:		☒ Gloves Type:	NITRILE / LEATHER
☒ Foot Protection Type:	SAFETY TOED	☐ Respiratory Protection:		☐ Water Safety Gear:	
☒ Eye Protection Type:	SAFETY GLASSES	☐ Fire Retardant Coveralls:		☐	
☒ High Visibility Vest:	REFLECTIVE	☐ Fall Protection:		☐	

Tools and Equipment **List specific equipment to be used. Verify type and inspect condition.**

☒ HAND AUGER	☒ MANOT	☒ SNAKE GAITORS
☒ PID	☒ BACKPACK	☐

HEALTH, SAFETY, AND ENVIRONMENT
RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day
DAILY TAILGATE DISCUSSIONS/SUBCONTRACTOR INPUT

Date: 02/24/15	**Time:** 0615	**Weather:** SUNNY / WINDY
Start 0615	LOADING EQUIPMENT / DEFENSIVE DRIVERS	
Mid-Day 1145	HIKING (BACKPACK) WITH EQUIPMENT / SUPPLIES - BIOLOGICAL HAZARDS	
Post-Day 1800	UNLOADING EQUIPMENT	
Date: 02/25/15	**Time:** 0600	**Weather:** SUNNY / WINDY
Start 0600	LOADING EQUIPMENT / DEFENSIVE DRIVING	
Mid-Day 1315	RELOCATING AND SAMPLE COLLECTION @ FINAL LOCATIONS	
Post-Day 1630	UNLOADING EQUIPMENT	
Date: 03/05/15	**Time:** 0530	**Weather:** SUNNY
Start 0530	LOADING EQUIPMENT / SAMPLE PREPARATION / DEFENSIVE DRIVING	
Mid-Day 1200	HIKING (BACKPACK); SLIPS, TRIPS, AND FALLS	
Post-Day 1700	UNLOAD EQUIPMENT; QAQC SAMPLES & COC	
Date: 03/10/15	**Time:** 0535	**Weather:** SUNNY / HAZY
Start 0535	LOADING EQUIPMENT / SAMPLE PREPARATION / DEFENSIVE DRIVING	
Mid-Day 1215	BACKPACKING SUPPLIES / TRAFFIC PEDESTRIANS	
Post-Day 1755	UNLOADING EQUIPMENT; QAQC SAMPLES & COCS	
Date:	**Time:**	**Weather:**
Start		
Mid-Day		
Post-Day		

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

I know the hazards:

By signing here, you are stating the following:

9. I have been involved in the Job Safety Analysis (JSA) and understand the hazards and risk control actions associated with each task I am about to perform.
10. I understand the permit to work requirements applicable to the work I am about to perform (if it includes permitted activities).
11. I am aware that work that has not been risk–assessed must not be performed.
12. I am aware of my ability and obligation to **Stop Work** (*See below).*

I arrived and departed fit for duty (see Fit for Duty card for further information):

13. I am physically and mentally fit for duty.
14. I am not under the influence of any type of medication, drugs or alcohol that could affect my ability to work safely.
15. I am aware of my responsibility to bring any illness, injury (regardless of where or when it occurred), symptoms of soreness or discomfort, or fatigue issue I may have to the attention of the Crew Lead or Supervisor.
16. I sign out uninjured unless I have otherwise informed the Crew Lead or Supervisor.

Insert fitness level under corresponding time column: Fit for Duty = F Alternate Plan = AP
Team Lead to contact Project Manager for any personnel identified as AP

Individual Name/Company Name/Signature	Date: 02/24/15			Date: 02/25/15			Date: 03/05/15			Date: 03/10/15			Date:		
	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:
SCOTT EDELAO / STANTEC	0615 F	1145 F	1800 F	0600 F	1315 F	1700 F	0530 F	1200 F	1700 F	0535 F	1215 F	1800 F			
Anuja Sawant / Stantec	0615 F	1145 F	1800 F				0530 F	1200 F	1700 F	0535 F	1215 F	1800 F			
[illegible] / STANTEC		1145 F	1800 F												
Stacy Annie Robert to Stantec	0615 F	1145 F	1800 F												
Tommy Fardig / Stantec	0615 F	1145 F	1800 F												
Jason Stayne / Stantec	0615 F	1145 F	1800 F				0530 F	1200 F	1700 F						
Nathan Chon / Caltrans	11:15														

I will STOP WORK any time anyone is concerned or uncertain about safety. **I will STOP WORK** if anyone identifies a hazard or additional mitigation not recorded. **I will** be alert to any changes in personnel or their fitness level (AP), conditions at the work site or hazards. If it is necessary to **STOP WORK**, I will reassess the task, hazards and mitigations; and then proceed only when safe to do so.

Conclusion of day: I certify that the planned work activities are completed for the day and all injuries and first aids have been reported via RMS3.

Signature of Crew Lead:	Scott Edelao	**Date:**	02/24/15
Signature of Crew Lead:	Scott Edelao	**Date:**	02/25/15
Signature of Crew Lead:	Scott Edelao	**Date:**	03/05/15
Signature of Crew Lead:	Scott Edelao	**Date:**	03/10/15
Signature of Crew Lead:		**Date:**	

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

HEALTH, SAFETY, AND ENVIRONMENT

RMS2 – FIELD LEVEL Risk ASSESSMENT (FIT FOR DUTY), 5 day

Job Safety Analysis (JSA) Must be completed for all field activities.

Basic Job Steps	Potential Hazards	Controls to Reduce or Eliminate Hazard	Person Responsible
DRIVING TO SITE DEPARTURE FROM SITE	ACCIDENTS; DRUNK; TRAFFIC	DEFENSIVE DRIVING	S. ROBLAD A SAWONT T. WALSH S. ROBERTS
TRAFFIC CONTROL SET	HIGH SPEED TRAFFIC; MUSCLE INJURY	WEAR PPE; PROPER LIFTING	T. PARDIG J. STAGNO
HAND AUGERING	UTILITIES; MUSCLE STRAIN; PINCH POINTS	USA MARKING; WEAR PPE; PROPER LIFTING; EYES ON HANDS/PATH	
COLLECTING SAMPLES	LEAD, TPH, HERBICIDES	WEAR PPE → PPE	
HIKING	BIOLOGICAL AND PHYSICAL (SLIPS; HEAT STRESS)	AVOID PLANTS AND ANIMALS; EYES ON PATH; WEAR BACK AND LIFT PROPERLY; DRINK LIQUIDS	

Review the hazard categories below and check the mitigation measures applicable to the identified scope of work.

Environmental Hazards

23. Work area clean
24. Material storage identified
25. Dust/Mist/Fume
26. Noise in area
27. Extreme temperatures
28. Spill potential
29. Waste containers needed
30. Waste properly disposed
31. Waste plan identified
32. Excavation permit required
33. Other workers in area
34. Weather conditions
35. MSDS reviewed

Ergonomic Hazards

36. Awkward body position
37. Over extension
38. Prolonged twisting/bending motion
39. Working in a tight area
40. Lift too heavy/awkward to lift
41. Parts of body in line of fire
42. Repetitive motion
43. Hands not in line of sight
44. Working above your head

Access/Egress Hazards

38. Aerial life/Man basket (inspected & tagged)
39. Scaffold (inspected & tagged)
40. Ladders (tied off)
41. Slips & trips
42. Hoisting (tools, equipment)
43. Evacuation (alarms, routes, ph. #)
44. Confined space entry permit required

Are you ready to work safely?

Remember to
1. Stop and think
2. Look around
3. Assess risk
4. Control risks
5. Begin/resume work

Overhead Hazards

45. Barricades & signs in place
46. Hole coverings identified
47. Harness/lanyard inspected
48. 100% Tie-off with harness
49. Tie off points identified
50. Falling items
51. Foreign bodies in eyes
52. Hoisting or moving loads overhead

Rigging & Hoisting Hazards

58. Lift study required
59. Proper tools used
60. Tools inspected
61. Equipment inspected
62. Slings inspected
63. Others working overhead/below
64. Critical lift permit

Electrical Hazards

65. GFI test
66. Lighting levels too low
67. Working on/near energized equipment
68. Electrical cords condition
69. Electrical tools condition
70. Fire extinguisher
71. Hot work or electrical permit required

Personal Limitations/Hazards

72. Procedure not available for task
73. Confusing instructions
74. No training for task or tools to be used
75. First time performing the task
76. Micro break (stretching/flexing)
77. Report **all injuries** to your supervisor

It is important that all relevant hazards have plans in place to reduce risk.
Be sure that all associated permits are closed off at the end of the job.

Remember: Stop and Think

Reviewed by Name and Signature: Seth Ellett 02/24/15

Required Pre-Entry Discussion Topics / Requirements for All Workers and Visitors

Safety rules apply to anyone entering a Stantec workplace or worksite, including employees, supervisors, management and visitors.

COMPANY SAFETY RULES (REFERENCE: STANTEC'S *HSE MANUAL* SECTION 1.3)

- Take reasonable care to protect the health and safety of yourself and others, and the environments in which we all work.
- Consumption of alcohol is only approved during company-sponsored events. Consumption or possession of illegal drugs on company premises, or on any company jobsite, is prohibited.
- Horseplay, fighting or otherwise interfering with other employees is prohibited.
- Theft, vandalism or any other abuses or misuse of company property is prohibited.
- All unsafe acts and conditions, including "near miss" incidents, spills or releases of hazardous materials, property damage, and injuries are to be promptly reported to your supervisor in accordance with Section 12 of the HSE manual, and Section 1.8 of this health and safety plan (HASP).
- Clothing and personal protective equipment (PPE) shall be appropriate to tasks being performed, as determined by hazard assessment (refer to job safety analyses and/or standard operating procedures in Attachment B of this HASP).
- All work shall be conducted in accordance with applicable regulatory safety requirements, client safety requirements, and in accordance with Stantec's HSE manual.
- Only use tools, vehicles and equipment that are in good repair, with all guards and safety devices in place, and for which you have sufficient training and experience. Select tools, vehicles and equipment appropriate for the task intended, and use them in compliance with the manufacturer's written instructions.
- Every employee will keep the work area neat, clean and orderly. A floor or other surface used by any employee will be kept free of obstructions, hazards, and accumulations of refuse, snow or ice.
- As a Stantec employee, you are responsible and authorized to STOP work immediately if you become aware of an unsafe act or condition that could place anyone in danger, or if you are not confident in the work plan. Refer to the Stop Work Authority for guidance.

DISCUSSION IDEAS FOR THE DAILY PRODUCTION H&S MEETING

- Emergency response plan, emergency vehicle (full of fuel) and muster point
- Route to medical aid (hospital or other facility)
- Work hours, is night work planned?
- Hand signals around heavy equipment
- Traffic control
- Pertinent Legislation and Regulations
- Above and below ground utilities (energized or de-energized)
- Material Safety Data Sheets (MSDS)
- To who, what, why, and when to report an incident
- Fire extinguisher and First Aid kit locations
- Excavations, trenching sloping and shoring
- Personal protective equipment (PPE) and training
- Safety equipment and training

Required Pre-Entry Discussion Topics / Requirements for All Workers and Visitors

- Emergency telephone and telephone numbers (may not be 911)
- Eye wash stations and washroom locations
- Energy lock-out/tag-out procedures. Location of “kill Switches” etc.
- Weather restrictions
- Site security. Site hazards. Is special waste present?
- Traffic and people movements
- Working around machinery (both static and mobile)
- Sources of ignition, static electricity etc.
- Stings, bites, large animals and other naturally related injuries
- Working above grade
- Working at isolated sites
- Decontamination procedures (both personnel and equipment)
- Falls, trips, sprains and lifting injuries (how to prevent)
- Right to refuse unsafe work
- Adjacent property issues (residence, business, school, day care center)
- Hand & glove safety, pinch points, hand positioning

Attachment 3

Driver's Fatigue Checklist /Safe Driving Vehicle Pre-Use Checklist

Too tired to drive?

A road safety initiative of RACV, Rural Ambulance Victoria and Metropolitan Ambulance Service

Driver Fatigue Checklist

Before you drive, answer these questions to make sure you are not too tired to drive.

	Yes	No
Have you been getting full nights of restful sleep over the past week? *When you don't get enough sleep you acquire sleep debt. The only way to repay the debt is by sleeping.*	❑	❑
Are you setting off on a trip after a good night's sleep, rather than after a full day at work? *Being awake for 17 hours has the same effect on driving as having a BAC (Blood Alcohol Concentration) of .05, doubling your risk of crashing. After 24 hours the BAC equivalent is 0.1, equating to a 7 times greater risk of crashing than someone who is well rested.*	❑	❑
Are you planning to start your trip after 6am, rather than starting out earlier when you would normally be asleep? *Your body naturally wants to sleep between about 1am and 6am greatly increasing your risk of crashing, at those times.*	❑	❑
Have you allowed time in your trip to stop and rest if you feel tired? *Regular breaks every 2 hours will help maintain vigilance, however, the only way to combat fatigue is to sleep.*	❑	❑
Do you stop and have a Powernap if you feel tired while driving? *Stopping for a 15 to 30 minute sleep or Powernap when you are tired is effective in alleviating the short-term effects of fatigue, but ensure you allow time to recover from your sleep before commencing to drive.*	❑	❑
Are you sure that you do not suffer from a sleeping disorder, such as sleep apnoea? *2% of people suffer from the most common sleep disorder, sleep apnoea. Men over 50, particularly those overweight, are most at risk.*	❑	❑

If you have answered "no" to any of these questions you may be at risk of fatigue.

RACV

Too tired to drive?

What is fatigue?

Driver fatigue contributes to more than 25 per cent of all road crashes in Victoria.

Two main causes:

- lack of quality sleep
- driving at times when you would normally be asleep.

Protect yourself from having a fatigue-related crash by:

- making sure you regularly get enough sleep
- being aware of the fatigue high crash risk times when driving between 1am-6am
- not starting a long trip after a long day's work
- planning your trip so you can take regular breaks
- seeking medical advice if you often feel sleepy
- being aware of the effects of any medication taken.

Once you're on the road:

- regular rest breaks to help keep you alert, but if you feel tired, the only way to keep safe is to stop and sleep
- eat proper and well-balanced meals, preferably at your normal meal times.

If you feel tired when driving, take a Powernap (sleep for 15 to 30 minutes), but allow time to recover from your sleep before commencing to drive.

Don't be fooled by myths about fatigue! The following common beliefs about fatigue are untrue:

myth – Coffee is the best way to combat fatigue.
Coffee only provides short-term benefits; once its effects wear off, you suffer from sleep rebound, which is a major cause of crashes.

myth – Playing music will help keep me alert.
This is only a short-term benefit.

myth – Plenty of fresh air through the window will help keep me alert.
This is only a short-term benefit.

myth – Young people need less sleep.
In fact, drivers under 25 years of age are over-represented in fatigue crashes.

myth – I know when I am tired, or when I am having "sleep attacks".
The danger is that you only find out how tired you are when it's too late.

The only cure for fatigue is sleep

HEALTH, SAFETY AND ENVIRONMENT

SAFE DRIVING – VEHICLE PRE-USE CHECKLIST

SWP 124A

Employee Name: Region/Business Unit:

Date: Time: Vehicle Color:

Vehicle Make/Model: Vehicle License Plate Number:

Job: Job #: # of Km or Mi Driven

Job: Job #: # of Km or Mi Driven

Odometer Start: Odometer Stop: Total Km or Mi Driven:

Stantec Vehicle ☐ Rental ☐ Personal Vehicle ☐

Perimeter Walk Around:	Item is OK	Item is NOT OK
Check for signs of vandalism, negligence, damage or unusual conditions		
Check all tires for excessive and unusual wear and proper inflation – include the spare tire if accessible		
Check under vehicle for signs of leaking fluids		
Check wiper blades (Do they work? Do they need replacement?)		
Check all light systems – brake, head, back-up, running, turn signals, emergency flashers		
Check to make sure doors, truck/toolbox lids, tailgates all open and close properly		
(Make sure you have keys to any toolboxes that you may need to access)		

Check Gauges on Dashboard:

Fuel Level		
Oil light		
Engine Coolant Temperature Gauge		
Service Indicator Lights		
Battery Charge Indicator		

HEALTH, SAFETY AND ENVIRONMENT

SAFE DRIVING – VEHICLE PRE-USE CHECKLIST

SWP 124A

Inside Vehicle:

Make sure seatbelts are present for all who will be riding in the vehicle		
Secure all cargo in the vehicle so that items will not become projectiles in the event of sudden stops or collisions		
Adjust the seat position, rearview and side mirrors		
Adjust temperature controls, vents, radio, etc.		

If Pulling a Trailer:

Is trailer properly hitched to the vehicle (including safety chains)		
All lights are working properly		
Proper trailer for the load (check weight specifications) and load is balanced. If you anticipate the load is near the trailer weight limit, weigh the trailer at a weigh station		
Are tires in good condition and properly inflated?		

Notify the vehicle manager or rental company if you feel that any deficiencies are unsafe and DO NOT drive the vehicle

Signature: _____

HEALTH, SAFETY AND ENVIRONMENT

SAFE DRIVING – VEHICLE PRE-USE CHECKLIST

SWP 124A

1 REVISION HISTORY

Date	Change	Acknowledgments
2010/02/23	Changed HSE to SWP; reformatted header and footer; added revision history	GD
20121015	Updated and reviewed by PS	KDR

Attachment 4
RMS-3 incident/Near Miss Investigation and Collision Kit

INCIDENT REPORT – RMS 3

Incidents involving injury, potential injury, or report of pain, soreness, or discomfort must be reported immediately (within one hour) to a supervisor. Supervisors will then immediately contact ***their HSE representative to develop a plan for assessment and care.*** This form must be completed and **submitted within 24 hours** of any incident. Do not delay submission waiting for signatures. **Email to hse@stantec.com or fax unsigned report to (780) 969-2030** and file locally in compliance with the corporate records retention policy and practices once all signatures have been obtained.

This document contains privileged and confidential information prepared at the request of Stantec's Legal Counsel. The contents of this report are restricted to HR personnel, Risk Management Representatives, Project Manager and PC Leader, and Stantec's Insurer, Adjuster and Legal Counsel. Information collected will be used solely for the purpose of meeting the requirements of Stantec's HSE and insurance programs, complying with applicable legislation, and will be used in accordance with any governing privacy legislation. The information collected will be maintained electronically and may be included in required reports.

SECTION 1: GENERAL INFORMATION			
Office location:		BC number:	
Location of incident:			
Incident date and time:		Date and time reported:	
Project name:		Project number:	
Client Name:			
Person in charge:		Person in Charge Phone:	

SECTION 2: STANTEC EMPLOYEE INFORMATION (if more than one identify extras in incident details below)			
Name:		Phone:	
Job position:		Group name:	
Time employee began work:		Job Experience (in years)	
Type of employment:	Full Time ☐ : Visitor ☐ : Contract ☐ : Volunteer ☐ : Seasonal ☐		
Supervisor:		Supervisor Phone:	

SECTION 3: INCIDENT DETAILS

Type of Incident: *incident types marked with an asterisk, please complete pages 1 and 4 only

See StanNet for a list of Incident Type Definitions

☐ **Report Only*	☐ **Hazard Identification*	☐ **Near Miss*
☐ First Aid	☐ Motor Vehicle Incident	☐ 3rd Party Incident (i.e., Public)
☐ Medical Aid – No Lost Time	☐ Property Damage - Vehicle	☐ Spill or Release
☐ Restricted Work	☐ Property Damage - Other	☐ Utility Strike
☐ Lost Time	☐ Theft	☐ Fire/Explosion/Flood
☐ Fatality	☐ Contractor Recordable Incident	☐ Stop Work Authority
☐ Violence or Harassment	☐ Non-compliance	☐ Other (specify details below)

Describe incident in detail: (include any issues related to people, equipment, materials, environment, and processes)

Immediate corrective actions taken:

SECTION 4: MEDICAL INFORMATION	
Name of first aid attendant:	Injury recorded in first aid log? Yes ☐ No ☐ N/A ☐
Description of first aid or medical treatment administered:	
Clinic/hospital sent to:	
Attending physician/paramedic (if known):	

Area of Injury – Please check all that apply:

☐	Head	☐	Teeth	☐	Upper back	Left		Right	Left		Right	Left		Right	Left		Right
☐	Face	☐	Neck	☐	Lower back	☐	Shoulder	☐	☐	Wrist	☐	☐	Hip	☐	☐	Ankle	☐
☐	Eye(s)	☐	Chest	☐	Abdomen	☐	Arm	☐	☐	Hand	☐	☐	Thigh	☐	☐	Foot	☐
☐	Ear(s)			☐	Pelvis	☐	Elbow	☐	☐	Finger(s)	☐	☐	Knee	☐	☐	Toe(s)	☐
☐	Other	Specify				☐	Forearm	☐				☐	Lower Leg	☐			

Has the injured employee had a previous similar injury or disability?	Yes ☐	No ☐

SECTION 5: PROPERTY OR VEHICLE DAMAGE: STANTEC			
Ownership Details (choose one):	☐ Rented (attach rental agreement)	☐ Stantec Owned	☐ Personal (employee vehicle)
Year, Make, and Model of Vehicle:		Vehicle ID # (VIN)	
Nature of damage:		Estimated cost of damage:	$
Description of damaged property:			
Attending police officer (if known):		Badge #:	
Copy of police report received	Yes ☐ No ☐ If yes, file number:	(attach copy of police report)	

PROPERTY OR VEHICLE DAMAGE: 3RD PARTY			
Name of owner and contact number:			
Year, Make, and Model of Vehicle:		License Plate Number:	
Insurer and Policy Number:			
Injured parties? Yes ☐ No ☐	If yes, describe Injuries:		
Diagram or photographs attached?	Yes ☐ No ☐		

WITNESS INFORMATION - #1			
Name:		Phone Number:	
Witness statement provided?	Yes (attached) ☐	No ☐	

WITNESS INFORMATION - #2			
Name:		Phone Number:	
Witness statement provided?	Yes (attached) ☐	No ☐	

SECTION 6: SPILL OR RELEASE			
Substance:			
Quantity:		Employee(s) exposed via:	☐ Inhalation ☐ Contact ☐ Ingestion ☐ n/a
Off-site impacts observed or anticipated?	Yes ☐ No ☐ If yes, describe:		
Name of regulatory agencies contacted:			
Contact name, number, date and time of call:			

SECTION 7: ANALYSIS

IMMEDIATE/DIRECT CAUSES

A. **UNSAFE ACTIONS** (check off as many as necessary)

- ☐ Operating equipment without authority
- ☐ Failure to warn
- ☐ Failure to secure
- ☐ Operating at improper speed
- ☐ Making safety devices inoperative
- ☐ Removing safety devices
- ☐ Using defective/improper equipment
- ☐ Using equipment improperly
- ☐ Failing to use personal protective equipment properly
- ☐ Improper loading
- ☐ Improper placement
- ☐ Improper lifting or handling
- ☐ Improper position for a task
- ☐ Servicing equipment in operation
- ☐ Horseplay
- ☐ Failure to follow procedure, policy or practice
- ☐ Failure to identify hazard or risk
- ☐ Inattention
- ☐ Failure to communicate
- ☐ Other: Specify

B. **UNSAFE CONDITIONS** (check off as many as necessary)

- ☐ Inadequate guards/barriers
- ☐ Improper/inadequate PPE
- ☐ Defective tools or equipment
- ☐ Congested work area
- ☐ Inadequate warning system
- ☐ Fire and explosion hazards
- ☐ Poor housekeeping; disorder
- ☐ Noise exposure
- ☐ Radiation exposure
- ☐ High or low temperature exposures
- ☐ Inadequate or excess illumination
- ☐ Inadequate ventilation
- ☐ Presence of harmful materials
- ☐ Inadequate instructions/procedures
- ☐ Hazardous environmental conditions; gases, dusts, smokes, fumes, vapours
- ☐ Inadequate information/data
- ☐ Inadequate preparation/planning
- ☐ Inadequate support/assistance
- ☐ Road conditions
- ☐ Weather conditions
- ☐ Other: Specify

BASIC/ROOT CAUSES

C. **PERSONAL FACTORS (check off as many as necessary)**

- ☐ Inadequate physical capability
- ☐ Physical stress
- ☐ Mental stress
- ☐ Lack of skill
- ☐ Lack of knowledge
- ☐ Other: Specify

D. **JOB FACTORS (check off as many as necessary)**

- ☐ Inadequate leadership or supervision
- ☐ Inadequate engineering
- ☐ Inadequate purchasing
- ☐ Abuse or misuse
- ☐ Inadequate maintenance (scheduled or preventative)
- ☐ Inadequate tools or equipment
- ☐ Inadequate work standards
- ☐ Other: Specify
- ☐ Excessive wear and tear
- ☐ Inadequate communications
- ☐ Improper motivation

SECTION 8: FOLLOW-UP

Short-term:	Corrective Action	Assigned To	Target Date	Completion Date

Long-term:	Corrective Action	Assigned To	Target Date	Completion Date

REVIEW COMMENTS		
Involved Employee Comments:		
Signature: Job Title:	Print Name:	Date:
Lead Investigator Comments:		
Signature: Job Title:	Print Name:	Date:
Supervisor/Project Manager:		
Signature: Job Title:	Print Name:	Date:
HSE Representative (OSEC/JH&S Committee/RSEC/HSE Manager):		
Signature: Job Title:	Print Name:	Date:
Management Review:		
Signature: Job Title:	Print Name:	Date:
Client Review (if required):		
Signature: Job Title:	Print Name:	Date:
Additional Comments:		

Contact information.
Immediately Call Corporate HSE, and Practice & Risk Management, and (if injuries) Human Resources.

Health, Safety & Environment: Call:
Clint Reuter Office (949) 923-6258 Cell (818) 395-8556

Practice & Risk Management: Fax unsigned report to (780) 969-2030

Human Resources: **For Injuries Only** contact the Human Resources Rep. for your region:

US East: Jennie Moore
Jennie Moore: Phone: (585) 413-5241, Cell: (585) 613-8022, Fax: (585) 272-7442,
E-Mail: jennie.moore@stantec.com.

US West: Peggy Ramos
Peggy Ramos: Phone: (949) 923-6061, Fax: (949) 923-6015,
E-Mail: peggy.ramos@stantec.com

US Mtn Desert: (Arlington, Houston, Midland, Phoenix, Scottsdale, Ponca City SLC): Shannon Drake
Shannon Drake: Phone: (602) 707-4627, Fax (602) 532-7784,
E-Mail: Shannon.Drake@stantec.com

US Mtn Desert: (Dallas, Fort Worth, Denver, Fort Collins, Golden, Las Vegas, Reno, Oklahoma City, Tucson) Sheryl Appelt
Sheryl Appelt: Phone: (602) 707-9495, Fax (602) 926-2217,
E-Mail: Sheryl.Appelt@stantec.com

Fax and/or scan-email report to all three.

VEHICLE COLLISION KIT

Stantec Vehicle Collision Kit

The following items should be enclosed in an envelope in the glove box of all Stantec vehicles:

- Vehicle Registration Card
- Vehicle Insurance Card with name and phone number of agent
- Name of Preferred Body Shop or Maintenance Facility to take damaged vehicle (usually nearest Dealership)
- Owner's Manual
- Disposable Camera
- Note Pad and Pen

WHAT TO DO AFTER A COLLISION:

Auto collisions: Even the most careful drivers may be involved. Knowledge of what to do **after** the collision can make the experience a little less frightening and decrease the chance of unnecessary complications.

After a Collision

- Check for injuries. Life and health are more important than damage to vehicles.
- Make note of specific damages to all vehicles involved.
- Write down the names, addresses and license numbers of persons involved in the collision. Also, write a description of the other vehicles.
- Call the police, even if the collision is minor.
- Jot down names and addresses of anyone who may have witnessed the collision. This can prevent disagreement concerning how the collision actually happened.

Other Do's and Don'ts

- DO jot down details about the collision, the location, and circumstances such as weather conditions and visibility.
- DO notify your insurance agent about the collision immediately.
- DON'T sign any document unless it is for the police or <u>your insurance agent</u>.

Remember that a <u>Stantec incident investigation form must also be completed</u> following any collision. The collision must be reported to the Stantec Project Manager in addition to the following people:

Practice and Risk Management :
Fax: 780-969-2030

Clint Reuter Office (949) 923-6258 Cell (818) 395-8556

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 05/01/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: ANDREA OTTO	
AON REED STENHOUSE INC. AON RISK SERVICES CENTRAL, INC. 900 - 10025 - 102A AVENUE EDMONTON, AB T5J 0Y2	PHONE (A/C, No, Ext): 1-952-807-0679	FAX (A/C, No): 1-312-381-6608
	E-MAIL ADDRESS: ANDREA.OTTO@AON.COM	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: ZURICH AMERICAN INSURANCE COMPANY	16535
INSURED	INSURER B: SENTRY INSURANCE A MUTUAL COMPANY	24988
STANTEC CONSULTING SERVICES INC. 25864-F BUSINESS CENTER DRIVE, REDLANDS, CA 92374	INSURER C: ZURICH INSURANCE COMPANY	
	INSURER D: SENTRY INSURANCE A MUTUAL COMPANY	24988
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 608 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X CONTRACTUAL/CROSS LIABILITY X OWNERS & CONTRACTORS PROTECTIVE GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC			GLO5415704 XCU COVER INCLUDED	05/01/14	05/01/15	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ $ $ $ $ $	2,000,000 300,000 10,000 2,000,000 4,000,000 2,000,000
B	**AUTOMOBILE LIABILITY** X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS			90-17043-03	11/01/13	11/01/14	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $	1,000,000
C	X **UMBRELLA LIAB** X OCCUR X **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $10,000			8831307 EXCESS GENERAL, AUTO AND EMPLOYERS LIABILITY (FOLLOW FORM)	05/01/14	05/01/15	EACH OCCURRENCE AGGREGATE	$ $	5,000,000 5,000,000
D	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		90-17043-01	11/01/13	11/01/14	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

REDLANDS, CA.

CERTIFICATE HOLDER

TO WHOM IT MAY CONCERN

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Andrea R. Otto

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 11/01/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: ANDREA OTTO
AON REED STENHOUSE INC. AON RISK SERVICES CENTRAL, INC. 900 - 10025 - 102A AVENUE EDMONTON, AB T5J 0Y2	PHONE (A/C, No, Ext): 1-952-807-0679 FAX (A/C, No): 1-312-381-6608 E-MAIL ADDRESS: ANDREA.OTTO@AON.COM

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
STANTEC CONSULTING SERVICES INC. 25864-F BUSINESS CENTER DRIVE, REDLANDS, CA 92374	INSURER A: ZURICH AMERICAN INSURANCE COMPANY	16535
	INSURER B: SENTRY INSURANCE A MUTUAL COMPANY	24988
	INSURER C: ZURICH INSURANCE COMPANY	
	INSURER D: SENTRY INSURANCE A MUTUAL COMPANY	24988
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 582 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	**GENERAL LIABILITY** X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X CONTRACTUAL/CROSS LIABILITY X OWNERS & CONTRACTORS PROTECTIVE GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC			GLO5415704 XCU COVER INCLUDED	05/01/14	05/01/15	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ $ $ $ $ $	2,000,000 300,000 10,000 2,000,000 4,000,000 2,000,000
B	**AUTOMOBILE LIABILITY** X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS			90-17043-03	11/01/14	11/01/15	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $	1,000,000
C	X **UMBRELLA LIAB** X OCCUR X **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $10,000			8831307 EXCESS GENERAL, AUTO AND EMPLOYERS LIABILITY (FOLLOW FORM)	05/01/14	05/01/15	EACH OCCURRENCE AGGREGATE	$ $	5,000,000 5,000,000
D	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		90-17043-01	11/01/14	11/01/15	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	1,000,000 1,000,000 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

REDLANDS, CA.

CERTIFICATE HOLDER

TO WHOM IT MAY CONCERN

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Andrea R. Otto

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APPENDIX B
BORING GPS COORDINATES

APPENDIX B
BORING GPS COORDINATES
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

Boring ID	Latitude [1] (degrees north)	Longitude [1] (degrees west)	Latitude [1] (decimal degrees north)	Longitude [1] (decimal degrees west)
NORTH CANYON (STAGING) AREA				
1278-101	34 ° 5 ′ 24.119	118 ° 28 ′ 33.342	34.09003306	118.47592833
1278-102	34 ° 5 ′ 24.466	118 ° 28 ′ 33.950	34.09012944	118.47609722
1278-103	34 ° 5 ′ 25.090	118 ° 28 ′ 33.674	34.09030278	118.47602056
1278-104	34 ° 5 ′ 25.208	118 ° 28 ′ 34.825	34.09033556	118.47634028
1278-105	34 ° 5 ′ 25.850	118 ° 28 ′ 34.435	34.09051389	118.47623194
1278-106	34 ° 5 ′ 26.123	118 ° 28 ′ 33.886	34.09058972	118.47607944
1278-107	34 ° 5 ′ 26.124	118 ° 28 ′ 35.008	34.09059000	118.47639111
1278-108	34 ° 5 ′ 26.704	118 ° 28 ′ 34.644	34.09075111	118.47629000
1278-109	34 ° 5 ′ 26.798	118 ° 28 ′ 34.107	34.09077722	118.47614083
1278-110	34 ° 5 ′ 25.105	118 ° 28 ′ 35.907	34.09030694	118.47664083
NORTH-NORTH CANYON (DEBRIS) AREA				
1278-111	34 ° 5 ′ 30.070	118 ° 28 ′ 34.276	34.09168611	118.47618778
1278-112	34 ° 5 ′ 30.510	118 ° 28 ′ 34.890	34.09180833	118.47635833
1278-113	34 ° 5 ′ 31.622	118 ° 28 ′ 34.587	34.09211722	118.47627417
1278-114	34 ° 5 ′ 31.856	118 ° 28 ′ 35.047	34.09218222	118.47640194
1278-115	34 ° 5 ′ 32.885	118 ° 28 ′ 34.693	34.09246806	118.47630361
1278-116	34 ° 5 ′ 33.088	118 ° 28 ′ 35.019	34.09252444	118.47639417
1278-117	34 ° 5 ′ 34.571	118 ° 28 ′ 35.012	34.09293639	118.47639222
1278-118	34 ° 5 ′ 34.829	118 ° 28 ′ 35.304	34.09300806	118.47647333
1278-119*	No Data - Not on Property			
SOUTHBOUND STRIP PARCEL				
1278-120	34 ° 4 ′ 31.053	118 ° 28 ′ 7.972	34.07529250	118.46888111
1278-121	34 ° 4 ′ 32.144	118 ° 28 ′ 8.895	34.07559556	118.46913750
1278-122	34 ° 4 ′ 33.400	118 ° 28 ′ 9.880	34.07594444	118.46941111
1278-123	34 ° 4 ′ 34.940	118 ° 28 ′ 10.792	34.07637222	118.46966444
1278-124*	No Data - Inaccessible			
1278-125*	No Data - Inaccessible			
1278-126*	No Data - Inaccessible			
1278-127	34 ° 4 ′ 40.588	118 ° 28 ′ 16.783	34.07794111	118.47132861
1278-128	34 ° 4 ′ 41.582	118 ° 28 ′ 18.004	34.07821722	118.47166778
1278-129	34 ° 4 ′ 43.954	118 ° 28 ′ 19.219	34.07887611	118.47200528
1278-130	34 ° 4 ′ 44.723	118 ° 28 ′ 20.110	34.07908972	118.47225278
1278-131	34 ° 4 ′ 45.540	118 ° 28 ′ 21.140	34.07931667	118.47253889
1278-132	34 ° 4 ′ 46.467	118 ° 28 ′ 22.308	34.07957417	118.47286333
1278-133	34 ° 4 ′ 47.558	118 ° 28 ′ 23.341	34.07987722	118.47315028
1278-134	34 ° 4 ′ 48.858	118 ° 28 ′ 23.905	34.08023833	118.47330694
1278-135	34 ° 4 ′ 50.057	118 ° 28 ′ 24.586	34.08057139	118.47349611
1278-136	34 ° 4 ′ 51.156	118 ° 28 ′ 25.181	34.08087667	118.47366139
1278-137	34 ° 4 ′ 52.608	118 ° 28 ′ 26.066	34.08128000	118.47390722
1278-138	34 ° 4 ′ 54.292	118 ° 28 ′ 27.055	34.08174778	118.47418194
1278-139	34 ° 4 ′ 55.993	118 ° 28 ′ 27.950	34.08222028	118.47443056
1278-140	34 ° 4 ′ 57.338	118 ° 28 ′ 28.528	34.08259389	118.47459111
1278-141	34 ° 4 ′ 58.898	118 ° 28 ′ 28.921	34.08302722	118.47470028

APPENDIX B
BORING GPS COORDINATES
SI SITE INVESTIGATION
LA-405, PM 28.8/39.0
LOS ANGELES COUNTY, CALIFORNIA
EFIS:0700000107 (EA#120301)
TASK ORDER #23
CONTRACT 07A3322

Boring ID	Latitude [1] (degrees north)	Longitude [1] (degrees west)	Latitude [1] (decimal degrees north)	Longitude [1] (decimal degrees west)
1278-142	34 ° 4 ′ 59.987	118 ° 28 ′ 29.228	34.08332972	118.47478556
1278-143	34 ° 5 ′ 0.732	118 ° 28 ′ 29.560	34.08353667	118.47487778
1278-144	34 ° 5 ′ 1.964	118 ° 28 ′ 29.544	34.08387889	118.47487333
1278-145	34 ° 5 ′ 2.911	118 ° 28 ′ 30.161	34.08414194	118.47504472
1278-146	34 ° 5 ′ 4.208	118 ° 28 ′ 30.338	34.08450222	118.47509389
1278-147	34 ° 5 ′ 5.907	118 ° 28 ′ 30.628	34.08497417	118.47517444
1278-148	34 ° 5 ′ 7.968	118 ° 28 ′ 30.927	34.08554667	118.47525750
1278-149	34 ° 5 ′ 10.012	118 ° 28 ′ 31.130	34.08611444	118.47531389
1278-150	34 ° 5 ′ 11.424	118 ° 28 ′ 31.341	34.08650667	118.47537250
1278-151	34 ° 5 ′ 13.141	118 ° 28 ′ 31.619	34.08698361	118.47544972
1278-152	34 ° 5 ′ 14.805	118 ° 28 ′ 31.799	34.08744583	118.47549972
1278-153	34 ° 5 ′ 15.817	118 ° 28 ′ 31.941	34.08772694	118.47553917
1278-154	34 ° 5 ′ 17.304	118 ° 28 ′ 32.112	34.08814000	118.47558667
1278-155	34 ° 5 ′ 17.499	118 ° 28 ′ 32.196	34.08819417	118.47561000
NORTHBOUND STRIP PARCEL				
1278-156*	No Sample - Removed from Scope due to Landscaping			
1278-157*	No Sample - Removed from Scope due to Landscaping			
1278-158*	No Sample - Removed from Scope due to Landscaping			
1278-159*	No Sample - Removed from Scope due to Landscaping			
1278-160*	No Sample - Removed from Scope due to Landscaping			
1278-161*	No Sample - Removed from Scope due to Landscaping			
1278-162	34 ° 5 ′ 23.333	118 ° 28 ′ 30.409	34.08981472	118.47511361
1278-163	34 ° 5 ′ 24.957	118 ° 28 ′ 30.717	34.09026583	118.47519917
1278-164	34 ° 5 ′ 26.442	118 ° 28 ′ 31.017	34.09067833	118.47528250
1278-165	34 ° 5 ′ 28.937	118 ° 28 ′ 31.489	34.09137139	118.47541361
1278-166	34 ° 5 ′ 29.877	118 ° 28 ′ 31.677	34.09163250	118.47546583
1278-167	34 ° 5 ′ 30.955	118 ° 28 ′ 31.895	34.09193194	118.47552639
1278-168	34 ° 5 ′ 14.000	118 ° 28 ′ 28.551	34.08722222	118.47459750
1278-169	34 ° 5 ′ 12.876	118 ° 28 ′ 29.007	34.08691000	118.47472417

Notes: [1] North American Datum 83 (WPS 84)
* No Data (Offsite, Inaccessible, or Landscape Disturbance)

APPENDIX C
BORING LOGS

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-101 & 1278-102	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200 02/24/15	**Northing:**	**Easting:**	
Drilling Start: ~~2/19~~ 1155 **Completed:** 1220	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 1 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. EDBLAD	**Checked By:**	

1278-101

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			BARE SOIL / GRAVEL @ SURFACE						0	
1		GM	SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% ANGULAR GRAVEL; 30% SILT; FINE TO COARSE GRAINED SAND; VERY DENSE GRAVEL (MIXED BEDROCK AND PEA GRAVEL); MOIST; NO STAINS OR ODORS	X	1210 1278-101-0			8.0	1	SOIL CUTTINGS
2									2	
3									3	
4			REFUSAL @ 1' BGS; STEPPED OUT 2' NORTH AND 2' SOUTH						4	
5									5	
			BOREHOLE TERMINATED @ 1' BGS							

1278-102

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			BARE SOIL / GRAVEL @ SURFACE						0	
1		GM	SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% ANGULAR GRAVEL; ~30% SILT; FINE TO COARSE GRAINED SAND; VERY DENSE GRAVEL (MIXED BEDROCK AND PEA GRAVEL); MOIST; NO STAINS OR ODORS	X	1156 1278-102-0			4.8	1	SOIL CUTTINGS
2									2	
3									3	
4									4	
5			REFUSAL @ 1' BGS; STOPPED OUT 2' SE AND 2' SW						5	
			BOREHOLE TERMINATED @ 1' BGS							

1278-102

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-103 & 1278-104	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200.0055 1120	**Northing:**	**Easting:**	
Drilling Start: 02/24/15 **Completed:** 02/24/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 1 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. EDELAD	**Checked By:**	

1278-103

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		GM	BARE SOIL / GRAVEL @ SURFACE SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% ANGULAR GRAVEL (MIXED BEDROCK AND PEA GRAVEL); ~30% SILT; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS	X	1108 1278-103-0			1.7	0	SOIL CUTTINGS
1									1	
2									2	
3									3	
4									4	
5			REFUSAL @ 1' BGS; STEPPED OUT 2' NORTH AND 2' EAST						5	

1278-104

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		GM	BARE SOIL / GRAVEL @ SURFACE SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% ANGULAR GRAVEL (MIXED BEDROCK AND PEA GRAVEL); ~30% SILT; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS	X	1057 1278-104-0			1.3	0	SOIL CUTTINGS
1									1	
2									2	
3									3	
4									4	
5			REFUSAL @ 1' BGS; STEPPED OUT 2' NORTH AND 2' SOUTH						5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 105 & 1278-106	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200 ~~1044~~ 1025 1050	**Northing:**	**Easting:**	
Drilling Start: 02/24/15 **Completed:** 02/24/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 1 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. EDBLAD	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		GM	BARE SOIL / GRAVEL @ SURFACE SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% ANGULAR GRAVEL (MIXED BEDROCK AND PEA GRAVEL); ~30% SILT; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS	X	1048 1278-105-0			1.7	0	CUTTINGS
1									1	
2									2	
3									3	
4									4	
5			REFUSAL @ 1' BGS; STEPPED OUT 2' NORTH AND 2' WEST						5	
0		GM	BARE SOIL / GRAVEL @ SURFACE SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% ANGULAR GRAVEL (MIXED BEDROCK AND PEA GRAVEL); ~30% SILT; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS	X	1028 1278-106-0			2.4	0	SOIL CUTTINGS
5			REFUSAL @ 1 BGS; STEPPED OUT 2' NORTH AND 2' WEST						5	

1278 - 105

1278 - 106

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-107 & 1278-108	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 0958 02/24/15 **Completed:** 1015	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 1 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. GOBLAN	**Checked By:**	

1278-107

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		GM	BARE SOIL / GRAVEL @ SURFACE SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% ANGULAR GRAVEL; ~30% SILT; FINE TO COARSE GRAINED SAND; VERY DENSE GRAVEL (MIXED BEDROCK AND PEA GRAVEL); MOIST; NO STAINS OR ODORS.	X	1014 1278-107-0			1.8	0	SILTY GRAVEL
1			REFUSAL @ 1' BGS; STEPPED OUT 2' WEST AND 2' SOUTH						1	
2			BOREHOLE TERMINATED @ 1' BGS						2	
3									3	
4									4	
5									5	

1278-108

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		GM	BARE SOIL / GRAVEL @ SURFACE SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/6); ~60% FINE TO COARSE ANGULAR GRAVEL; ~30% SILT; FINE TO COARSE GRAINED SAND; VERY DENSE GRAVEL (MIXED BEDROCK AND PEA GRAVEL; MOIST; NA STAINS OR ODORS	X	0958 1278-108-0			2.0	0	SILTY GRAVEL
1			REFUSAL @ 1 BGS; STEPPED OUT 2' NW AND 2' EAST						1	
2			BOREHOLE TERMINATED @ 1' BGS						2	
3									3	
4									4	
5									5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278 - 109 & 1278-	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200 02/24/15		**Northing:**	**Easting:**
Drilling Start: 0920	**Completed:** 0940	**Latitude:**	**Longitude:**
Installation Start: NA	**Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 1 &
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:** S. EDBLAD	**Checked By:**

1278 - 109

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
		GM	BARE SOIL / GRAVEL @ SURFACE SILTY GRAVEL (GM); YELLOWISH BROWN (10YR 5/4) ~ 60% FINE TO COARSE ANGULAR GRAVEL; ~30% SILT; FINE TO COARSE GRAINED SAND; VERY DENSE GRAVEL; MOIST; NO STAINS OR ODORS; MIXED BEDROCK AND PEA GRAVEL WITH DEPTH (VERY DENSE) → VI DENSE ROCK REFUSAL @ 1' BGS; STEPPED OUT 4' NORTH AND 2' WEST BOREHOLE TERMINATED @ 1' BGS	X	0920 1278-109-1			2.5	0 1 2 3 4 5	SOIL CUTTINGS
									0 5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278-110 & 1278-	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200		**Northing:**	**Easting:**
Drilling Start: 02/24/15 1225	**Completed:** 02/24/15 1255	**Latitude:**	**Longitude:**
Installation Start: NA	**Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 4 &
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:** S. GOBLAD	**Checked By:**

1278 - 110

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
		ML	GRASS @ SURFACE GRAVELLY SILT (ML); DARK GRAYISH BROWN (10YR 4/2); ~60% SILT; ~30% ANGULAR GRAVEL (BEDROCK LOOSE); FINE TO MEDIUM GRAINED SAND; TRACE CLAY; ROOTS @ SURFACE; MOIST; VERY ORGANIC; NO ODORS/ STAINS; INCREASED GRAVEL (LOOSE BEDROCK) WITH DEPTH NON-PLASTIC SLOUGH OR COLLUVIUM	X	1228 1278-110-0 1235 1278-110-1.5 1252 1278-110-3.5			2.3 8.6 3.8	0 1 2 3 4 5	SOIL CUTTINGS
			BOREHOLE TERMINATED @ 4' BGS							

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-112 & 1278-111	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 2/24/15 **Completed:** 2/24/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 1 & 0.5	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** J. Stagno / A. Sawant	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-112			Hydromulch @ surface							
		SW-SM	Silty Sand with gravel; well graded sand; ~~fine~~ (10YR 4/2); Dark grayish brown; fine to medium, coarse sand, med. gravel; moist, no staining, no odor	X	1278-1 1100	12-0		11.0		Soil Cuttings
			Refusal @ 1' bgs, stepped out ~2' east and ~2' south from original boring							
			Borehole terminated at 1' bgs							
1278-111			HYDROMULCH @ SURFACE							
		SW-SM	Silty sand w/ gravel; well graded fine to med. coarse sand; (10YR 4/2; dark grayish brown); fine-med. gravel; moist, no stain, no odor.	X	1278-111-0 1120			5.7		Soil cuttings
			Refusal @ 0.5' bgs, stepped out ~2' east & 2' south from original boring. Borehole terminated @ 0.5' bgs							

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278-114 & 1278-113	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200		**Northing:**	**Easting:**
Drilling Start: 2/24/15	**Completed:** 2/24/15	**Latitude:**	**Longitude:**
Installation Start: NA	**Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 1 & 0.6
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:** A. Sawant.	**Checked By:**

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	~~Measured Recovery (ft)~~	~~Blow Counts~~	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-114			Hydromulch @ surface Silty sand with gravel; well graded sand; ~~me~~ fine-med, coarse sand; med. gravel, (10YR 4/2). D. grayish brown, moist, no stain, no odor. Silty gravel. ~30% silt; fine-med. grained sand; angular gravel, bed rock; very dense; moist, no odor, no stain. Refusal @ 1' bgs; Stepped out ~2' east & 2' south. Borehole terminated at 1' bgs	X	1278-114-0 1005			4.2		SOIL CUTTINGS
1278-113			Hydromulch @ surface Silty sand w gravel (10YR 4/2); Dark grayish brown; well graded, med-coarse grained sand, med. gravel, moist, no stain, no odor Bedrock @ 0.6' bgs. Refusal @ 0.6' bgs. stepped out ~2' east, & 2' south. Borehole terminated @ 0.6' bgs	X	1278-113-0 1040			5.4		SOIL CUTTINGS

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-116 & 1278-115	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 02/24/15 **Completed:** 02/24/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 0.5 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** T. WALSH / A. Stawar	**Checked By:**	

1278-116

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		GM	HYDROMULCH @ SURFACE SILTY GRAVEL (GM); 10YR 4/2 (D. GRAYISH BRN); FINE-MEDIUM GRAINED SAND; WELL GRADED GRAVEL (ANGULAR); BEDROCK; VERY DENSE; MOIST; NO STAINING OR ODOR. 50% GRAVEL; 20% SAND; 30% SILT.	X	0920 1278-116-0			5.8	0	Soil cuttings
1			REFUSAL @ ~0.5' BGS; STEPPED OUT ~2' EAST & 2' SOUTH BOREHOLE TERMINATED @ 0.5' bgs						1	
2									2	
3									3	
4									4	
5									5	

1278-115

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		GM	Hydromulch @ Surface Silty Gravel (GM); 10YR 4/2 (D. Grayish brown); fine-med grained sand; gravel (angular); bed rock; V. dense; moist, no stain; no odor;	X	0935 1278-115-0			2.1	0	Soil cuttings
1			Refusal @ 1' BGS. stepped out ~2' east & south. Borehole terminated at 1' bgs						1	
2									2	
3									3	
4									4	
5									5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-117 & 1278-118
Location: SR 405 - Getty Center	**Page:** 1 of 1
Project #: 1858032023.200 0815 0815 0912	**Northing:**
Drilling Start: 02/24/15 **Completed:** 02/24/15	**Latitude:**
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**
Drilling Company: Stantec	**Initial DTW (ft):**
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. GARLAND / A. SKWARA **Checked By:**

Stantec

Easting:
Longitude:
TOC Elev (ft):
Borehole Depth (ft): 1 & 0.5
Well Depth (ft): NA
Borehole Dia (in): ~3-4"

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			HYDROMULCH @ SURFACE						0	
	MC GM		~~SILT WITH GRAVEL~~ SILTY GRAVEL (GM); DARK GRAYISH BROWN (10YR 4/2); ~30% SILT; FINE TO MEDIUM GRAINED SAND; ANGULAR GRAVEL (4-6 cm DIA); ~50% GRAVEL (BED ROCK) VERY DENSE; MOIST; NO STAINS OR ODORS.	X	0815 1278-117			4.6		Soil cuttings
1			REFUSAL @ ~1' BGS; STEPPED OUT 2' EAST AND 2' SOUTH BOREHOLE TERMINATED @ 1' BGS						1	
0			HYDROMULCH @ Surface						0	
	GM		Silty Gravel (GM). Dark grayish brown (10YR 4/2); ~30% silt. fine to medium grained sand; angular gravel (4-6cm dia); ~50% gravel (bed rock) v. dens; no stain; no odor.	X	0900 1278-118			10.7		Soil cuttings
0.5			Refusal @ ~0.5' bgs; Stepped out 2' east & 2' south Borehole terminated @ 0.5' bgs						0.5	

1278-117

1278-118

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278 - 121 & 1278- 120	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200	02/25/15	**Northing:**	**Easting:**
Drilling Start: 1401	**Completed:** 1450	**Latitude:**	**Longitude:**
Installation Start: NA	**Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 2 & 1
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:** S. EDBLAD	**Checked By:**

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, line to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (%)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-121		ML	BARESOIL @ SURFACE							SOIL CUTTINGS
		SM	SANDY SILT WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/6); ~50% SILT; ~10% LEAN CLAY; ~20% FINE GRAVEL; FINE TO COARSE GRAINED SAND; NON-PLASTIC; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL AND DENSITY WITH DEPTH (VERY DENSE @ 2' BGS).	X	1401 1278-121-0			8.5		
				X	1416 1278-121-1.5			5.4		
			↳ COMPACTED GRAVEL							
			→ DENSE GRAVEL							
			REFUSAL @ 1' BGS; STEPPED OUT 2' SOUTH (SAMPLE @ 1.5' BGS) AND 4' SOUTH (REFUSAL @ 2' BGS)							
			BOREHOLE TERMINATED @ 2' BGS							
1278-120			SPARSE VEGETATION @ SURFACE							SOIL CUTTINGS
			GRAVELLY LEAN CLAY (CL); DARK BROWN (10YR 3/3); ~30% LEAN CLAY; ~30% SILT; ~30% ANGULAR GRAVEL; FINE TO MEDIUM GRAINED SAND; LOW PLASTICITY; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL WITH DEPTH; REFUSAL @ 1' BGS DUE DENSE GRAVEL.	X	1432 1278-120-0			3.4		
			REFUSAL @ 1' BGS (LARGE ROCK - COBBLE RIP RAP); STEPPED OUT 4' SOUTH AND 4' SOUTHEAST							
			BOREHOLE TERMINATED @ 1' BGS							

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 123 & 1278- 122	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 2/25/15 **Completed:** 2/25/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 1' & 10"	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** A. Sawant	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-123			1 Roadbase @ Surface AB gravel Silty gravel; well graded sand (10YR 4/2), dark grayish brown; fine-med, coarse sand, med. gravel, no stain no odor. Refusal due to bedrock @ 1 ft bgs. Stepout 2' North & 2' east.	X	1278-123-0 1400			5.4	0 1 2 3 4 5	Soil cuttings
1278-122			Roadbase @ Surface. Silty Sand; (10YR 4/2) dark grayish brown, well graded sand, fine-med. coarse grained sand, few gravel observed. no stain no odor, moist. Refusal from bedrock @ 10". Stepout 2' north & 2' northeast. Refusal. Hole terminated @ 10".	X	1278-122-0 1420			4.8	0 5 0	Soil cuttings

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-127 & 1278-128	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200 03/05/15	**Northing:**	**Easting:**	
Drilling Start: 0946 **Completed:** 1020	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. EDGLAD	**Checked By:**	

1278-127

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SM	GRASS / LOOSE ROCK @ SURFACE SILTY SAND WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/6); ~30% SILT; ~30% SUBROUNDED GRAVEL (LOOSE BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL WITH DEPTH (VERY DENSE); COLOR DARKENS WITH DEPTH TO (10YR 3/3) DARK BROWN.	X	0946 1278-127-0			2.2		SOIL CUTTINGS
1				X	0954 1278-127-1.5			4.6		
2										
3				X	1003 1278-127-3.5			2.1		
4			REFUSAL @ 1' BGS; STEPPED OUT 2' WEST (1278-127-1.5)/ (1278-127-3.5) BOREHOLE TERMINATED @ 4' BGS							
5										

1278-128

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SM	GRASS AND COMPOST / LOOSE ROCK @ SURFACE SILTY SAND WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/4); ~30% SILT; ~30% SUBROUNDED AND ANGULAR GRAVEL (LOOSE BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL WITH DEPTH (VERY DENSE SANDSTONE)	X	1013 1278-128-0			12.8		SOIL CUTTINGS
1				X (S1)						
2				X (S2)						
3			REFUSAL @ 1' BGS (VERY DENSE SANDSTONE); STEPPED OUT 2' WEST AND 2' NORTH BOREHOLE TERMINATED @ 1' BGS							
4										
5										

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 129 & 1278-130	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 2/25/15 **Completed:** 2/25/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 4	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** A. Savant	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-129			Vegetation @ surface Silty Sand (10YR 4/4); dark yellowish brown; ~~poorly~~ well graded fine-mudgrained sand; few roots observed, trace gravel, no stain, no odor, moist, cobbles S.A.A. med. gravel observed, few roots observed. @ Hole terminated @ 4' bgs.	X X X	1278-129-0 0750 1278-129 0800 1278-129-3.5 0825			7.4 -1.5 8.8 2.5	0 1 2 3 4 5	SOIL CUTTINGS
1278-130			Vegetation @ surface Silty Sand (10YR 4/4); dark yellowish brown; ~~poorly~~ well graded fine, med. coarse grained sand; few roots observed, trace clay; no stain, no odor, moist no roots observed, SAA Hole terminated @ 4' bgs	X X X	1278-130-0 0830 1278-130-1.5 0840 1278-130-3.5 0850			106 8.6 20	0 1 2 3 4 5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 131 & 1278- 132	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200 03/05/15	**Northing:**	**Easting:**	
Drilling Start: 1044 **Completed:** 1139	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 2 & 4	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. EDELMAN	**Checked By:**	

1278 - 131

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			GRASS AND GRAVEL @ SURFACE						0	
1		SW SM	SILTY SAND WITH GRAVEL (SM); YELLOWISH BROWN (10YR 5/6); ~20% SILT; ~20% GRAVEL (SANDSTONE); FINE TO COARSE GRAINED SAND; INCREASED SANDSTONE GRAVEL (ANGULAR) WITH DEPTH; MOIST; NO STAINS OR ODORS	X	1044 1278-131-0			2.1	1	
2				X	1050 1278-131-1.5			6.5	2	SOIL CUTTINGS
3			→ DENSE SANDSTONE						3	
4			REFUSAL @ 2' BGS; STEPPED OUT 2' BGS SOUTH AND 2' EAST						4	
5			BOREHOLE TERMINATED @ 2' BGS						5	

1278 - 132

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			GRASS @ SURFACE						0	
1		SM	SILTY SAND WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/4); ~30% SILT; ~20% FINE GRAVEL; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED SILT WITH DEPTH (~40%); COLOR CHANGES WITH DEPTH TO YELLOWISH BROWN (10YR 5/6); DECREASED GRAVEL WITH DEPTH; NON-PLASTIC	X	1114 1278-132-0			1.8	1	
2				X	1130 1278-132-0			2.1	2	SOIL CUTTINGS
3				X	1139 1278-132-3.5			4.2	3	
4									4	
5			BOREHOLE TERMINATED @ 4' BGS						5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 133 & 1278- 134
Location: SR 405 - Getty Center	**Page:** 1 of 1
Project #: 1858032023.200 03/05/15	**Northing:**
Drilling Start: 1334 **Completed:** 1437	**Latitude:**
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**
Drilling Company: Stantec	**Initial DTW (ft):**
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. BOBLAD

Stantec

Easting:
Longitude:
TOC Elev (ft):
Borehole Depth (ft): 4 & 4
Well Depth (ft): NA
Borehole Dia (in): ~3-4"
Checked By:

1278 - 133

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			GRASS @ SURFACE						0	SOIL CUTTINGS
1		SM	SILTY SAND (SM); BROWNISH YELLOW (10YR 6/8); ~30% SILT; ~10% FINE ANGULAR GRAVEL; FINE TO MEDIUM GRAINED SAND; TRACE COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED DENSITY WITH DEPTH (SANDSTONE BEDROCK); VERY DENSE FROM 3' TO 4' BGS	X	1334 1278-133-0			3.1	1	
2				X	1342 1278-133-1.5			5.0	2	
3			DECREASED SILT						3	
4			CEMENTATION	X	1354 1278-133-3.5			5.5	4	
5			BOREHOLE TERMINATED @ 4' BGS						5	

1278 - 134

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			GRASS @ SURFACE						0	SOIL CUTTINGS
1		SM	SILTY SAND (SM); YELLOWISH BROWN (10YR 5/6); ~30% SILT; ~10% FINE ANGULAR GRAVEL; FINE TO MEDIUM GRAINED SAND; TRACE COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; DECREASED SILT WITH DEPTH; INCREASED DENSITY/ CEMENTATION WITH DEPTH (SANDSTONE BEDROCK) VERY DENSE FROM 3' TO 4' BGS	X	1410 1278-134-0			7.4	1	
2				X	1417 1278-134-1.5			5.6	2	
3									3	
4				X	1437 1278-134-3.5			4.6	4	
5			BOREHOLE TERMINATED @ 4 BGS						5	

1278 - 134

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 135 & 1278- 136	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 2/25/15 **Completed:** 2/25/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 4	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** A. Savant / T. Welch	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-135			Vegetation @ Surface Silty sand (10YR 6/4); light yellowish brown; poorly graded fine-med. grained sand, ~30% silt; micaceous no odor, no stain, moist. Poorly graded sand (SP); ~~(8/4 10YR 8/4)~~ pale very pale brown. fine grained sand, trace med. gravel, moist; no odor, no stain., trace silt. Hole terminated @ 4' bgs		1278-135-0 0905 1278-135-1.5 0915 1278-135-3.5 0930			10.1 6.7 9.8	0 1 2 3 4 5	SOIL CUTTINGS
1278-136		ML/SM SP	VEGETATION @ SURFACE SANDY SILT; 10YR 4/3 (Brown); F.G. SAND; MOIST; FIRM; ABUNDANT ORGANICS (Roots, Rootlets) (Roots + Rootlets) NO STAINING; NO ODOR POORLY GRADED SAND; F.G. SAND; 10YR 6/4 (LT. YELLOWISH BRN) MOIST. SOME CEMENTATION (Roots) SAA T.D.@ 4' Bgs		1278-136-0 1040 1278-136-1.5 1050 1278-136-3.5 1100			3.2 4.5 4.4	0 1 2 3 4 5	SOIL CUTTINGS

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 137 & 1278- 138	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 2/25/15 **Completed:** 2/25/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** &	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** A. Saulant	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-137			Vegetation @ surface Silty Sand (10YR3/3) dark brown; fine-med. grained well graded sand; few med. gravel, few roots observed; no stain no odor, moist @ refusal @ 2ft bgs. Step out 2' east & 2' south. Hole terminated @ 2' bgs	X	1278-137-0 1120			11.4	0 1 2 3 4 5	Soil Cuttings
				X	1278-137-1.5 1130			13.1		
1278-138			Vegetation @ surface Silty Sand (10YR3/3) dark brown; fine-med grained sand, well graded, few med gravel, roots & rootlets observed; no staining; no odor; moist	X	1278-138-0 1155			11.5	0 1 2 3 4 5	Soil Cuttings
				X	1278-138-1.5 1200			1.1		
			SAA	X	1278-138-3.5 1210					
			No Roots observed, SAA Hole terminated @ 4' bgs							

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 139 & 1278-
Location: SR 405 - Getty Center	**Page:** 1 of 1
Project #: 1858032023.200	**Northing:** / **Easting:**
Drilling Start: 2/25/15 **Completed:** 2/25/15	**Latitude:** / **Longitude:**
Installation Start: NA **Completed:** NA	**Ground Elev (ft):** / **TOC Elev (ft):**
Drilling Company: Stantec	**Initial DTW (ft):** / **Borehole Depth (ft):** 2 &
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):** / **Well Depth (ft):** NA
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA / **Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** T. WALSH / **Checked By:**

Stantec

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace P/D (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-139			VEGETATION @ SURFACE SANDY SILT; 10YR 4/3 (BRN) F.G. SAND, MOIST, FIRM - HARD; SOME ROOTLETS AND OTHER ORGANICS NO STAINING, NO ODR Refusal at 0.6' bgs. Step out 2' west. SMA. Refusal @ 2' bgs. Step out 2' north & 2' east. Hole terminated @ 2' bgs.	X X	1278-139 1220 1278-139-1.5 1235	0		10.1 8.1	0 1 2 3 4 5	SOIL CUTTINGS
									0 5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278 - 140 & 1278-	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200 02/25/15		**Northing:**	**Easting:**
Drilling Start: 1252	**Completed:** 1313	**Latitude:**	**Longitude:**
Installation Start: NA	**Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 4 &
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:** S. EDBLAD	**Checked By:**

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			GRASS / VEGETATION @ SURFACE						0	
1		SM	SILT SAND ~~CLAY~~ WITH GRAVEL (SM); YELLOWISH BROWN (10YR 5/6); N30% SILT; N20% SUBROUNDED FINE GRAVEL; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL (QUANTITY AND SIZE) WITH DEPTH	X	1252 1278-140-0			9.9	1	
2				X	1306 1278-141-1.5			6.8	2	
3									3	
4				X	1313 1278-141-3.5			1.5	4	JOIE CUTTINGS
5			REFUSAL @ 2' BGS DENSE COBBLES & GRAVEL; STEPPED OUT 2' WEST AND 2' NORTH (TOTAL DEPTH 4' BGS)						5	
			BOREHOLE TERMINATED @ 4' BGS							
0									0	
5									5	
0									0	

1278 - 140

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 142 & 1278- 141	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200 a2/25/15	**Northing:**	**Easting:**	
Drilling Start: 1117 **Completed:** 1236	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 4	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. ADBLAD	**Checked By:**	

1278 - 142

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			HYDROMULCH / GRASS / PEA GRAVEL @ SURFACE						0	SOIL CUTTINGS
1		ML	SANDY SILT WITH GRAVEL (ML); DARK YELLOWISH BROWN (10YR 4/6); ~50% SILT (TRACE CLAY); ~30% FINE TO COARSE GRAINED SAND; ~ 20% FINE GRAVEL (LOOSE BEDROCK/ PEA GRAVEL); MOIST; NON-PLASTIC; NO STAINS OR ODORS; PEA GRAVEL AND FINE GRAY SAND LENSE @ 0.5' BGS;	X	1117 1278-142-0		3.1		1	
2				X	1122 1278-142-1.5			3.5	2	
3				X	1130 1278-142-3.5			0.9	3	
4		ML	SILT WITH SAND; VERY DARK GRAYISH BROWN (10YR 3/2); ~60% SILT; ~10% CLAY; FINE TO MEDIUM GRAINED SAND; TRACE FINE GRAVEL; MOIST; NO STAINS OR ODORS; VERY ORGANIC	X	1147 EBA-2-022515				4	
5			BOREHOLE TERMINATED @ 4' BGS						5	

1278 - 141

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			HYDROMULCH / DENSE GRASS @ SURFACE						0	SOIL CUTTINGS
1		SM	SILTY SAND (SM); YELLOWISH BROWN (10YR 5/6); ~20% SILT; FINE TO COARSE GRAINED SAND; ~10% FINE GRAVEL (LOOSE BEDROCK); MOIST; NO STAINS OR ODORS; INCREASED GRAVEL WITH DEPTH (QUANTITY AND SIZE) ~30% GRAVEL	X	1225 1278-141-0			6.0	1	
2				X	1229 1278-141-1.5			3.1	2	
3				X	1236 1278-141-3.5			3.8	3	
4									4	
5			BOREHOLE TERMINATED @ 4' BGS						5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-144 & 1278-143	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 1033 12/05/15 **Completed:** 1043	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. BOBLAD	**Checked By:**	

1278 - 144

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SM	HYDROMULCH AND VEGETATION @SURFACE						0	SOIL CUTTINGS
1			SILTY SAND WITH GRAVEL (SM); YELLOWISH BROWN (10YR 5/6); ~20% SILT; TRACE CLAY; ~20% FINE GRAVEL (LOOSE BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; DECREASED GRAVEL WITH DEPTH	X	1033 1278-144-0			8.1	1	
2				X	1037 1278-144-1.5			3.1	2	
3									3	
4				X	1043 1278-144-3.5			9.7	4	
5			BOREHOLE TERMINATED @ 4'BGS						5	

1278 - 143

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SM	HYDROMULCH AND GRASS @SURFACE						0	SOFT EXCAVATION
1			SILTY SAND WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/4); ~20% SILT; TRACE CLAY; ~30% GRAVEL (VERY DENSE BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL AND DENSITY WITH DEPTH	X	1054 1278-143-0				1	
2									2	
3									3	
4									4	
5			REFUSAL @ 1' BGS (VERY DENSE/COMPACTED GRAVEL/BEDROCK); STEPPED OUT 2' WEST AND 2' SOUTH						5	
			BOREHOLE TERMINATED @ 4'BGS							

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-146 & 1278-145	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200 OCR 5/15	**Northing:**	**Easting:**	
Drilling Start: 0845 **Completed:** 1021	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 4	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. ENGLAD	**Checked By:**	

1278-146

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SM	HYDROMULCH / DENSE GRASS @ SURFACE						0	
1			SILTY SAND WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/6); ~30% SILT; TRACE CLAY; ~20% FINE GRAVEL (BEDROCK) - FINE TO MEDIUM GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL (SIZE) WITH DEPTH	X	0845 1278-146-0			3.7	1	SOIL CUTTINGS
2				X	0853 1278-146-1.5			6.7	2	
3									3	
4				X	0904 1278-146-3.5 0934 EB9-1-022515			6.4	4	
5			BOREHOLE TERMINATED @ 4' BGS						5	

1278-145

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SM	HYDROMULCH / DENSE VEGETATION @ SURFACE						0	
1			SILTY SAND WITH GRAVEL (SM); YELLOWISH BROWN (10YR 5/6); ~20% SILT; ~20% FINE GRAVEL (LOOSE BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; DECREASED GRAVEL WITH DEPTH; INCREASED CLAY / ORGANICS WITH DEPTH	X	1010 1278-145-0			13.6	1	SOIL CUTTINGS
2				X	1015 1278-145-1.5			5.4	2	
3									3	
4				X	1021 1278-145-3.5			1.6	4	
5			BOREHOLE TERMINATED @ 4' BGS						5	

1278-145

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278-~~148~~ 147 & 1278-148	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200 02/25/15		**Northing:**	**Easting:**
Drilling Start: 0749 **Completed:** 0830		**Latitude:**	**Longitude:**
Installation Start: NA **Completed:** NA		**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 4
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:** S. EDGLAD	**Checked By:**

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SM	HYDROMULCH AND GRASS @ SURFACE SILTY SAND WITH GRAVEL (SM); YELLOWISH BROWN (10YR 5/6); ~20% SILT; TRACE CLAY (<10%); ~20% FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL SIZE AND QUANTITY WITH DEPTH; PLASTIC AND ASPHALT DEBRIS	X	~~0748~~ 0814 1278-147-0			0.7	0	SOIL CUTTINGS
1				X	0820 1278-147-1.5			1.3	1	
2									2	
3				X	0830 1278-147-3.5			0.7	3	
4			→ DENSE GRAVEL REFUSAL @ 2'; STEPPED OUT 2' SOUTH BOREHOLE TERMINATED @ 4' BGS						4	
5									5	
0		SM	HYDROMULCH AND GRASS @ SURFACE SILTY SAND WITH GRAVEL (SM); YELLOWISH BROWN (10YR 5/6); ~20% SILT; TRACE CLAY (LESS THAN 10%); ~20% FINE GRAVEL (LOOSE BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL SIZE AND QUANTITY WITH DEPTH	X	0749 1278-148-0			8.3	0	SOIL CUTTINGS
1				X	0754 1278-148-1.5			7.5	1	
2									2	
3				X	0808 ~~148~~ 1278-148-3.5			2.3	3	
4			BOREHOLE TERMINATED @ 4' BGS						4	
5									5	

1278-147

1278-148

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 149 & 1278- ~~149~~ (2)
Location: SR 405 - Getty Center	**Page:** 1 of 1
Project #: 1858032023.200 02/24/15	**Northing:** **Easting:**
Drilling Start: 1525 **Completed:** 1552	**Latitude:** **Longitude:**
Installation Start: NA **Completed:** NA	**Ground Elev (ft):** **TOC Elev (ft):**
Drilling Company: Stantec	**Initial DTW (ft):** **Borehole Depth (ft):** 4 &
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):** **Well Depth (ft):** NA
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA **Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. EDBLAD **Checked By:**

Stantec

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovered (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			HYDROMULCH AND GRAVEL @ SURFACE	X	1525 1278-149-0			0.0	0	SOIL CUTTINGS
1		SM	SILTY SAND WITH GRAVEL (SM); ~30% SILT; ~20% ANGULAR GRAVEL (LOOSE BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAIN OR ODORS; INCREASED GRAVEL WITH DEPTH	X	1533 1278-149-1.5			0.0	1	
2		GM	~~GRAVEL~~ SILTY GRAVEL (GM); DARK YELLOWISH BROWN (10YR 4/4); ~40% ANGULAR GRAVEL (LOOSE BEDROCK); ~30% ~~FINES~~ SILT; FINE TO MEDIUM GRAINED SAND; MOIST; NO STAIN OR ODORS; INCREASED GRAVEL WITH DEPTH	X	1552 1278-149-3.5			0.0	2	
3									3	
4			BOREHOLE TERMINATED @ 4' BGS						4	
5									5	

1278 - 149

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278-150 & 1278-151	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200		**Northing:**	**Easting:**
Drilling Start: 02/24/15 1400	**Completed:** 02/24/15 1435 1516	**Latitude:**	**Longitude:**
Installation Start: NA	**Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 3 & 4
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:**	**Checked By:**

1278-150

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			HYDROSEED @ SURFACE						0	SOIL CUTTINGS
1		SM	SILTY SAND WITH GRAVEL (SM); ~30% SILT; ~20% ANGULAR GRAVEL (LOOSE ~~GRAVEL~~ BEDROCK); FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL AND COBBLES WITH DEPTH. (SCHIST, MICACEOUS)	X	1446 1278-150-0			0.0	1	
2				X	1452 1278-150-1.5			0.0	2	
3				X	1516 1278-150-3			0.0	3	
4			DENSE GRAVEL → REFUSAL @ 3' BGS; STEPPED OUT 2' NORTH AND 2' EAST						4	
5			COLLECTED SAMPLE @ 3' BGS						5	
			BOREHOLE TERMINATED @ ~~4~~ 3 @ 3' BGS							

1278-151

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			HYDROSEED @ SURFACE (IVY)						0	SOIL CUTTINGS
1		SM	SILTY SAND WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/4); ~30% SILT; ~20% GRAVEL (ANGULAR) (LOOSE BEDROCK); FINE TO COARSE GRAINED SAND; ROOTS NEAR SURFACE; INCREASED GRAVEL WITH DEPTH; MOIST; NO STAINS OR ODORS; COBBLES WITH DEPTH	X	1400 1278-151-0			15.1	1	
2				X	1410 1278-151-1.5			15.7	2	
3				X	1431 1278-151-3.5			7.5	3	
4			COBBLES → REFUSAL @ 3' BGS; STEPPED OUT 2' SOUTH						4	
5			BOREHOLE TERMINATED @ 4' BGS						5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 153 & 1278- 152	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 2/24/15 **Completed:** 2/24/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 4	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** A. Sawant	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-153			Silty sand (10YR 4/4), dark yellowish brown, fine - med. poorly graded grained sand. ~30% silt, paint flux observed @ surface (new paint, no lead). conduit ~~Refusal~~ @ 1.5 ft bgs. Step out 1' east S.A.A. (10YR, 4/3), brown. no paint Observed	X	1278-153-0 1420			0.0		soil cuttings
				X	1278-153-1.5 1440			0.0		
				X	1278-153-3.5 1450			3.3		
			Hole terminated @ 4' bgs							
1278-152			Silty sand (10YR 4/4), dark yellowish brown; fine - med. ~~graded~~ poorly graded sand ~35% silt; ~~10%~~ 5% paint flux particles observed. (new paint, no lead). S.A.A. (no paint observed, few med. gravel observed.	X	1278-152-0 1505			0.0		soil cuttings
				X	1278-152-1.5 1520			0.0		
				X	1278-152-3.5 1530			0.4		
			Hole terminated @ 4' bgs.							

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-1S & 1278-1S4	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 2/24/15 **Completed:** 2/24/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 4 & 2.5	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** A. Savant	**Checked By:**	

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-1S			Silty sand; (10YR 4/4) dark yellowish brown; fine-med. ~~grained~~ poorly graded sand; ~ 30% silt, no stain, no odor, moist	X	1278-1S-0 1320			1.5	0	SOIL CUTTINGS
				X	1278-1S-1.5 1330			12.1	1	
				X	1278-1S-3 1335			10.5	2	
			Hole terminated @ 4' bgs.						3	
									4	
									5	
1278-1S4			Silty sand; (10YR 4/4) dark yellowish brown; fine-med. poorly graded sand; ~ 30% silt; moist, no stain, no odor.	X	1278-1S4-0 1345			5.1	0	SOIL CUTTINGS
			some siltstone observed						1	
			S.A.A. (10YR 4/3); brown.	X	1278-1S4-1.5 1355			4.9	2	
			~~Step~~ Refusal @ 2.5' bgs. Stepped out 2' South & 2' east. Hole terminated @ 2.5' bgs						3	
									4	
									5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278 - 163 & 1278- 162	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 3/10/15 1011 **Completed:** 3/10/15 1140	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 2.5 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. EDBLAD / A. SAWAYA	**Checked By:**	

1278-163

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			DENSE VEGETATION; GRAVEL/ASPHALT @ SURFACE						0	
1		SW	WELL GRADED SAND WITH GRAVEL (SW); YELLOWISH BROWN (10YR 5/6); ~10% FINES; ~30% ANGULAR GRAVEL; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL AND DENSITY WITH DEPTH	X	1278-163-0 1012			1.4	1	SOIL CUTTINGS
2				X	1278-163-1.5 1041			1.1	2	
3			REFUSAL @ 1' BGS - DENSE ROCK; STEPPED OUT 4' SOUTH - REFUSAL @ 2.5' BGS (SAMPLED 1278-163-1.5) - DENSE ROCK; STEPPED OUT 2' WEST - REFUSAL 1' BGS						3	
4			BOREHOLE TERMINATED @ 2.5 BGS						4	
5									5	

1278-162

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			GRAVEL/ASPHALT @ SURFACE						0	
1		SW	Well graded sand with gravel (SW) yellowish brown (10YR 5/6). ~10% fines, ~30% angular gravel; fine-coarse grained sand; moist; no stain/odor; increased gravel & density with depth.	X	1278-162-0 1117			2.0	1	SOIL CUTTINGS
2									2	
3			Refusal @ 1' bgs. Dense rock; stepped out west 2' & 2' northwest. Refusal @ 1' bgs at all locations.						3	
4			Borehole terminated @ 1' BGS						4	
5									5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-165 & 1278-164	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200 03/10/15	**Northing:**	**Easting:**	
Drilling Start: 0909 **Completed:** 1004 3/10/15	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 2 & 1	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** SIEBLAD / SAWANT	**Checked By:**	

1278-165

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SW	ASPHALT / GRAVEL AND VEGETATION @ SURFACE WELL GRADED SAND WITH GRAVEL (SW); DARK GRAYISH BROWN (10YR 4/2); ~10% FINES; ~30% ANGULAR GRAVEL; FINE TO COARSE GRAINED SAND; MOIST; NO STAINS OR ODORS; INCREASED GRAVEL AND DENSITY WITH DEPTH	X	1278-165-0 0909			6.8	0	SOIL CUTTINGS
1				X	1278-165-1.5 0929			2.8	1	
2			REFUSAL @ 2' BGS - LARGE DENSE GRAVEL; STEPPED OUT 4' SOUTH AND 2' NORTH (REFUSAL @ 1' BGS). BOREHOLE TERMINATED @ 2' BGS						2	
3									3	
4									4	
5									5	

1278-164

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0		SW	GRAVEL & VEGETATION @ SURFACE well graded sand with gravel (SW) yellowish brown (10YR 5/6); ~10% fines, ~30% angular gravel; fine-coarse grained sand, moist, no odor/no stain; increased gravel with depth.	X	1278-164-0 0951			4.8	0	SOIL CUTTINGS
1			Refusal @ 1' bgs. ~~Ste~~ large dense gravel; stepped out 2' south & 4' south. Borehole terminated @ 1' bgs.						1	
2									2	
3									3	
4									4	
5									5	

Project: Caltrans, Contract No. 07A3322, Task Order No. 23		**Boring ID:** 1278-167 & 1278-166	Stantec
Location: SR 405 - Getty Center		**Page:** 1 of 1	
Project #: 1858032023.200		**Northing:**	**Easting:**
Drilling Start: 0739 3/10/15	**Completed:** 3/10/15 0842	**Latitude:**	**Longitude:**
Installation Start: NA	**Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**
Drilling Company: Stantec		**Initial DTW (ft):**	**Borehole Depth (ft):** 2 & 2
Drilling Equipment: Hand Auger Bucket		**Static DTW (ft):**	**Well Depth (ft):** NA
Drilling Method: Hand Auger		**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores		**Logged By:** S. EDBLAD / A. SAWANT	**Checked By:**

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	~~Measured Recovery (ft)~~	~~Blow Counts~~	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
1278-167			GRAVEL / ASPHALT AND VEGETATION @ SURFACE							
0		SW	WELL GRADED SAND WITH GRAVEL (SW); DARK GRAYISH BROWN (10YR 4/2); ~10% SILT / CLAY; ~30% FINE ANGULAR GRAVEL; FINE TO COARSE GRAINED SAND; ASPHALT / PAPER DEBRIS NEAR SURFACE; INCREASED GRAVEL WITH DEPTH AND DENSITY; NO ODORS OR STAINS; MOIST	X	1278-167-0 0739			0.4		SOIL CUTTINGS
2				X	1278-167-1.5 0800			0.5		
4			REFUSAL @ 2' BGS - LARGE GRAVEL (VERY DENSE); STEPPED OUT 2' SW AND 4' SOUTH							
5			BOREHOLE TERMINATED @ 2' BGS							
1278-166			GRAVEL / ASPHALT AND VEGETATION @ SURFACE							
0		SW	Well graded sand with gravel (SW); yellowish brown (10YR 5/4); ~10% silt / clay; ~30% fine angular gravel; fine - coarse grained sand; asphalt debris near surface; increased gravel with depth & density; no odor/stain	X	1278-166-0 0834			0.2 ppm		soil cuttings
1				X	1278-166-1.5 0842			5.9 ppm		
2			Refusal @ 2' bgs - stepped out 2' SW & 4' south. Borehole terminated @ 2' BGS							

Project: Caltrans, Contract No. 07A3322, Task Order No. 23	**Boring ID:** 1278-168 & 1278-169	Stantec	
Location: SR 405 - Getty Center	**Page:** 1 of 1		
Project #: 1858032023.200	**Northing:**	**Easting:**	
Drilling Start: 1336 03/10/15 **Completed:** 3/10/15 1432	**Latitude:**	**Longitude:**	
Installation Start: NA **Completed:** NA	**Ground Elev (ft):**	**TOC Elev (ft):**	
Drilling Company: Stantec	**Initial DTW (ft):**	**Borehole Depth (ft):** 2 & 4	
Drilling Equipment: Hand Auger Bucket	**Static DTW (ft):**	**Well Depth (ft):** NA	
Drilling Method: Hand Auger	**Well Casing DIA (in):** NA	**Borehole Dia (in):** ~3-4"	
Sampling Equipment: Hand Auger / 8 oz. Glass Jars / Terra Cores	**Logged By:** S. GOBLOD / A. SALVATO	**Checked By:**	

1278 - 168

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			WOOD MULCH (3" THICK) @ SURFACE						0	SOIL CUTTINGS
1		SM	SILTY SAND WITH GRAVEL (SM); DARK YELLOWISH BROWN (10YR 4/4); ~30% SILT WITH TRACE CLAY; ~30% ANGULAR GRAVEL; FINE TO COARSE GRAINED SAND; NON-PLASTIC; MOIST; NO STAINS OR ODORS; INCREASED DENSE GRAVEL WITH DEPTH	X	1278-168-0 1336			5.5	1	
2				X	1278-168-1.5 1354			1.1	2	
3			REFUSAL @ 1' BGS - DENSE GRAVEL; STEPPED OUT 2' SOUTH - REFUSAL @ 2' BGS; STEPPED OUT 2' SW - REFUSAL @ 1' BGS						3	
4			BOREHOLE TERMINATED @ 2' BGS						4	
5									5	

1278 - 169

Time & Depth (ft)	Graphic log	USCS	Description: Example: SAND (SP) - olive (2.5Y 5/4), trace (5%) fines, 20-30% fine grained sand, fine to coarse gravel, medium dense, medium plasticity, stiff, moist, no petroleum hydrocarbon odor, no staining	Sample	Time/ Sample ID/ Method	Measured Recovery (ft)	Blow Counts	Headspace PID (ppm)	Depth (ft)	Well Construction or Borehole Backfill
0			Wood mulch ~3" thick @ surface						0	SOIL CUTTINGS
1		SM	Silty sand with gravel (SM): ~~dark~~ yellowish brown (10YR 5/6); ~30% silt with trace clay; ~30% angular gravel; fine - coarse grained sand; moist, no stain no odor.	X	1278-169-0 1418			1.1	1	
2				X	1278-169-1.5 1426			0.8	2	
			dark brown (10YR 3/3); SAA more gravel observed; solid bedrock observed; reduced conditions; oxygen deficiency observed	X	1278-169-3.5 1432			0.7		
5			Borehole terminated @ 4 ft bgs						5	

APPENDIX D
ANALYTICAL LABORATORY REPORTS and CHAIN-OF-CUSTODY RECORDS

ADVANCED TECHNOLOGY
LABORATORIES

March 09, 2015

Anne Perez/Kristy Edblad
Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Tel: (805) 230-1266
Fax:(805) 230-1277

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500725
Client Reference : 185832023, 200.0003, Caltrans 07A3322-23

Enclosed are the results for sample(s) received on February 25, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1278-117-0	1500725-01	Soil	2/24/15 8:15	2/25/15 13:50
EBB-1-022415	1500725-02	Aqueous	2/24/15 8:35	2/25/15 13:50
1278-118-0	1500725-03	Soil	2/24/15 9:00	2/25/15 13:50
1278-116-0	1500725-04	Soil	2/24/15 9:20	2/25/15 13:50
1278-115-0	1500725-05	Soil	2/24/15 9:35	2/25/15 13:50
1278-114-0	1500725-06	Soil	2/24/15 10:05	2/25/15 13:50
1278-113-0	1500725-07	Soil	2/24/15 10:40	2/25/15 13:50
1278-112-0	1500725-08	Soil	2/24/15 11:00	2/25/15 13:50
1278-111-0	1500725-09	Soil	2/24/15 11:20	2/25/15 13:50
EBB-2-022415	1500725-10	Aqueous	2/24/15 11:50	2/25/15 13:50
1278-155-0	1500725-11	Soil	2/24/15 13:20	2/25/15 13:50
1278-155-1.5	1500725-12	Soil	2/24/15 13:30	2/25/15 13:50
1278-154-0	1500725-14	Soil	2/24/15 13:45	2/25/15 13:50
1278-154-1.5	1500725-15	Soil	2/24/15 13:55	2/25/15 13:50
1278-153-0	1500725-16	Soil	2/24/15 14:30	2/25/15 13:50
1278-153-1.5	1500725-17	Soil	2/24/15 14:40	2/25/15 13:50
EBB-3-022415	1500725-19	Aqueous	2/24/15 15:00	2/25/15 13:50
1278-152-0	1500725-20	Soil	2/24/15 15:05	2/25/15 13:50
1278-152-1.5	1500725-21	Soil	2/24/15 15:20	2/25/15 13:50

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

CASE NARRATIVE

The samples for Asbestos analysis were subcontracted to AmeriSci Los Angeles with ELAP Cert.# 2322.

The samples for EPA 8151 (Chlorinated Herbicides) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

Documentation pertaining to additional analyses/change order available upon request.

EPA 8260 analysis was performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to urately quantitate the analyte near the MDL.

Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500725-02	EBB-1-022415	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 16:47	
1500725-10	EBB-2-022415	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:02	
1500725-19	EBB-3-022415	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:05	

Mercury by AA (Cold Vapor) EPA 7471A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500725-01	1278-117-0	0.04	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:00	J
1500725-03	1278-118-0	0.02	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:14	J
1500725-04	1278-116-0	0.03	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:16	J
1500725-05	1278-115-0	0.04	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:18	J
1500725-06	1278-114-0	0.02	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:20	J
1500725-07	1278-113-0	0.02	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:22	J
1500725-08	1278-112-0	0.03	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:24	J
1500725-09	1278-111-0	0.02	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:26	J
1500725-11	1278-155-0	0.01	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:28	J
1500725-12	1278-155-1.5	0.01	mg/kg	0.10	0.009	1	B5C0015	03/02/2015	03/03/15 11:30	J
1500725-14	1278-154-0	0.02	mg/kg	0.10	0.009	1	B5C0016	03/02/2015	03/03/15 12:28	J
1500725-15	1278-154-1.5	0.05	mg/kg	0.10	0.009	1	B5C0016	03/02/2015	03/03/15 12:40	J
1500725-16	1278-153-0	0.04	mg/kg	0.10	0.009	1	B5C0016	03/02/2015	03/03/15 12:42	J
1500725-17	1278-153-1.5	0.03	mg/kg	0.10	0.009	1	B5C0016	03/02/2015	03/03/15 12:44	J
1500725-20	1278-152-0	0.05	mg/kg	0.10	0.009	1	B5C0016	03/02/2015	03/03/15 12:48	J
1500725-21	1278-152-1.5	0.04	mg/kg	0.10	0.009	1	B5C0016	03/02/2015	03/03/15 12:50	J

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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-117-0
Lab ID: 1500725-01

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.2**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 14:56	J
Antimony	**1.2**	2.0	0.25	1	B5C0012	03/02/2015	03/03/15 15:15	J
Arsenic	**10**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 14:56	
Arsenic	**10**	1.0	0.19	1	B5C0012	03/02/2015	03/03/15 15:15	
Barium	**76**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 14:55	
Barium	**69**	1.0	0.14	1	B5C0012	03/02/2015	03/03/15 15:15	
Beryllium	**0.72**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 14:55	J
Beryllium	**0.42**	1.0	0.04	1	B5C0012	03/02/2015	03/03/15 15:15	J
Cadmium	ND	1.0	0.11	1	B5C0012	03/02/2015	03/03/15 15:15	
Cadmium	**0.72**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 14:56	J
Chromium	**27**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 14:55	
)mium	**29**	1.0	0.07	1	B5C0012	03/02/2015	03/03/15 15:15	
Cobalt	**9.3**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 14:56	
Cobalt	**8.9**	1.0	0.15	1	B5C0012	03/02/2015	03/03/15 15:15	
Copper	**31**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 14:55	
Copper	**31**	2.0	0.05	1	B5C0012	03/02/2015	03/03/15 15:15	B
Lead	**22**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 14:56	
Lead	**11**	1.0	0.07	1	B5C0012	03/02/2015	03/03/15 15:15	
Molybdenum	**0.40**	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 14:56	J
Molybdenum	**1.2**	1.0	0.05	1	B5C0012	03/02/2015	03/03/15 15:15	
Nickel	**24**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 14:56	
Nickel	**25**	1.0	0.07	1	B5C0012	03/02/2015	03/03/15 15:15	
Selenium	**1.4**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 14:56	
Selenium	**2.2**	1.0	0.15	1	B5C0012	03/02/2015	03/03/15 15:15	
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 14:55	
Silver	ND	1.0	0.06	1	B5C0012	03/02/2015	03/03/15 15:15	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 14:56	
Thallium	ND	1.0	0.20	1	B5C0012	03/02/2015	03/03/15 15:15	
Vanadium	**41**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 14:55	
Vanadium	**39**	1.0	0.07	1	B5C0012	03/02/2015	03/03/15 15:15	
Zinc	**58**	1.0	0.11	1	B5C0012	03/02/2015	03/03/15 15:15	B
Zinc	**60**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 14:55	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
line Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 13:53	
C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 13:53	
Surrogate: 4-Bromofluorobenzene	*95.0 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 13:53*	

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Client Sample ID 1278-117-0
Lab ID: 1500725-01

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	16	4.0	4.0	2	B5B0701	02/26/2015	02/27/15 12:03	
C23-C32	130	4.0	4.0	2	B5B0701	02/26/2015	02/27/15 12:03	
Surrogate: p-Terphenyl	*79.5 %*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 12:03*	

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Aroclor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Aroclor 1262	2.2	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	J
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:35	
Surrogate: Decachlorobiphenyl	*72.7 %*	*8 - 143*			B5B0750	02/27/2015	*02/27/15 17:35*	
Surrogate: Tetrachloro-m-xylene	*91.5 %*	*27 - 124*			B5B0750	02/27/2015	*02/27/15 17:35*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	3300	570	10	B5C0039	03/02/2015	03/02/15 15:44	D1
1,2-Dichlorobenzene	ND	3300	590	10	B5C0039	03/02/2015	03/02/15 15:44	D1
1,3-Dichlorobenzene	ND	3300	640	10	B5C0039	03/02/2015	03/02/15 15:44	D1
1,4-Dichlorobenzene	ND	3300	590	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2,4,5-Trichlorophenol	ND	3300	1300	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2,4,6-Trichlorophenol	ND	3300	1400	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2,4-Dichlorophenol	ND	16000	1300	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2,4-Dimethylphenol	ND	3300	1300	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2,4-Dinitrophenol	ND	16000	1300	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2,4-Dinitrotoluene	ND	3300	560	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2,6-Dinitrotoluene	ND	3300	690	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2-Chloronaphthalene	ND	3300	610	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2-Chlorophenol	ND	3300	1200	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2-Methylnaphthalene	ND	3300	610	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2-Methylphenol	ND	3300	740	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2-Nitroaniline	ND	16000	540	10	B5C0039	03/02/2015	03/02/15 15:44	D1
2-Nitrophenol	ND	3300	1500	10	B5C0039	03/02/2015	03/02/15 15:44	D1

Certificate of Analysis

...tec

290 Conejo Ridge Avenue, Suite 200

Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23

Report To : Anne Perez/Kristy Edblad

Reported : 03/09/2015

Client Sample ID 1278-117-0

Lab ID: 1500725-01

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
3,3'-Dichlorobenzidine	ND	6600	2900	10	B5C0039	03/02/2015	03/02/15 15:44	D1
3-Nitroaniline	ND	16000	450	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4,6-Dinitro-2-methyphenol	ND	16000	920	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4-Bromophenyl-phenylether	ND	3300	780	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4-Chloro-3-methylphenol	ND	6600	1200	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4-Chloroaniline	ND	6600	610	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4-Chlorophenyl-phenylether	ND	3300	600	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4-Methylphenol	ND	3300	730	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4-Nitroaniline	ND	16000	650	10	B5C0039	03/02/2015	03/02/15 15:44	D1
4-Nitrophenol	ND	3300	2000	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Acenaphthene	ND	3300	560	10	B5C0039	03/02/2015	03/02/15 15:44	D1
...naphthylene	ND	3300	560	10	B5C0039	03/02/2015	03/02/15 15:44	D1
...hracene	ND	3300	570	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzidine (M)	ND	16000	16000	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzo(a)anthracene	ND	3300	550	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzo(a)pyrene	ND	3300	640	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzo(b)fluoranthene	ND	3300	610	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzo(g,h,i)perylene	ND	3300	390	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzo(k)fluoranthene	ND	3300	650	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzoic acid	ND	16000	4200	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Benzyl alcohol	ND	6600	760	10	B5C0039	03/02/2015	03/02/15 15:44	D1
bis(2-chloroethoxy)methane	ND	3300	650	10	B5C0039	03/02/2015	03/02/15 15:44	D1
bis(2-Chloroethyl)ether	ND	3300	1600	10	B5C0039	03/02/2015	03/02/15 15:44	D1
bis(2-chloroisopropyl)ether	ND	3300	650	10	B5C0039	03/02/2015	03/02/15 15:44	D1
bis(2-ethylhexyl)phthalate	ND	3300	630	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Butylbenzylphthalate	ND	3300	670	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Chrysene	ND	3300	410	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Di-n-butylphthalate	ND	3300	600	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Di-n-octylphthalate	ND	3300	670	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Dibenz(a,h)anthracene	ND	3300	470	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Dibenzofuran	ND	3300	570	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Diethyl phthalate	ND	3300	620	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Dimethyl phthalate	ND	3300	570	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Fluoranthene	ND	3300	520	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Fluorene	ND	3300	500	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Hexachlorobenzene	ND	3300	610	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Hexachlorobutadiene	ND	6600	570	10	B5C0039	03/02/2015	03/02/15 15:44	D1
...achlorocyclopentadiene	ND	6600	720	10	B5C0039	03/02/2015	03/02/15 15:44	D1
...ichloroethane	ND	3300	640	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Indeno(1,2,3-cd)pyrene	ND	3300	650	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Isophorone	ND	3300	680	10	B5C0039	03/02/2015	03/02/15 15:44	D1

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-117-0

Lab ID: 1500725-01

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
N-Nitroso-di-n propylamine	ND	3300	730	10	B5C0039	03/02/2015	03/02/15 15:44	D1
N-Nitrosodiphenylamine	ND	3300	660	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Naphthalene	ND	3300	580	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Nitrobenzene	ND	3300	580	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Pentachlorophenol	ND	16000	830	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Phenanthrene	ND	3300	610	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Phenol	ND	3300	1300	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Pyrene	ND	3300	550	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Pyridine	ND	16000	3300	10	B5C0039	03/02/2015	03/02/15 15:44	D1
Surrogate: 1,2-Dichlorobenzene-d4	*45.1 %*	*24 - 114*			B5C0039	03/02/2015	*03/02/15 15:44*	
Surrogate: 2,4,6-Tribromophenol	*28.4 %*	*0 - 189*			B5C0039	03/02/2015	*03/02/15 15:44*	
Surrogate: 2-Chlorophenol-d4	*49.3 %*	*23 - 123*			B5C0039	03/02/2015	*03/02/15 15:44*	
Surrogate: 2-Fluorobiphenyl	*55.5 %*	*28 - 128*			B5C0039	03/02/2015	*03/02/15 15:44*	
Surrogate: 2-Fluorophenol	*47.6 %*	*8 - 138*			B5C0039	03/02/2015	*03/02/15 15:44*	
Surrogate: 4-Terphenyl-d14	*58.0 %*	*27 - 154*			B5C0039	03/02/2015	*03/02/15 15:44*	
Surrogate: Nitrobenzene-d5	*55.6 %*	*19 - 129*			B5C0039	03/02/2015	*03/02/15 15:44*	
Surrogate: Phenol-d5	*50.7 %*	*20 - 126*			B5C0039	03/02/2015	*03/02/15 15:44*	

Certificate of Analysis

...tec	Project Number: 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To: Anne Perez/Kristy Edblad
Thousand Oaks, CA 91361	Reported: 03/09/2015

Client Sample ID EBB-1-022415
Lab ID: 1500725-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 10:50	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 10:50	
Barium	**0.0006**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 10:50	J
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 10:49	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 10:50	
Chromium	**0.0009**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 10:50	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 10:50	
Copper	**0.0013**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 10:49	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 10:50	
Molybdenum	**0.0005**	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 10:50	J
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 10:50	
...nium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 10:50	
...ver	**0.0007**	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 10:49	J
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 10:50	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 10:49	
Zinc	**0.0040**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 10:50	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 14:01	
C4-C8	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 14:01	
Surrogate: 4-Bromofluorobenzene	*97.9 %*	*70 - 130*			B5B0704	02/26/2015	*02/26/15 14:01*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 15:18	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 15:18	
Surrogate: p-Terphenyl	*44.6 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 15:18*	

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...oclor 1016	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
...lor 1221	ND	1.0	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
Aroclor 1232	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
Aroclor 1242	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-1-022415
Lab ID: 1500725-02

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1248	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
Aroclor 1254	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
Aroclor 1260	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
Aroclor 1262	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
Aroclor 1268	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 11:54	
Surrogate: Decachlorobiphenyl	*64.7 %*	*20 - 138*			B5C0059	03/03/2015	*03/03/15 11:54*	
Surrogate: Tetrachloro-m-xylene	*86.9 %*	*11 - 133*			B5C0059	03/03/2015	*03/03/15 11:54*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
1,2-Dichlorobenzene	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:19	
1,3-Dichlorobenzene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
1,4-Dichlorobenzene	ND	10	1.3	1	B5C0043	03/02/2015	03/02/15 18:19	
2,4,5-Trichlorophenol	ND	10	2.3	1	B5C0043	03/02/2015	03/02/15 18:19	
2,4,6-Trichlorophenol	ND	10	3.3	1	B5C0043	03/02/2015	03/02/15 18:19	
2,4-Dichlorophenol	ND	10	3.9	1	B5C0043	03/02/2015	03/02/15 18:19	
2,4-Dimethylphenol	ND	10	3.3	1	B5C0043	03/02/2015	03/02/15 18:19	
2,4-Dinitrophenol	ND	50	2.8	1	B5C0043	03/02/2015	03/02/15 18:19	
2,4-Dinitrotoluene	ND	10	2.0	1	B5C0043	03/02/2015	03/02/15 18:19	
2,6-Dinitrotoluene	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:19	
2-Chloronaphthalene	ND	10	1.4	1	B5C0043	03/02/2015	03/02/15 18:19	
2-Chlorophenol	ND	10	3.5	1	B5C0043	03/02/2015	03/02/15 18:19	
2-Methylnaphthalene	ND	10	1.4	1	B5C0043	03/02/2015	03/02/15 18:19	
2-Methylphenol	ND	10	2.0	1	B5C0043	03/02/2015	03/02/15 18:19	
2-Nitroaniline	ND	50	1.9	1	B5C0043	03/02/2015	03/02/15 18:19	
2-Nitrophenol	ND	10	3.3	1	B5C0043	03/02/2015	03/02/15 18:19	
3,3'-Dichlorobenzidine	ND	20	11	1	B5C0043	03/02/2015	03/02/15 18:19	
3-Nitroaniline	ND	50	1.8	1	B5C0043	03/02/2015	03/02/15 18:19	
4,6-Dinitro-2-methyphenol	ND	50	2.4	1	B5C0043	03/02/2015	03/02/15 18:19	
4-Bromophenyl-phenylether	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
4-Chloro-3-methylphenol	ND	50	3.7	1	B5C0043	03/02/2015	03/02/15 18:19	
4-Chloroaniline	ND	20	1.7	1	B5C0043	03/02/2015	03/02/15 18:19	
4-Chlorophenyl-phenylether	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:19	
4-Methylphenol	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:19	
4-Nitroaniline	ND	20	2.2	1	B5C0043	03/02/2015	03/02/15 18:19	
4-Nitrophenol	ND	50	3.6	1	B5C0043	03/02/2015	03/02/15 18:19	
Acenaphthene	ND	10	1.4	1	B5C0043	03/02/2015	03/02/15 18:19	
Acenaphthylene	ND	10	1.3	1	B5C0043	03/02/2015	03/02/15 18:19	

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-1-022415

Lab ID: 1500725-02

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzidine (M)	ND	50	2.7	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzo(a)anthracene	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzo(a)pyrene	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzo(b)fluoranthene	ND	10	2.0	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzo(g,h,i)perylene	ND	10	2.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzo(k)fluoranthene	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzoic acid	ND	50	35	1	B5C0043	03/02/2015	03/02/15 18:19	
Benzyl alcohol	ND	20	1.3	1	B5C0043	03/02/2015	03/02/15 18:19	
bis(2-chloroethoxy)methane	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:19	
bis(2-Chloroethyl)ether	ND	10	2.9	1	B5C0043	03/02/2015	03/02/15 18:19	
?-chloroisopropyl)ether	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
,2-ethylhexyl)phthalate	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:19	
Butylbenzylphthalate	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:19	
Chrysene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Di-n-butylphthalate	ND	10	3.2	1	B5C0043	03/02/2015	03/02/15 18:19	
Di-n-octylphthalate	ND	10	2.2	1	B5C0043	03/02/2015	03/02/15 18:19	
Dibenz(a,h)anthracene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Dibenzofuran	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:19	
Diethyl phthalate	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:19	
Dimethyl phthalate	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:19	
Fluoranthene	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:19	
Fluorene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Hexachlorobenzene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Hexachlorobutadiene	ND	20	1.6	1	B5C0043	03/02/2015	03/02/15 18:19	
Hexachlorocyclopentadiene	ND	10	1.9	1	B5C0043	03/02/2015	03/02/15 18:19	
Hexachloroethane	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Indeno(1,2,3-cd)pyrene	ND	10	1.9	1	B5C0043	03/02/2015	03/02/15 18:19	
Isophorone	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:19	
N-Nitroso-di-n propylamine	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:19	
N-Nitrosodiphenylamine	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Naphthalene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:19	
Nitrobenzene	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:19	
Pentachlorophenol	ND	50	2.9	1	B5C0043	03/02/2015	03/02/15 18:19	
Phenanthrene	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:19	
Phenol	ND	10	4.8	1	B5C0043	03/02/2015	03/02/15 18:19	
Pyrene	ND	10	1.9	1	B5C0043	03/02/2015	03/02/15 18:19	
idine	ND	50	9.2	1	B5C0043	03/02/2015	03/02/15 18:19	
ogate: 1,2-Dichlorobenzene-d4	*67.7 %*	*4 - 111*			B5C0043	03/02/2015	*03/02/15 18:19*	
Surrogate: 2,4,6-Tribromophenol	*90.4 %*	*21 - 162*			B5C0043	03/02/2015	*03/02/15 18:19*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-1-022415

Lab ID: 1500725-02

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2-Chlorophenol-d4	*68.6 %*	*0 - 124*		B5C0043	03/02/2015	*03/02/15 18:19*	
Surrogate: 2-Fluorobiphenyl	*86.2 %*	*21 - 118*		B5C0043	03/02/2015	*03/02/15 18:19*	
Surrogate: 2-Fluorophenol	*47.2 %*	*0 - 83*		B5C0043	03/02/2015	*03/02/15 18:19*	
Surrogate: 4-Terphenyl-d14	*98.5 %*	*33 - 150*		B5C0043	03/02/2015	*03/02/15 18:19*	
Surrogate: Nitrobenzene-d5	*81.3 %*	*10 - 117*		B5C0043	03/02/2015	*03/02/15 18:19*	
Surrogate: Phenol-d5	*35.7 %*	*0 - 68*		B5C0043	03/02/2015	*03/02/15 18:19*	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-118-0
Lab ID: 1500725-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.83**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:09	J
Arsenic	7.9	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:09	
Barium	**98**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:09	
Beryllium	**0.70**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:08	J
Cadmium	**0.59**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:09	J
Chromium	**19**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:09	
Cobalt	**5.9**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:09	
Copper	**20**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:09	
Lead	**25**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:09	
Molybdenum	**0.49**	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:09	J
Nickel	**18**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:09	
...nium	**0.94**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:09	J
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:09	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:09	
Vanadium	**33**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:09	
Zinc	**53**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:09	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 19:52	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 19:52	
Surrogate: 4-Bromofluorobenzene	*95.6 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 19:52*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**76**	20	20	10	B5B0701	02/26/2015	02/27/15 14:12	
C23-C32	**650**	20	20	10	B5B0701	02/26/2015	02/27/15 14:12	
Surrogate: p-Terphenyl	*0%*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 14:12*	S4

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...lor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	
...lor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-118-0

Lab ID: 1500725-03

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	
Aroclor 1262	2.9	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	J
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 17:54	
Surrogate: Decachlorobiphenyl	*45.8 %*	*8 - 143*			B5B0750	02/27/2015	*02/27/15 17:54*	
Surrogate: Tetrachloro-m-xylene	*64.4 %*	*27 - 124*			B5B0750	02/27/2015	*02/27/15 17:54*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
1,2-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
1,3-Dichlorobenzene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
1,4-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2,4,5-Trichlorophenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2,4,6-Trichlorophenol	ND	8200	3500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2,4-Dichlorophenol	ND	41000	3300	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2,4-Dimethylphenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2,4-Dinitrophenol	ND	41000	3200	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2,4-Dinitrotoluene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2,6-Dinitrotoluene	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2-Chloronaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2-Chlorophenol	ND	8200	3000	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2-Methylnaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2-Methylphenol	ND	8200	1900	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2-Nitroaniline	ND	41000	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
2-Nitrophenol	ND	8200	3700	25	B5C0039	03/02/2015	03/03/15 16:23	D1
3,3'-Dichlorobenzidine	ND	16000	7200	25	B5C0039	03/02/2015	03/03/15 16:23	D1
3-Nitroaniline	ND	41000	1100	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4,6-Dinitro-2-methyphenol	ND	41000	2300	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4-Bromophenyl-phenylether	ND	8200	2000	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4-Chloro-3-methylphenol	ND	16000	3100	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4-Chloroaniline	ND	16000	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4-Chlorophenyl-phenylether	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4-Methylphenol	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4-Nitroaniline	ND	41000	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
4-Nitrophenol	ND	8200	5100	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Acenaphthene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-118-0
Lab ID: 1500725-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Acenaphthylene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzidine (M)	ND	41000	41000	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzo(a)anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzo(a)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzo(b)fluoranthene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzo(g,h,i)perylene	ND	8200	970	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzo(k)fluoranthene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzoic acid	ND	41000	11000	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Benzyl alcohol	ND	16000	1900	25	B5C0039	03/02/2015	03/03/15 16:23	D1
bis(2-chloroethoxy)methane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
?-Chloroethyl)ether	ND	8200	3900	25	B5C0039	03/02/2015	03/03/15 16:23	D1
,2-chloroisopropyl)ether	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
bis(2-ethylhexyl)phthalate	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Butylbenzylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Chrysene	ND	8200	1000	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Di-n-butylphthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Di-n-octylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Dibenz(a,h)anthracene	ND	8200	1200	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Dibenzofuran	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Diethyl phthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Dimethyl phthalate	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Fluoranthene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Fluorene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Hexachlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Hexachlorobutadiene	ND	16000	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Hexachlorocyclopentadiene	ND	16000	1800	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Hexachloroethane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Indeno(1,2,3-cd)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Isophorone	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:23	D1
N-Nitroso-di-n propylamine	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 16:23	D1
N-Nitrosodiphenylamine	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Naphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Nitrobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Pentachlorophenol	ND	41000	2100	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Phenanthrene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Phenol	ND	8200	3300	25	B5C0039	03/02/2015	03/03/15 16:23	D1
ene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:23	D1
line	ND	41000	8100	25	B5C0039	03/02/2015	03/03/15 16:23	D1
Surrogate: 1,2-Dichlorobenzene-d4	*0%*	*24 - 114*			B5C0039	03/02/2015	*03/03/15 16:23*	S4

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-118-0
Lab ID: 1500725-03

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2,4,6-Tribromophenol	*0%*	*0 - 189*		B5C0039	03/02/2015	*03/03/15 16:23*	S4
Surrogate: 2-Chlorophenol-d4	*0%*	*23 - 123*		B5C0039	03/02/2015	*03/03/15 16:23*	S4
Surrogate: 2-Fluorobiphenyl	*0%*	*28 - 128*		B5C0039	03/02/2015	*03/03/15 16:23*	S4
Surrogate: 2-Fluorophenol	*0%*	*8 - 138*		B5C0039	03/02/2015	*03/03/15 16:23*	S4
Surrogate: 4-Terphenyl-d14	*0%*	*27 - 154*		B5C0039	03/02/2015	*03/03/15 16:23*	S4
Surrogate: Nitrobenzene-d5	*0%*	*19 - 129*		B5C0039	03/02/2015	*03/03/15 16:23*	S4
Surrogate: Phenol-d5	*0%*	*20 - 126*		B5C0039	03/02/2015	*03/03/15 16:23*	S4

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-116-0
Lab ID: 1500725-04

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.76**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:46	J
Arsenic	**8.8**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:46	
Barium	**86**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:45	
Beryllium	**0.72**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:45	J
Cadmium	**0.73**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:46	J
Chromium	**21**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:45	
Cobalt	**6.3**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:46	
Copper	**24**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:45	
Lead	**24**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:46	
Molybdenum	**1.1**	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:45	
...ckel	**18**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:45	
...nium	**0.91**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:46	J
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:45	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:46	
Vanadium	**36**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:45	
Zinc	**64**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:45	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:08	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:08	
Surrogate: 4-Bromofluorobenzene	*95.6 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 20:08*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	50	20	20	10	B5B0701	02/26/2015	02/27/15 13:07	
C23-C32	480	20	20	10	B5B0701	02/26/2015	02/27/15 13:07	
Surrogate: p-Terphenyl	*0%*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 13:07*	S4

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...clor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	
...clor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-116-0
Lab ID: 1500725-04

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	
Aroclor 1262	**3.1**	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	J
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:12	
Surrogate: Decachlorobiphenyl	*39.5 %*	*8 - 143*			B5B0750	02/27/2015	*02/27/15 18:12*	
Surrogate: Tetrachloro-m-xylene	*57.0 %*	*27 - 124*			B5B0750	02/27/2015	*02/27/15 18:12*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
1,2-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
1,3-Dichlorobenzene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
1,4-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2,4,5-Trichlorophenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2,4,6-Trichlorophenol	ND	8200	3500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2,4-Dichlorophenol	ND	41000	3300	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2,4-Dimethylphenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2,4-Dinitrophenol	ND	41000	3200	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2,4-Dinitrotoluene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2,6-Dinitrotoluene	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2-Chloronaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2-Chlorophenol	ND	8200	3000	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2-Methylnaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2-Methylphenol	ND	8200	1900	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2-Nitroaniline	ND	41000	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
2-Nitrophenol	ND	8200	3700	25	B5C0039	03/02/2015	03/03/15 16:49	D1
3,3'-Dichlorobenzidine	ND	16000	7200	25	B5C0039	03/02/2015	03/03/15 16:49	D1
3-Nitroaniline	ND	41000	1100	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4,6-Dinitro-2-methyphenol	ND	41000	2300	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4-Bromophenyl-phenylether	ND	8200	2000	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4-Chloro-3-methylphenol	ND	16000	3100	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4-Chloroaniline	ND	16000	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4-Chlorophenyl-phenylether	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4-Methylphenol	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4-Nitroaniline	ND	41000	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
4-Nitrophenol	ND	8200	5100	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Acenaphthene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-116-0
Lab ID: 1500725-04

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Acenaphthylene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzidine (M)	ND	41000	41000	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzo(a)anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzo(a)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzo(b)fluoranthene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzo(g,h,i)perylene	ND	8200	970	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzo(k)fluoranthene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzoic acid	ND	41000	11000	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Benzyl alcohol	ND	16000	1900	25	B5C0039	03/02/2015	03/03/15 16:49	D1
bis(2-chloroethoxy)methane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
?-Chloroethyl)ether	ND	8200	3900	25	B5C0039	03/02/2015	03/03/15 16:49	D1
,2-chloroisopropyl)ether	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
bis(2-ethylhexyl)phthalate	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Butylbenzylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Chrysene	ND	8200	1000	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Di-n-butylphthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Di-n-octylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Dibenz(a,h)anthracene	ND	8200	1200	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Dibenzofuran	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Diethyl phthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Dimethyl phthalate	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Fluoranthene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Fluorene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Hexachlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Hexachlorobutadiene	ND	16000	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Hexachlorocyclopentadiene	ND	16000	1800	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Hexachloroethane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Indeno(1,2,3-cd)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Isophorone	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:49	D1
N-Nitroso-di-n propylamine	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 16:49	D1
N-Nitrosodiphenylamine	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Naphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Nitrobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Pentachlorophenol	ND	41000	2100	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Phenanthrene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Phenol	ND	8200	3300	25	B5C0039	03/02/2015	03/03/15 16:49	D1
ene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 16:49	D1
line	ND	41000	8100	25	B5C0039	03/02/2015	03/03/15 16:49	D1
Surrogate: 1,2-Dichlorobenzene-d4	*0%*	*24 - 114*			B5C0039	03/02/2015	*03/03/15 16:49*	S4

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-116-0
Lab ID: 1500725-04

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2,4,6-Tribromophenol	*0%*	*0 - 189*		B5C0039	03/02/2015	*03/03/15 16:49*	S4
Surrogate: 2-Chlorophenol-d4	*0%*	*23 - 123*		B5C0039	03/02/2015	*03/03/15 16:49*	S4
Surrogate: 2-Fluorobiphenyl	*0%*	*28 - 128*		B5C0039	03/02/2015	*03/03/15 16:49*	S4
Surrogate: 2-Fluorophenol	*0%*	*8 - 138*		B5C0039	03/02/2015	*03/03/15 16:49*	S4
Surrogate: 4-Terphenyl-d14	*0%*	*27 - 154*		B5C0039	03/02/2015	*03/03/15 16:49*	S4
Surrogate: Nitrobenzene-d5	*0%*	*19 - 129*		B5C0039	03/02/2015	*03/03/15 16:49*	S4
Surrogate: Phenol-d5	*0%*	*20 - 126*		B5C0039	03/02/2015	*03/03/15 16:49*	S4

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-115-0
Lab ID: 1500725-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.75**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:16	J
Arsenic	**8.0**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:16	
Barium	**46**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:15	
Beryllium	**0.67**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:15	J
Cadmium	**0.62**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:16	J
Chromium	**28**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:15	
Cobalt	**9.6**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:16	
Copper	**29**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:15	
Lead	**25**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:16	
Molybdenum	**0.10**	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:15	J
Nickel	**24**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:15	
...nium	**0.97**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:16	J
...ilver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:15	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:16	
Vanadium	**37**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:15	
Zinc	**61**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:15	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:24	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:24	
Surrogate: 4-Bromofluorobenzene	*96.8 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 20:24*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**7.1**	2.0	2.0	2	B5B0701	02/26/2015	02/27/15 12:19	
C23-C32	**59**	2.0	2.0	2	B5B0701	02/26/2015	02/27/15 12:19	
Surrogate: p-Terphenyl	*76.3 %*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 12:19*	

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...clor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
...clor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-115-0
Lab ID: 1500725-05

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
Aroclor 1262	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:31	
Surrogate: Decachlorobiphenyl	*73.7 %*	*8 - 143*			B5B0750	02/27/2015	*02/27/15 18:31*	
Surrogate: Tetrachloro-m-xylene	*93.3 %*	*27 - 124*			B5B0750	02/27/2015	*02/27/15 18:31*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	1600	280	5	B5C0039	03/02/2015	03/02/15 20:02	D1
1,2-Dichlorobenzene	ND	1600	290	5	B5C0039	03/02/2015	03/02/15 20:02	D1
1,3-Dichlorobenzene	ND	1600	320	5	B5C0039	03/02/2015	03/02/15 20:02	D1
1,4-Dichlorobenzene	ND	1600	290	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2,4,5-Trichlorophenol	ND	1600	650	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2,4,6-Trichlorophenol	ND	1600	700	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2,4-Dichlorophenol	ND	8200	660	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2,4-Dimethylphenol	ND	1600	640	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2,4-Dinitrophenol	ND	8200	630	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2,4-Dinitrotoluene	ND	1600	280	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2,6-Dinitrotoluene	ND	1600	340	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2-Chloronaphthalene	ND	1600	300	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2-Chlorophenol	ND	1600	610	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2-Methylnaphthalene	ND	1600	300	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2-Methylphenol	ND	1600	370	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2-Nitroaniline	ND	8200	270	5	B5C0039	03/02/2015	03/02/15 20:02	D1
2-Nitrophenol	ND	1600	740	5	B5C0039	03/02/2015	03/02/15 20:02	D1
3,3'-Dichlorobenzidine	ND	3300	1400	5	B5C0039	03/02/2015	03/02/15 20:02	D1
3-Nitroaniline	ND	8200	230	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4,6-Dinitro-2-methyphenol	ND	8200	460	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4-Bromophenyl-phenylether	ND	1600	390	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4-Chloro-3-methylphenol	ND	3300	620	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4-Chloroaniline	ND	3300	310	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4-Chlorophenyl-phenylether	ND	1600	300	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4-Methylphenol	ND	1600	360	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4-Nitroaniline	ND	8200	330	5	B5C0039	03/02/2015	03/02/15 20:02	D1
4-Nitrophenol	ND	1600	1000	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Acenaphthene	ND	1600	280	5	B5C0039	03/02/2015	03/02/15 20:02	D1

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-115-0
Lab ID: 1500725-05

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Acenaphthylene	ND	1600	280	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Anthracene	ND	1600	290	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzidine (M)	ND	8200	8200	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzo(a)anthracene	ND	1600	270	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzo(a)pyrene	ND	1600	320	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzo(b)fluoranthene	ND	1600	310	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzo(g,h,i)perylene	ND	1600	190	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzo(k)fluoranthene	ND	1600	330	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzoic acid	ND	8200	2100	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Benzyl alcohol	ND	3300	380	5	B5C0039	03/02/2015	03/02/15 20:02	D1
bis(2-chloroethoxy)methane	ND	1600	330	5	B5C0039	03/02/2015	03/02/15 20:02	D1
...)-Chloroethyl)ether	ND	1600	790	5	B5C0039	03/02/2015	03/02/15 20:02	D1
...,2-chloroisopropyl)ether	ND	1600	330	5	B5C0039	03/02/2015	03/02/15 20:02	D1
bis(2-ethylhexyl)phthalate	ND	1600	320	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Butylbenzylphthalate	ND	1600	330	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Chrysene	ND	1600	210	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Di-n-butylphthalate	ND	1600	300	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Di-n-octylphthalate	ND	1600	340	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Dibenz(a,h)anthracene	ND	1600	230	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Dibenzofuran	ND	1600	290	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Diethyl phthalate	ND	1600	310	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Dimethyl phthalate	ND	1600	280	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Fluoranthene	ND	1600	260	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Fluorene	ND	1600	250	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Hexachlorobenzene	ND	1600	300	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Hexachlorobutadiene	ND	3300	290	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Hexachlorocyclopentadiene	ND	3300	360	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Hexachloroethane	ND	1600	320	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Indeno(1,2,3-cd)pyrene	ND	1600	320	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Isophorone	ND	1600	340	5	B5C0039	03/02/2015	03/02/15 20:02	D1
N-Nitroso-di-n propylamine	ND	1600	360	5	B5C0039	03/02/2015	03/02/15 20:02	D1
N-Nitrosodiphenylamine	ND	1600	330	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Naphthalene	ND	1600	290	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Nitrobenzene	ND	1600	290	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Pentachlorophenol	ND	8200	410	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Phenanthrene	ND	1600	310	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Phenol	ND	1600	660	5	B5C0039	03/02/2015	03/02/15 20:02	D1
...ene	ND	1600	270	5	B5C0039	03/02/2015	03/02/15 20:02	D1
...dine	ND	8200	1600	5	B5C0039	03/02/2015	03/02/15 20:02	D1
Surrogate: 1,2-Dichlorobenzene-d4	*45.7 %*	*24 - 114*			B5C0039	03/02/2015	*03/02/15 20:02*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-115-0
Lab ID: 1500725-05

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2,4,6-Tribromophenol	*39.5 %*	*0 - 189*		B5C0039	03/02/2015	*03/02/15 20:02*	
Surrogate: 2-Chlorophenol-d4	*51.6 %*	*23 - 123*		B5C0039	03/02/2015	*03/02/15 20:02*	
Surrogate: 2-Fluorobiphenyl	*54.1 %*	*28 - 128*		B5C0039	03/02/2015	*03/02/15 20:02*	
Surrogate: 2-Fluorophenol	*48.4 %*	*8 - 138*		B5C0039	03/02/2015	*03/02/15 20:02*	
Surrogate: 4-Terphenyl-d14	*59.0 %*	*27 - 154*		B5C0039	03/02/2015	*03/02/15 20:02*	
Surrogate: Nitrobenzene-d5	*53.7 %*	*19 - 129*		B5C0039	03/02/2015	*03/02/15 20:02*	
Surrogate: Phenol-d5	*51.1 %*	*20 - 126*		B5C0039	03/02/2015	*03/02/15 20:02*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-114-0
Lab ID: 1500725-06

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.77**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:19	J
Arsenic	**40**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:19	
Barium	**92**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:19	
Beryllium	**0.70**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:18	J
Cadmium	**0.66**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:19	J
Chromium	**38**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:19	
Cobalt	**7.8**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:19	
Copper	**24**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:19	
Lead	**25**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:19	
Molybdenum	**0.33**	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:19	J
Nickel	**24**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:19	
...lum	**0.99**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:19	J
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:19	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:19	
Vanadium	**39**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:19	
Zinc	**67**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:19	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:39	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:39	
Surrogate: 4-Bromofluorobenzene	*93.4 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 20:39*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**85**	20	20	10	B5B0701	02/26/2015	02/27/15 13:23	
C23-C32	**550**	20	20	10	B5B0701	02/26/2015	02/27/15 13:23	
Surrogate: p-Terphenyl	*0%*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 13:23*	S4

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...clor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	
...clor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-114-0
Lab ID: 1500725-06

Polychlorinated Biphenyls by EPA 8082 — **Analyst: CL**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	
Aroclor 1262	4.6	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	J
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 18:50	
Surrogate: Decachlorobiphenyl	*48.1 %*		*8 - 143*		B5B0750	02/27/2015	*02/27/15 18:50*	
Surrogate: Tetrachloro-m-xylene	*67.4 %*		*27 - 124*		B5B0750	02/27/2015	*02/27/15 18:50*	

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
1,2-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
1,3-Dichlorobenzene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
1,4-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2,4,5-Trichlorophenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2,4,6-Trichlorophenol	ND	8200	3500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2,4-Dichlorophenol	ND	41000	3300	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2,4-Dimethylphenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2,4-Dinitrophenol	ND	41000	3200	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2,4-Dinitrotoluene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2,6-Dinitrotoluene	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2-Chloronaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2-Chlorophenol	ND	8200	3000	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2-Methylnaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2-Methylphenol	ND	8200	1900	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2-Nitroaniline	ND	41000	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
2-Nitrophenol	ND	8200	3700	25	B5C0039	03/02/2015	03/03/15 17:16	D1
3,3'-Dichlorobenzidine	ND	16000	7200	25	B5C0039	03/02/2015	03/03/15 17:16	D1
3-Nitroaniline	ND	41000	1100	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4,6-Dinitro-2-methyphenol	ND	41000	2300	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4-Bromophenyl-phenylether	ND	8200	2000	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4-Chloro-3-methylphenol	ND	16000	3100	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4-Chloroaniline	ND	16000	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4-Chlorophenyl-phenylether	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4-Methylphenol	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4-Nitroaniline	ND	41000	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
4-Nitrophenol	ND	8200	5100	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Acenaphthene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200

Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23

Report To : Anne Perez/Kristy Edblad

Reported : 03/09/2015

Client Sample ID 1278-114-0

Lab ID: 1500725-06

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Acenaphthylene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzidine (M)	ND	41000	41000	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzo(a)anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzo(a)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzo(b)fluoranthene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzo(g,h,i)perylene	ND	8200	970	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzo(k)fluoranthene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzoic acid	ND	41000	11000	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Benzyl alcohol	ND	16000	1900	25	B5C0039	03/02/2015	03/03/15 17:16	D1
bis(2-chloroethoxy)methane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
...)-Chloroethyl)ether	ND	8200	3900	25	B5C0039	03/02/2015	03/03/15 17:16	D1
...,2-chloroisopropyl)ether	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
bis(2-ethylhexyl)phthalate	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Butylbenzylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Chrysene	ND	8200	1000	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Di-n-butylphthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Di-n-octylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Dibenz(a,h)anthracene	ND	8200	1200	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Dibenzofuran	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Diethyl phthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Dimethyl phthalate	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Fluoranthene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Fluorene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Hexachlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Hexachlorobutadiene	ND	16000	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Hexachlorocyclopentadiene	ND	16000	1800	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Hexachloroethane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Indeno(1,2,3-cd)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Isophorone	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:16	D1
N-Nitroso-di-n propylamine	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 17:16	D1
N-Nitrosodiphenylamine	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Naphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Nitrobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Pentachlorophenol	ND	41000	2100	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Phenanthrene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Phenol	ND	8200	3300	25	B5C0039	03/02/2015	03/03/15 17:16	D1
...ene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:16	D1
...dine	ND	41000	8100	25	B5C0039	03/02/2015	03/03/15 17:16	D1
Surrogate: 1,2-Dichlorobenzene-d4	*0%*	*24 - 114*			B5C0039	03/02/2015	*03/03/15 17:16*	S4

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-114-0
Lab ID: 1500725-06

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte		Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2,4,6-Tribromophenol	*0%*		*0 - 189*		B5C0039	03/02/2015	*03/03/15 17:16*	S4
Surrogate: 2-Chlorophenol-d4	*0%*		*23 - 123*		B5C0039	03/02/2015	*03/03/15 17:16*	S4
Surrogate: 2-Fluorobiphenyl	*0%*		*28 - 128*		B5C0039	03/02/2015	*03/03/15 17:16*	S4
Surrogate: 2-Fluorophenol	*0%*		*8 - 138*		B5C0039	03/02/2015	*03/03/15 17:16*	S4
Surrogate: 4-Terphenyl-d14	*0%*		*27 - 154*		B5C0039	03/02/2015	*03/03/15 17:16*	S4
Surrogate: Nitrobenzene-d5	*0%*		*19 - 129*		B5C0039	03/02/2015	*03/03/15 17:16*	S4
Surrogate: Phenol-d5	*0%*		*20 - 126*		B5C0039	03/02/2015	*03/03/15 17:16*	S4

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-113-0
Lab ID: 1500725-07

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	1.2	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:29	J
Arsenic	10	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:29	
Barium	90	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:29	
Beryllium	0.88	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:28	J
Cadmium	0.63	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:29	J
Chromium	28	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:29	
Cobalt	7.6	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:29	
Copper	28	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:29	
Lead	29	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:29	
Molybdenum	0.62	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:29	J
Nickel	21	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:29	
...nium	1.0	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:29	J
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:29	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:29	
Vanadium	43	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:29	
Zinc	59	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:29	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:55	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 20:55	
Surrogate: 4-Bromofluorobenzene	*96.9 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 20:55*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	62	20	20	10	B5B0701	02/26/2015	02/27/15 13:39	
C23-C32	560	20	20	10	B5B0701	02/26/2015	02/27/15 13:39	
Surrogate: p-Terphenyl	*0%*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 13:39*	S4

Polychlorinated Biphenyls by EPA 8082 — **Analyst: CL**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...clor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	
...clor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-113-0
Lab ID: 1500725-07

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	
Aroclor 1262	3.3	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	J
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:09	
Surrogate: Decachlorobiphenyl	*55.4 %*	*8 - 143*			B5B0750	02/27/2015	*02/27/15 19:09*	
Surrogate: Tetrachloro-m-xylene	*79.3 %*	*27 - 124*			B5B0750	02/27/2015	*02/27/15 19:09*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
1,2-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
1,3-Dichlorobenzene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
1,4-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2,4,5-Trichlorophenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2,4,6-Trichlorophenol	ND	8200	3500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2,4-Dichlorophenol	ND	41000	3300	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2,4-Dimethylphenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2,4-Dinitrophenol	ND	41000	3200	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2,4-Dinitrotoluene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2,6-Dinitrotoluene	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2-Chloronaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2-Chlorophenol	ND	8200	3000	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2-Methylnaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2-Methylphenol	ND	8200	1900	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2-Nitroaniline	ND	41000	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
2-Nitrophenol	ND	8200	3700	25	B5C0039	03/02/2015	03/03/15 17:41	D1
3,3'-Dichlorobenzidine	ND	16000	7200	25	B5C0039	03/02/2015	03/03/15 17:41	D1
3-Nitroaniline	ND	41000	1100	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4,6-Dinitro-2-methyphenol	ND	41000	2300	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4-Bromophenyl-phenylether	ND	8200	2000	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4-Chloro-3-methylphenol	ND	16000	3100	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4-Chloroaniline	ND	16000	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4-Chlorophenyl-phenylether	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4-Methylphenol	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4-Nitroaniline	ND	41000	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
4-Nitrophenol	ND	8200	5100	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Acenaphthene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-113-0
Lab ID: 1500725-07

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Acenaphthylene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzidine (M)	ND	41000	41000	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzo(a)anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzo(a)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzo(b)fluoranthene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzo(g,h,i)perylene	ND	8200	970	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzo(k)fluoranthene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzoic acid	ND	41000	11000	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Benzyl alcohol	ND	16000	1900	25	B5C0039	03/02/2015	03/03/15 17:41	D1
bis(2-chloroethoxy)methane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
...?-Chloroethyl)ether	ND	8200	3900	25	B5C0039	03/02/2015	03/03/15 17:41	D1
...(2-chloroisopropyl)ether	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
bis(2-ethylhexyl)phthalate	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Butylbenzylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Chrysene	ND	8200	1000	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Di-n-butylphthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Di-n-octylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Dibenz(a,h)anthracene	ND	8200	1200	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Dibenzofuran	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Diethyl phthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Dimethyl phthalate	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Fluoranthene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Fluorene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Hexachlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Hexachlorobutadiene	ND	16000	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Hexachlorocyclopentadiene	ND	16000	1800	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Hexachloroethane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Indeno(1,2,3-cd)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Isophorone	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:41	D1
N-Nitroso-di-n propylamine	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 17:41	D1
N-Nitrosodiphenylamine	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Naphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Nitrobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Pentachlorophenol	ND	41000	2100	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Phenanthrene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Phenol	ND	8200	3300	25	B5C0039	03/02/2015	03/03/15 17:41	D1
...ene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 17:41	D1
...dine	ND	41000	8100	25	B5C0039	03/02/2015	03/03/15 17:41	D1
Surrogate: 1,2-Dichlorobenzene-d4	*0%*	*24 - 114*			B5C0039	03/02/2015	*03/03/15 17:41*	S4

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-113-0
Lab ID: 1500725-07

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2,4,6-Tribromophenol	*0%*	*0 - 189*		B5C0039	03/02/2015	*03/03/15 17:41*	S4
Surrogate: 2-Chlorophenol-d4	*0%*	*23 - 123*		B5C0039	03/02/2015	*03/03/15 17:41*	S4
Surrogate: 2-Fluorobiphenyl	*0%*	*28 - 128*		B5C0039	03/02/2015	*03/03/15 17:41*	S4
Surrogate: 2-Fluorophenol	*0%*	*8 - 138*		B5C0039	03/02/2015	*03/03/15 17:41*	S4
Surrogate: 4-Terphenyl-d14	*0%*	*27 - 154*		B5C0039	03/02/2015	*03/03/15 17:41*	S4
Surrogate: Nitrobenzene-d5	*0%*	*19 - 129*		B5C0039	03/02/2015	*03/03/15 17:41*	S4
Surrogate: Phenol-d5	*0%*	*20 - 126*		B5C0039	03/02/2015	*03/03/15 17:41*	S4

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-112-0
Lab ID: 1500725-08

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.89**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:33	J
Arsenic	**9.3**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:33	
Barium	**97**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:32	
Beryllium	**0.81**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:32	J
Cadmium	**0.83**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:33	J
Chromium	**22**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:32	
Cobalt	**6.5**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:33	
Copper	**22**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:32	
Lead	**28**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:33	
Molybdenum	**1.2**	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:32	
Nickel	**19**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:32	
...nium	**1.4**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:33	
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:32	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:33	
Vanadium	**38**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:32	
Zinc	**64**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:32	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:11	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:11	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 21:11*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**32**	10	10	5	B5B0701	02/26/2015	02/27/15 12:51	
C23-C32	**240**	10	10	5	B5B0701	02/26/2015	02/27/15 12:51	
Surrogate: p-Terphenyl	*0%*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 12:51*	S4

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...clor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	
...clor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-112-0
Lab ID: 1500725-08

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	
Aroclor 1262	14	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	J
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:28	
Surrogate: Decachlorobiphenyl	*59.7 %*	*8 - 143*			B5B0750	02/27/2015	*02/27/15 19:28*	
Surrogate: Tetrachloro-m-xylene	*83.9 %*	*27 - 124*			B5B0750	02/27/2015	*02/27/15 19:28*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
1,2-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
1,3-Dichlorobenzene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
1,4-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2,4,5-Trichlorophenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2,4,6-Trichlorophenol	ND	8200	3500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2,4-Dichlorophenol	ND	41000	3300	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2,4-Dimethylphenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2,4-Dinitrophenol	ND	41000	3200	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2,4-Dinitrotoluene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2,6-Dinitrotoluene	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2-Chloronaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2-Chlorophenol	ND	8200	3000	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2-Methylnaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2-Methylphenol	ND	8200	1900	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2-Nitroaniline	ND	41000	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
2-Nitrophenol	ND	8200	3700	25	B5C0039	03/02/2015	03/03/15 18:07	D1
3,3'-Dichlorobenzidine	ND	16000	7200	25	B5C0039	03/02/2015	03/03/15 18:07	D1
3-Nitroaniline	ND	41000	1100	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4,6-Dinitro-2-methyphenol	ND	41000	2300	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4-Bromophenyl-phenylether	ND	8200	2000	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4-Chloro-3-methylphenol	ND	16000	3100	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4-Chloroaniline	ND	16000	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4-Chlorophenyl-phenylether	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4-Methylphenol	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4-Nitroaniline	ND	41000	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
4-Nitrophenol	ND	8200	5100	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Acenaphthene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1

...tec
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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-112-0
Lab ID: 1500725-08

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Acenaphthylene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzidine (M)	ND	41000	41000	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzo(a)anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzo(a)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzo(b)fluoranthene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzo(g,h,i)perylene	ND	8200	970	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzo(k)fluoranthene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzoic acid	ND	41000	11000	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Benzyl alcohol	ND	16000	1900	25	B5C0039	03/02/2015	03/03/15 18:07	D1
bis(2-chloroethoxy)methane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
...?-Chloroethyl)ether	ND	8200	3900	25	B5C0039	03/02/2015	03/03/15 18:07	D1
...2-chloroisopropyl)ether	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
bis(2-ethylhexyl)phthalate	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Butylbenzylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Chrysene	ND	8200	1000	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Di-n-butylphthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Di-n-octylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Dibenz(a,h)anthracene	ND	8200	1200	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Dibenzofuran	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Diethyl phthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Dimethyl phthalate	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Fluoranthene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Fluorene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Hexachlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Hexachlorobutadiene	ND	16000	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Hexachlorocyclopentadiene	ND	16000	1800	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Hexachloroethane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Indeno(1,2,3-cd)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Isophorone	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:07	D1
N-Nitroso-di-n propylamine	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 18:07	D1
N-Nitrosodiphenylamine	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Naphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Nitrobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Pentachlorophenol	ND	41000	2100	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Phenanthrene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Phenol	ND	8200	3300	25	B5C0039	03/02/2015	03/03/15 18:07	D1
...ene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:07	D1
...line	ND	41000	8100	25	B5C0039	03/02/2015	03/03/15 18:07	D1
Surrogate: 1,2-Dichlorobenzene-d4	*0%*	*24 - 114*			B5C0039	03/02/2015	*03/03/15 18:07*	S4

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-112-0

Lab ID: 1500725-08

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2,4,6-Tribromophenol	*0%*	*0 - 189*		B5C0039	03/02/2015	*03/03/15 18:07*	S4
Surrogate: 2-Chlorophenol-d4	*0%*	*23 - 123*		B5C0039	03/02/2015	*03/03/15 18:07*	S4
Surrogate: 2-Fluorobiphenyl	*0%*	*28 - 128*		B5C0039	03/02/2015	*03/03/15 18:07*	S4
Surrogate: 2-Fluorophenol	*0%*	*8 - 138*		B5C0039	03/02/2015	*03/03/15 18:07*	S4
Surrogate: 4-Terphenyl-d14	*0%*	*27 - 154*		B5C0039	03/02/2015	*03/03/15 18:07*	S4
Surrogate: Nitrobenzene-d5	*0%*	*19 - 129*		B5C0039	03/02/2015	*03/03/15 18:07*	S4
Surrogate: Phenol-d5	*0%*	*20 - 126*		B5C0039	03/02/2015	*03/03/15 18:07*	S4

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-111-0
Lab ID: 1500725-09

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.2**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:36	J
Arsenic	**10**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:36	
Barium	**90**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:36	
Beryllium	**0.90**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:35	J
Cadmium	**0.67**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:36	J
Chromium	**33**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:36	
Cobalt	**8.2**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:36	
Copper	**29**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:36	
Lead	**28**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:36	
Molybdenum	**0.37**	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:36	J
Nickel	**23**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:36	
...ium	**1.3**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:36	
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:36	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:36	
Vanadium	**48**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:36	
Zinc	**59**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:36	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:26	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:26	
Surrogate: 4-Bromofluorobenzene	*96.7 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 21:26*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**51**	20	20	10	B5B0701	02/26/2015	02/27/15 13:56	
C23-C32	**430**	20	20	10	B5B0701	02/26/2015	02/27/15 13:56	
Surrogate: p-Terphenyl	*0%*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 13:56*	S4

Polychlorinated Biphenyls by EPA 8082 — **Analyst: CL**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...lor 1016	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	
...lor 1221	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	
Aroclor 1232	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-111-0

Lab ID: 1500725-09

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1242	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	
Aroclor 1248	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	
Aroclor 1254	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	
Aroclor 1260	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	
Aroclor 1262	7.5	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	J
Aroclor 1268	ND	16	2.1	1	B5B0750	02/27/2015	02/27/15 19:47	
Surrogate: Decachlorobiphenyl	*53.4 %*	*8 - 143*			B5B0750	02/27/2015	*02/27/15 19:47*	
Surrogate: Tetrachloro-m-xylene	*82.3 %*	*27 - 124*			B5B0750	02/27/2015	*02/27/15 19:47*	

Semivolatile Organic Compounds by EPA 8270C

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
1,2-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
1,3-Dichlorobenzene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
1,4-Dichlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2,4,5-Trichlorophenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2,4,6-Trichlorophenol	ND	8200	3500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2,4-Dichlorophenol	ND	41000	3300	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2,4-Dimethylphenol	ND	8200	3200	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2,4-Dinitrophenol	ND	41000	3200	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2,4-Dinitrotoluene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2,6-Dinitrotoluene	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2-Chloronaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2-Chlorophenol	ND	8200	3000	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2-Methylnaphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2-Methylphenol	ND	8200	1900	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2-Nitroaniline	ND	41000	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2-Nitrophenol	ND	8200	3700	25	B5C0039	03/02/2015	03/03/15 18:33	D1
3,3'-Dichlorobenzidine	ND	16000	7200	25	B5C0039	03/02/2015	03/03/15 18:33	D1
3-Nitroaniline	ND	41000	1100	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4,6-Dinitro-2-methyphenol	ND	41000	2300	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4-Bromophenyl-phenylether	ND	8200	2000	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4-Chloro-3-methylphenol	ND	16000	3100	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4-Chloroaniline	ND	16000	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4-Chlorophenyl-phenylether	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4-Methylphenol	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4-Nitroaniline	ND	41000	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
4-Nitrophenol	ND	8200	5100	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Acenaphthene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-111-0
Lab ID: 1500725-09

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Acenaphthylene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzidine (M)	ND	41000	41000	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzo(a)anthracene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzo(a)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzo(b)fluoranthene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzo(g,h,i)perylene	ND	8200	970	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzo(k)fluoranthene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzoic acid	ND	41000	11000	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Benzyl alcohol	ND	16000	1900	25	B5C0039	03/02/2015	03/03/15 18:33	D1
bis(2-chloroethoxy)methane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
'2-Chloroethyl)ether	ND	8200	3900	25	B5C0039	03/02/2015	03/03/15 18:33	D1
2-chloroisopropyl)ether	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
bis(2-ethylhexyl)phthalate	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Butylbenzylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Chrysene	ND	8200	1000	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Di-n-butylphthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Di-n-octylphthalate	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Dibenz(a,h)anthracene	ND	8200	1200	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Dibenzofuran	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Diethyl phthalate	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Dimethyl phthalate	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Fluoranthene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Fluorene	ND	8200	1300	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Hexachlorobenzene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Hexachlorobutadiene	ND	16000	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Hexachlorocyclopentadiene	ND	16000	1800	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Hexachloroethane	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Indeno(1,2,3-cd)pyrene	ND	8200	1600	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Isophorone	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:33	D1
N-Nitroso-di-n propylamine	ND	8200	1800	25	B5C0039	03/02/2015	03/03/15 18:33	D1
N-Nitrosodiphenylamine	ND	8200	1700	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Naphthalene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Nitrobenzene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Pentachlorophenol	ND	41000	2100	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Phenanthrene	ND	8200	1500	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Phenol	ND	8200	3300	25	B5C0039	03/02/2015	03/03/15 18:33	D1
ene	ND	8200	1400	25	B5C0039	03/02/2015	03/03/15 18:33	D1
line	ND	41000	8100	25	B5C0039	03/02/2015	03/03/15 18:33	D1
Surrogate: 1,2-Dichlorobenzene-d4	*0%*	*24 - 114*			B5C0039	03/02/2015	*03/03/15 18:33*	S4

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-111-0
Lab ID: 1500725-09

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2,4,6-Tribromophenol	*0%*	*0 - 189*		B5C0039	03/02/2015	*03/03/15 18:33*	S4
Surrogate: 2-Chlorophenol-d4	*0%*	*23 - 123*		B5C0039	03/02/2015	*03/03/15 18:33*	S4
Surrogate: 2-Fluorobiphenyl	*0%*	*28 - 128*		B5C0039	03/02/2015	*03/03/15 18:33*	S4
Surrogate: 2-Fluorophenol	*0%*	*8 - 138*		B5C0039	03/02/2015	*03/03/15 18:33*	S4
Surrogate: 4-Terphenyl-d14	*0%*	*27 - 154*		B5C0039	03/02/2015	*03/03/15 18:33*	S4
Surrogate: Nitrobenzene-d5	*0%*	*19 - 129*		B5C0039	03/02/2015	*03/03/15 18:33*	S4
Surrogate: Phenol-d5	*0%*	*20 - 126*		B5C0039	03/02/2015	*03/03/15 18:33*	S4

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-2-022415
Lab ID: 1500725-10

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:04	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:04	
Barium	**0.0005**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:04	J
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:03	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:04	
Chromium	**0.0011**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:04	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:04	
Copper	**0.0028**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:04	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:04	
Molybdenum	**0.0006**	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:04	J
Nickel	**0.0014**	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:04	J
...nium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:04	
...ilver	**0.0015**	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:04	J
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:04	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:04	
Zinc	**0.0056**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:04	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 14:21	
C4-C8	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 14:21	
Surrogate: 4-Bromofluorobenzene	*96.5 %*	*70 - 130*			B5B0704	02/26/2015	*02/26/15 14:21*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 15:34	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 15:34	
Surrogate: p-Terphenyl	*51.9 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 15:34*	

Polychlorinated Biphenyls by EPA 8082

Analyst: CL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...clor 1016	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
...clor 1221	ND	1.0	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
Aroclor 1232	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
Aroclor 1242	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-2-022415
Lab ID: 1500725-10

Polychlorinated Biphenyls by EPA 8082 — **Analyst: CL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Aroclor 1248	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
Aroclor 1254	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
Aroclor 1260	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
Aroclor 1262	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
Aroclor 1268	ND	0.50	0.03	1	B5C0059	03/03/2015	03/03/15 12:13	
Surrogate: Decachlorobiphenyl	*54.7 %*	*20 - 138*			B5C0059	03/03/2015	*03/03/15 12:13*	
Surrogate: Tetrachloro-m-xylene	*75.0 %*	*11 - 133*			B5C0059	03/03/2015	*03/03/15 12:13*	

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2,4-Trichlorobenzene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
1,2-Dichlorobenzene	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:45	
1,3-Dichlorobenzene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
1,4-Dichlorobenzene	ND	10	1.3	1	B5C0043	03/02/2015	03/02/15 18:45	
2,4,5-Trichlorophenol	ND	10	2.3	1	B5C0043	03/02/2015	03/02/15 18:45	
2,4,6-Trichlorophenol	ND	10	3.3	1	B5C0043	03/02/2015	03/02/15 18:45	
2,4-Dichlorophenol	ND	10	3.9	1	B5C0043	03/02/2015	03/02/15 18:45	
2,4-Dimethylphenol	ND	10	3.3	1	B5C0043	03/02/2015	03/02/15 18:45	
2,4-Dinitrophenol	ND	50	2.8	1	B5C0043	03/02/2015	03/02/15 18:45	
2,4-Dinitrotoluene	ND	10	2.0	1	B5C0043	03/02/2015	03/02/15 18:45	
2,6-Dinitrotoluene	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:45	
2-Chloronaphthalene	ND	10	1.4	1	B5C0043	03/02/2015	03/02/15 18:45	
2-Chlorophenol	ND	10	3.5	1	B5C0043	03/02/2015	03/02/15 18:45	
2-Methylnaphthalene	ND	10	1.4	1	B5C0043	03/02/2015	03/02/15 18:45	
2-Methylphenol	ND	10	2.0	1	B5C0043	03/02/2015	03/02/15 18:45	
2-Nitroaniline	ND	50	1.9	1	B5C0043	03/02/2015	03/02/15 18:45	
2-Nitrophenol	ND	10	3.3	1	B5C0043	03/02/2015	03/02/15 18:45	
3,3'-Dichlorobenzidine	ND	20	11	1	B5C0043	03/02/2015	03/02/15 18:45	
3-Nitroaniline	ND	50	1.8	1	B5C0043	03/02/2015	03/02/15 18:45	
4,6-Dinitro-2-methyphenol	ND	50	2.4	1	B5C0043	03/02/2015	03/02/15 18:45	
4-Bromophenyl-phenylether	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
4-Chloro-3-methylphenol	ND	50	3.7	1	B5C0043	03/02/2015	03/02/15 18:45	
4-Chloroaniline	ND	20	1.7	1	B5C0043	03/02/2015	03/02/15 18:45	
4-Chlorophenyl-phenylether	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:45	
4-Methylphenol	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:45	
4-Nitroaniline	ND	20	2.2	1	B5C0043	03/02/2015	03/02/15 18:45	
4-Nitrophenol	ND	50	3.6	1	B5C0043	03/02/2015	03/02/15 18:45	
Acenaphthene	ND	10	1.4	1	B5C0043	03/02/2015	03/02/15 18:45	
Acenaphthylene	ND	10	1.3	1	B5C0043	03/02/2015	03/02/15 18:45	

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Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID EBB-2-022415
Lab ID: 1500725-10

Semivolatile Organic Compounds by EPA 8270C — **Analyst: BD**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Anthracene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzidine (M)	ND	50	2.7	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzo(a)anthracene	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzo(a)pyrene	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzo(b)fluoranthene	ND	10	2.0	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzo(g,h,i)perylene	ND	10	2.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzo(k)fluoranthene	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzoic acid	ND	50	35	1	B5C0043	03/02/2015	03/02/15 18:45	
Benzyl alcohol	ND	20	1.3	1	B5C0043	03/02/2015	03/02/15 18:45	
bis(2-chloroethoxy)methane	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:45	
bis(2-Chloroethyl)ether	ND	10	2.9	1	B5C0043	03/02/2015	03/02/15 18:45	
'2-chloroisopropyl)ether	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
.2-ethylhexyl)phthalate	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:45	
Butylbenzylphthalate	ND	10	2.1	1	B5C0043	03/02/2015	03/02/15 18:45	
Chrysene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Di-n-butylphthalate	ND	10	3.2	1	B5C0043	03/02/2015	03/02/15 18:45	
Di-n-octylphthalate	ND	10	2.2	1	B5C0043	03/02/2015	03/02/15 18:45	
Dibenz(a,h)anthracene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Dibenzofuran	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:45	
Diethyl phthalate	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:45	
Dimethyl phthalate	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:45	
Fluoranthene	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:45	
Fluorene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Hexachlorobenzene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Hexachlorobutadiene	ND	20	1.6	1	B5C0043	03/02/2015	03/02/15 18:45	
Hexachlorocyclopentadiene	ND	10	1.9	1	B5C0043	03/02/2015	03/02/15 18:45	
Hexachloroethane	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Indeno(1,2,3-cd)pyrene	ND	10	1.9	1	B5C0043	03/02/2015	03/02/15 18:45	
Isophorone	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:45	
N-Nitroso-di-n propylamine	ND	10	1.6	1	B5C0043	03/02/2015	03/02/15 18:45	
N-Nitrosodiphenylamine	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Naphthalene	ND	10	1.5	1	B5C0043	03/02/2015	03/02/15 18:45	
Nitrobenzene	ND	10	1.7	1	B5C0043	03/02/2015	03/02/15 18:45	
Pentachlorophenol	ND	50	2.9	1	B5C0043	03/02/2015	03/02/15 18:45	
Phenanthrene	ND	10	1.8	1	B5C0043	03/02/2015	03/02/15 18:45	
Phenol	ND	10	4.8	1	B5C0043	03/02/2015	03/02/15 18:45	
Pyrene	ND	10	1.9	1	B5C0043	03/02/2015	03/02/15 18:45	
Pyridine	ND	50	9.2	1	B5C0043	03/02/2015	03/02/15 18:45	
ogate: 1,2-Dichlorobenzene-d4	*72.0 %*	*4 - 111*			B5C0043	03/02/2015	*03/02/15 18:45*	
Surrogate: 2,4,6-Tribromophenol	*92.7 %*	*21 - 162*			B5C0043	03/02/2015	*03/02/15 18:45*	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-2-022415
Lab ID: 1500725-10

Semivolatile Organic Compounds by EPA 8270C **Analyst: BD**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 2-Chlorophenol-d4	*71.8 %*	*0 - 124*		B5C0043	03/02/2015	*03/02/15 18:45*	
Surrogate: 2-Fluorobiphenyl	*89.8 %*	*21 - 118*		B5C0043	03/02/2015	*03/02/15 18:45*	
Surrogate: 2-Fluorophenol	*48.2 %*	*0 - 83*		B5C0043	03/02/2015	*03/02/15 18:45*	
Surrogate: 4-Terphenyl-d14	*100 %*	*33 - 150*		B5C0043	03/02/2015	*03/02/15 18:45*	
Surrogate: Nitrobenzene-d5	*83.4 %*	*10 - 117*		B5C0043	03/02/2015	*03/02/15 18:45*	
Surrogate: Phenol-d5	*34.8 %*	*0 - 68*		B5C0043	03/02/2015	*03/02/15 18:45*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-155-0
Lab ID: 1500725-11

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.81**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:39	J
Arsenic	**0.68**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:39	J
Barium	**75**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:39	
Beryllium	**0.49**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:38	J
Cadmium	**0.19**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:39	J
Chromium	**4.9**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:39	
Cobalt	**4.6**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:39	
Copper	**13**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:39	
Lead	**15**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:39	
Molybdenum	ND	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:39	
Nickel	**4.4**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:39	
...nium	**0.51**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:39	J
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:39	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:39	
Vanadium	**21**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:39	
Zinc	**38**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:39	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:42	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:42	
Surrogate: 4-Bromofluorobenzene	*97.3 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 21:42*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**1.1**	1.0	1.0	1	B5B0701	02/26/2015	02/27/15 00:28	
C23-C32	**2.2**	1.0	1.0	1	B5B0701	02/26/2015	02/27/15 00:28	
Surrogate: p-Terphenyl	*72.3 %*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 00:28*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
...-Trichloroethane	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5B0719	02/26/2015	02/26/15 18:10	

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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-155-0
Lab ID: 1500725-11

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
1,1-Dichloroethane	ND	4.4	0.86	1	B5B0719	02/26/2015	02/26/15 18:10	
1,1-Dichloroethene	ND	4.4	1.0	1	B5B0719	02/26/2015	02/26/15 18:10	
1,1-Dichloropropene	ND	4.4	1.4	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2-Dibromo-3-chloropropane	ND	8.8	1.9	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2-Dibromoethane	ND	4.4	1.3	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2-Dichloroethane	ND	4.4	0.77	1	B5B0719	02/26/2015	02/26/15 18:10	
1,2-Dichloropropane	ND	4.4	3.0	1	B5B0719	02/26/2015	02/26/15 18:10	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
1,3-Dichloropropane	ND	4.4	0.97	1	B5B0719	02/26/2015	02/26/15 18:10	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5B0719	02/26/2015	02/26/15 18:10	
2,2-Dichloropropane	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
2-Chlorotoluene	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
4-Chlorotoluene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
4-Isopropyltoluene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Benzene	ND	4.4	1.0	1	B5B0719	02/26/2015	02/26/15 18:10	
Bromobenzene	ND	4.4	1.4	1	B5B0719	02/26/2015	02/26/15 18:10	
Bromochloromethane	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
Bromodichloromethane	ND	4.4	1.4	1	B5B0719	02/26/2015	02/26/15 18:10	
Bromoform	ND	4.4	1.3	1	B5B0719	02/26/2015	02/26/15 18:10	
Bromomethane	ND	4.4	2.3	1	B5B0719	02/26/2015	02/26/15 18:10	
Carbon disulfide	ND	4.4	2.0	1	B5B0719	02/26/2015	02/26/15 18:10	
Carbon tetrachloride	ND	4.4	1.3	1	B5B0719	02/26/2015	02/26/15 18:10	
Chlorobenzene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Chloroethane	ND	4.4	4.4	1	B5B0719	02/26/2015	02/26/15 18:10	
Chloroform	ND	4.4	1.3	1	B5B0719	02/26/2015	02/26/15 18:10	
Chloromethane	ND	4.4	0.65	1	B5B0719	02/26/2015	02/26/15 18:10	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5B0719	02/26/2015	02/26/15 18:10	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5B0719	02/26/2015	02/26/15 18:10	
Di-isopropyl ether	ND	4.4	0.89	1	B5B0719	02/26/2015	02/26/15 18:10	
Dibromochloromethane	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Dibromomethane	ND	4.4	1.7	1	B5B0719	02/26/2015	02/26/15 18:10	
Dichlorodifluoromethane	ND	4.4	0.65	1	B5B0719	02/26/2015	02/26/15 18:10	
Ethyl Acetate	ND	44	12	1	B5B0719	02/26/2015	02/26/15 18:10	
Ethyl Ether	ND	44	11	1	B5B0719	02/26/2015	02/26/15 18:10	

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Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-155-0
Lab ID: 1500725-11

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5B0719	02/26/2015	02/26/15 18:10	
Ethylbenzene	ND	4.4	0.99	1	B5B0719	02/26/2015	02/26/15 18:10	
Freon-113	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Hexachlorobutadiene	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
Isopropylbenzene	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
m,p-Xylene	ND	8.8	2.2	1	B5B0719	02/26/2015	02/26/15 18:10	
Methylene chloride	ND	4.4	4.4	1	B5B0719	02/26/2015	02/26/15 18:10	
MTBE	ND	4.4	0.80	1	B5B0719	02/26/2015	02/26/15 18:10	
n-Butylbenzene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
n-Propylbenzene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Naphthalene	ND	4.4	2.8	1	B5B0719	02/26/2015	02/26/15 18:10	
..lene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
..-Butylbenzene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Styrene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
tert-Amyl methyl ether	ND	4.4	0.90	1	B5B0719	02/26/2015	02/26/15 18:10	
tert-Butanol	ND	88	18	1	B5B0719	02/26/2015	02/26/15 18:10	
tert-Butylbenzene	ND	4.4	1.2	1	B5B0719	02/26/2015	02/26/15 18:10	
Tetrachloroethene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Toluene	ND	4.4	0.78	1	B5B0719	02/26/2015	02/26/15 18:10	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5B0719	02/26/2015	02/26/15 18:10	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5B0719	02/26/2015	02/26/15 18:10	
Trichloroethene	ND	4.4	1.1	1	B5B0719	02/26/2015	02/26/15 18:10	
Trichlorofluoromethane	ND	4.4	1.6	1	B5B0719	02/26/2015	02/26/15 18:10	
Vinyl acetate	ND	44	9.4	1	B5B0719	02/26/2015	02/26/15 18:10	
Vinyl chloride	ND	4.4	0.90	1	B5B0719	02/26/2015	02/26/15 18:10	
Surrogate: 1,2-Dichloroethane-d4	*104 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 18:10*	
Surrogate: 4-Bromofluorobenzene	*99.2 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 18:10*	
Surrogate: Dibromofluoromethane	*95.0 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 18:10*	
Surrogate: Toluene-d8	*99.5 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 18:10*	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-155-1.5
Lab ID: 1500725-12

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.75**	2.0	0.25	1	B5C0082	03/04/2015	03/04/15 15:43	J
Arsenic	**0.65**	1.0	0.19	1	B5C0082	03/04/2015	03/04/15 15:43	J
Barium	**65**	1.0	0.14	1	B5C0082	03/04/2015	03/04/15 15:42	
Beryllium	**0.52**	1.0	0.04	1	B5C0082	03/04/2015	03/04/15 15:42	J
Cadmium	**0.19**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:43	J
Chromium	**5.5**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:43	
Cobalt	**4.9**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:43	
Copper	**14**	2.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:42	
Lead	**5.2**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:43	
Molybdenum	ND	1.0	0.05	1	B5C0082	03/04/2015	03/04/15 15:43	
Nickel	**5.0**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:43	
Selenium	**0.70**	1.0	0.15	1	B5C0082	03/04/2015	03/04/15 15:43	J
Silver	ND	1.0	0.06	1	B5C0082	03/04/2015	03/04/15 15:42	
Thallium	ND	1.0	0.20	1	B5C0082	03/04/2015	03/04/15 15:43	
Vanadium	**21**	1.0	0.07	1	B5C0082	03/04/2015	03/04/15 15:42	
Zinc	**22**	1.0	0.11	1	B5C0082	03/04/2015	03/04/15 15:42	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:58	
C4-C8	ND	1.0	0.20	1	B5B0723	02/26/2015	02/26/15 21:58	
Surrogate: 4-Bromofluorobenzene	*93.4 %*	*37 - 153*			B5B0723	02/26/2015	*02/26/15 21:58*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5B0701	02/26/2015	02/27/15 00:44	
C23-C32	**2.9**	1.0	1.0	1	B5B0701	02/26/2015	02/27/15 00:44	
Surrogate: p-Terphenyl	*49.6 %*	*40 - 112*			B5B0701	02/26/2015	*02/27/15 00:44*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
1,1,1-Trichloroethane	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
1,1,2,2-Tetrachloroethane	ND	4.0	1.6	1	B5B0719	02/26/2015	02/26/15 18:29	
1,1,2-Trichloroethane	ND	4.0	0.97	1	B5B0719	02/26/2015	02/26/15 18:29	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-155-1.5
Lab ID: 1500725-12

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	4.0	0.79	1	B5B0719	02/26/2015	02/26/15 18:29	
1,1-Dichloroethene	ND	4.0	0.91	1	B5B0719	02/26/2015	02/26/15 18:29	
1,1-Dichloropropene	ND	4.0	1.2	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2,3-Trichloropropane	ND	4.0	1.5	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2,3-Trichlorobenzene	ND	4.0	2.2	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2,4-Trichlorobenzene	ND	4.0	1.6	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2,4-Trimethylbenzene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2-Dibromo-3-chloropropane	ND	8.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2-Dibromoethane	ND	4.0	1.2	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2-Dichlorobenzene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
1,2-Dichloroethane	ND	4.0	0.70	1	B5B0719	02/26/2015	02/26/15 18:29	
Dichloropropane	ND	4.0	2.7	1	B5B0719	02/26/2015	02/26/15 18:29	
,5-Trimethylbenzene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
1,3-Dichlorobenzene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
1,3-Dichloropropane	ND	4.0	0.88	1	B5B0719	02/26/2015	02/26/15 18:29	
1,4-Dichlorobenzene	ND	4.0	1.4	1	B5B0719	02/26/2015	02/26/15 18:29	
2,2-Dichloropropane	ND	4.0	0.98	1	B5B0719	02/26/2015	02/26/15 18:29	
2-Chlorotoluene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
4-Chlorotoluene	ND	4.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:29	
4-Isopropyltoluene	ND	4.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:29	
Benzene	ND	4.0	0.95	1	B5B0719	02/26/2015	02/26/15 18:29	
Bromobenzene	ND	4.0	1.3	1	B5B0719	02/26/2015	02/26/15 18:29	
Bromochloromethane	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
Bromodichloromethane	ND	4.0	1.2	1	B5B0719	02/26/2015	02/26/15 18:29	
Bromoform	ND	4.0	1.2	1	B5B0719	02/26/2015	02/26/15 18:29	
Bromomethane	ND	4.0	2.1	1	B5B0719	02/26/2015	02/26/15 18:29	
Carbon disulfide	ND	4.0	1.9	1	B5B0719	02/26/2015	02/26/15 18:29	
Carbon tetrachloride	ND	4.0	1.2	1	B5B0719	02/26/2015	02/26/15 18:29	
Chlorobenzene	ND	4.0	0.97	1	B5B0719	02/26/2015	02/26/15 18:29	
Chloroethane	ND	4.0	4.0	1	B5B0719	02/26/2015	02/26/15 18:29	
Chloroform	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
Chloromethane	ND	4.0	0.60	1	B5B0719	02/26/2015	02/26/15 18:29	
cis-1,2-Dichloroethene	ND	4.0	0.95	1	B5B0719	02/26/2015	02/26/15 18:29	
cis-1,3-Dichloropropene	ND	4.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:29	
Di-isopropyl ether	ND	4.0	0.81	1	B5B0719	02/26/2015	02/26/15 18:29	
Dibromochloromethane	ND	4.0	0.98	1	B5B0719	02/26/2015	02/26/15 18:29	
Dibromomethane	ND	4.0	1.6	1	B5B0719	02/26/2015	02/26/15 18:29	
-hlorodifluoromethane	ND	4.0	0.59	1	B5B0719	02/26/2015	02/26/15 18:29	
l Acetate	ND	40	11	1	B5B0719	02/26/2015	02/26/15 18:29	
Ethyl Ether	ND	40	9.6	1	B5B0719	02/26/2015	02/26/15 18:29	
Ethyl tert-butyl ether	ND	4.0	0.93	1	B5B0719	02/26/2015	02/26/15 18:29	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-155-1.5
Lab ID: 1500725-12

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	4.0	0.90	1	B5B0719	02/26/2015	02/26/15 18:29	
Freon-113	ND	4.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:29	
Hexachlorobutadiene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
Isopropylbenzene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
m,p-Xylene	ND	8.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:29	
Methylene chloride	ND	4.0	4.0	1	B5B0719	02/26/2015	02/26/15 18:29	
MTBE	ND	4.0	0.72	1	B5B0719	02/26/2015	02/26/15 18:29	
n-Butylbenzene	ND	4.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:29	
n-Propylbenzene	ND	4.0	0.98	1	B5B0719	02/26/2015	02/26/15 18:29	
Naphthalene	ND	4.0	2.5	1	B5B0719	02/26/2015	02/26/15 18:29	
o-Xylene	ND	4.0	0.99	1	B5B0719	02/26/2015	02/26/15 18:29	
sec-Butylbenzene	ND	4.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:29	
Styrene	ND	4.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:29	
tert-Amyl methyl ether	ND	4.0	0.82	1	B5B0719	02/26/2015	02/26/15 18:29	
tert-Butanol	ND	80	16	1	B5B0719	02/26/2015	02/26/15 18:29	
tert-Butylbenzene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
Tetrachloroethene	ND	4.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:29	
Toluene	ND	4.0	0.71	1	B5B0719	02/26/2015	02/26/15 18:29	
trans-1,2-Dichloroethene	ND	4.0	1.1	1	B5B0719	02/26/2015	02/26/15 18:29	
trans-1,3-Dichloropropene	ND	4.0	0.94	1	B5B0719	02/26/2015	02/26/15 18:29	
Trichloroethene	ND	4.0	0.97	1	B5B0719	02/26/2015	02/26/15 18:29	
Trichlorofluoromethane	ND	4.0	1.4	1	B5B0719	02/26/2015	02/26/15 18:29	
Vinyl acetate	ND	40	8.6	1	B5B0719	02/26/2015	02/26/15 18:29	
Vinyl chloride	ND	4.0	0.82	1	B5B0719	02/26/2015	02/26/15 18:29	
Surrogate: 1,2-Dichloroethane-d4	*111 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 18:29*	
Surrogate: 4-Bromofluorobenzene	*99.5 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 18:29*	
Surrogate: Dibromofluoromethane	*101 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 18:29*	
Surrogate: Toluene-d8	*95.7 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 18:29*	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-154-0
Lab ID: 1500725-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.46**	2.0	0.25	1	B5C0013	03/02/2015	03/03/15 15:32	J
Arsenic	**2.9**	1.0	0.19	1	B5C0013	03/02/2015	03/03/15 15:32	
Barium	**140**	1.0	0.14	1	B5C0013	03/02/2015	03/03/15 15:32	
Beryllium	**0.23**	1.0	0.04	1	B5C0013	03/02/2015	03/03/15 15:32	J
Cadmium	**0.51**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:32	J
Chromium	**8.4**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:32	
Cobalt	**2.7**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:32	
Copper	**20**	2.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:32	
Lead	**4.6**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:32	
Molybdenum	**1.9**	1.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:32	
...ckel	**9.9**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:32	
...nium	**1.4**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:32	
Silver	ND	1.0	0.06	1	B5C0013	03/02/2015	03/03/15 15:32	
Thallium	ND	1.0	0.20	1	B5C0013	03/02/2015	03/03/15 15:32	
Vanadium	**19**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:32	
Zinc	**190**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:32	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:09	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:09	
Surrogate: 4-Bromofluorobenzene	*95.4 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 14:09*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**6.5**	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 08:33	
C23-C32	**9.9**	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 08:33	
Surrogate: p-Terphenyl	*82.9 %*	*40 - 112*			B5B0726	02/26/2015	*02/27/15 08:33*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
...,1-Trichloroethane	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
1,1,2,2-Tetrachloroethane	ND	7.0	2.7	1	B5B0719	02/26/2015	02/26/15 18:47	

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-154-0
Lab ID: 1500725-14

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
1,1-Dichloroethane	ND	7.0	1.4	1	B5B0719	02/26/2015	02/26/15 18:47	
1,1-Dichloroethene	ND	7.0	1.6	1	B5B0719	02/26/2015	02/26/15 18:47	
1,1-Dichloropropene	ND	7.0	2.2	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2,3-Trichloropropane	ND	7.0	2.6	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2,3-Trichlorobenzene	ND	7.0	3.8	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2,4-Trichlorobenzene	ND	7.0	2.9	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2,4-Trimethylbenzene	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2-Dibromo-3-chloropropane	ND	14	3.0	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2-Dibromoethane	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2-Dichlorobenzene	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2-Dichloroethane	ND	7.0	1.2	1	B5B0719	02/26/2015	02/26/15 18:47	
1,2-Dichloropropane	ND	7.0	4.8	1	B5B0719	02/26/2015	02/26/15 18:47	
1,3,5-Trimethylbenzene	ND	7.0	1.9	1	B5B0719	02/26/2015	02/26/15 18:47	
1,3-Dichlorobenzene	ND	7.0	1.9	1	B5B0719	02/26/2015	02/26/15 18:47	
1,3-Dichloropropane	ND	7.0	1.5	1	B5B0719	02/26/2015	02/26/15 18:47	
1,4-Dichlorobenzene	ND	7.0	2.5	1	B5B0719	02/26/2015	02/26/15 18:47	
2,2-Dichloropropane	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
2-Chlorotoluene	ND	7.0	1.9	1	B5B0719	02/26/2015	02/26/15 18:47	
4-Chlorotoluene	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
4-Isopropyltoluene	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
Benzene	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Bromobenzene	ND	7.0	2.3	1	B5B0719	02/26/2015	02/26/15 18:47	
Bromochloromethane	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
Bromodichloromethane	ND	7.0	2.2	1	B5B0719	02/26/2015	02/26/15 18:47	
Bromoform	ND	7.0	2.1	1	B5B0719	02/26/2015	02/26/15 18:47	
Bromomethane	ND	7.0	3.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Carbon disulfide	ND	7.0	3.2	1	B5B0719	02/26/2015	02/26/15 18:47	
Carbon tetrachloride	ND	7.0	2.1	1	B5B0719	02/26/2015	02/26/15 18:47	
Chlorobenzene	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Chloroethane	ND	7.0	7.0	1	B5B0719	02/26/2015	02/26/15 18:47	
Chloroform	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
Chloromethane	ND	7.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:47	
cis-1,2-Dichloroethene	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
cis-1,3-Dichloropropene	ND	7.0	3.2	1	B5B0719	02/26/2015	02/26/15 18:47	
Di-isopropyl ether	ND	7.0	1.4	1	B5B0719	02/26/2015	02/26/15 18:47	
Dibromochloromethane	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Dibromomethane	ND	7.0	2.8	1	B5B0719	02/26/2015	02/26/15 18:47	
Dichlorodifluoromethane	ND	7.0	1.0	1	B5B0719	02/26/2015	02/26/15 18:47	
Ethyl Acetate	ND	70	19	1	B5B0719	02/26/2015	02/26/15 18:47	
Ethyl Ether	ND	70	17	1	B5B0719	02/26/2015	02/26/15 18:47	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-154-0
Lab ID: 1500725-14

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	7.0	1.6	1	B5B0719	02/26/2015	02/26/15 18:47	
Ethylbenzene	ND	7.0	1.6	1	B5B0719	02/26/2015	02/26/15 18:47	
Freon-113	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
Hexachlorobutadiene	ND	7.0	1.9	1	B5B0719	02/26/2015	02/26/15 18:47	
Isopropylbenzene	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
m,p-Xylene	ND	14	3.5	1	B5B0719	02/26/2015	02/26/15 18:47	
Methylene chloride	ND	7.0	7.0	1	B5B0719	02/26/2015	02/26/15 18:47	
MTBE	ND	7.0	1.3	1	B5B0719	02/26/2015	02/26/15 18:47	
n-Butylbenzene	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
n-Propylbenzene	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Naphthalene	ND	7.0	4.5	1	B5B0719	02/26/2015	02/26/15 18:47	
'ylene	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Butylbenzene	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
Styrene	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
tert-Amyl methyl ether	ND	7.0	1.4	1	B5B0719	02/26/2015	02/26/15 18:47	
tert-Butanol	ND	140	28	1	B5B0719	02/26/2015	02/26/15 18:47	
tert-Butylbenzene	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
Tetrachloroethene	ND	7.0	1.8	1	B5B0719	02/26/2015	02/26/15 18:47	
Toluene	ND	7.0	1.2	1	B5B0719	02/26/2015	02/26/15 18:47	
trans-1,2-Dichloroethene	ND	7.0	2.0	1	B5B0719	02/26/2015	02/26/15 18:47	
trans-1,3-Dichloropropene	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Trichloroethene	ND	7.0	1.7	1	B5B0719	02/26/2015	02/26/15 18:47	
Trichlorofluoromethane	ND	7.0	2.5	1	B5B0719	02/26/2015	02/26/15 18:47	
Vinyl acetate	ND	70	15	1	B5B0719	02/26/2015	02/26/15 18:47	
Vinyl chloride	ND	7.0	1.4	1	B5B0719	02/26/2015	02/26/15 18:47	
Surrogate: 1,2-Dichloroethane-d4	*116 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 18:47*	
Surrogate: 4-Bromofluorobenzene	*98.9 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 18:47*	
Surrogate: Dibromofluoromethane	*102 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 18:47*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 18:47*	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-154-1.5
Lab ID: 1500725-15

Title 22 Metals by ICP-AES EPA 6010B — Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0013	03/02/2015	03/03/15 15:39	
Arsenic	6.6	1.0	0.19	1	B5C0013	03/02/2015	03/03/15 15:39	
Barium	98	1.0	0.14	1	B5C0013	03/02/2015	03/03/15 15:39	
Beryllium	0.33	1.0	0.04	1	B5C0013	03/02/2015	03/03/15 15:39	J
Cadmium	1.5	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:39	
Chromium	17	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:39	
Cobalt	4.5	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:39	
Copper	18	2.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:39	
Lead	10	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:39	
Molybdenum	4.9	1.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:39	
Nickel	21	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:39	
Selenium	1.5	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:39	
Silver	ND	1.0	0.06	1	B5C0013	03/02/2015	03/03/15 15:39	
Thallium	ND	1.0	0.20	1	B5C0013	03/02/2015	03/03/15 15:39	
Vanadium	37	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:39	
Zinc	48	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:39	

Gasoline Range Organics by EPA 8015B (Modified) — Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 12:24	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 12:24	
Surrogate: 4-Bromofluorobenzene	*98.1 %*	*33 - 151*			B5B0735	02/27/2015	*02/27/15 12:24*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	2.2	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 08:49	
C23-C32	3.9	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 08:49	
Surrogate: p-Terphenyl	*79.0 %*	*40 - 112*			B5B0726	02/26/2015	*02/27/15 08:49*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
1,1,1-Trichloroethane	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
1,1,2,2-Tetrachloroethane	ND	5.3	2.1	1	B5B0719	02/26/2015	02/26/15 19:06	

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-154-1.5
Lab ID: 1500725-15

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
1,1-Dichloroethane	ND	5.3	1.0	1	B5B0719	02/26/2015	02/26/15 19:06	
1,1-Dichloroethene	ND	5.3	1.2	1	B5B0719	02/26/2015	02/26/15 19:06	
1,1-Dichloropropene	ND	5.3	1.6	1	B5B0719	02/26/2015	02/26/15 19:06	
1,2,3-Trichloropropane	ND	5.3	1.9	1	B5B0719	02/26/2015	02/26/15 19:06	
1,2,3-Trichlorobenzene	ND	5.3	2.9	1	B5B0719	02/26/2015	02/26/15 19:06	
1,2,4-Trichlorobenzene	ND	5.3	2.2	1	B5B0719	02/26/2015	02/26/15 19:06	
1,2,4-Trimethylbenzene	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5B0719	02/26/2015	02/26/15 19:06	
1,2-Dibromoethane	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
1,2-Dichlorobenzene	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
Dichloroethane	ND	5.3	0.93	1	B5B0719	02/26/2015	02/26/15 19:06	
Dichloropropane	ND	5.3	3.6	1	B5B0719	02/26/2015	02/26/15 19:06	
1,3,5-Trimethylbenzene	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
1,3-Dichlorobenzene	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
1,3-Dichloropropane	ND	5.3	1.2	1	B5B0719	02/26/2015	02/26/15 19:06	
1,4-Dichlorobenzene	ND	5.3	1.9	1	B5B0719	02/26/2015	02/26/15 19:06	
2,2-Dichloropropane	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
2-Chlorotoluene	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
4-Chlorotoluene	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
4-Isopropyltoluene	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
Benzene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
Bromobenzene	ND	5.3	1.7	1	B5B0719	02/26/2015	02/26/15 19:06	
Bromochloromethane	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
Bromodichloromethane	ND	5.3	1.7	1	B5B0719	02/26/2015	02/26/15 19:06	
Bromoform	ND	5.3	1.6	1	B5B0719	02/26/2015	02/26/15 19:06	
Bromomethane	ND	5.3	2.8	1	B5B0719	02/26/2015	02/26/15 19:06	
Carbon disulfide	ND	5.3	2.5	1	B5B0719	02/26/2015	02/26/15 19:06	
Carbon tetrachloride	ND	5.3	1.6	1	B5B0719	02/26/2015	02/26/15 19:06	
Chlorobenzene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
Chloroethane	ND	5.3	5.3	1	B5B0719	02/26/2015	02/26/15 19:06	
Chloroform	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
Chloromethane	ND	5.3	0.79	1	B5B0719	02/26/2015	02/26/15 19:06	
cis-1,2-Dichloroethene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
cis-1,3-Dichloropropene	ND	5.3	2.4	1	B5B0719	02/26/2015	02/26/15 19:06	
Di-isopropyl ether	ND	5.3	1.1	1	B5B0719	02/26/2015	02/26/15 19:06	
Dibromochloromethane	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
romomethane	ND	5.3	2.1	1	B5B0719	02/26/2015	02/26/15 19:06	
lorodifluoromethane	ND	5.3	0.79	1	B5B0719	02/26/2015	02/26/15 19:06	
Ethyl Acetate	ND	53	14	1	B5B0719	02/26/2015	02/26/15 19:06	
Ethyl Ether	ND	53	13	1	B5B0719	02/26/2015	02/26/15 19:06	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-154-1.5
Lab ID: 1500725-15

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.3	1.2	1	B5B0719	02/26/2015	02/26/15 19:06	
Ethylbenzene	ND	5.3	1.2	1	B5B0719	02/26/2015	02/26/15 19:06	
Freon-113	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
Hexachlorobutadiene	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
Isopropylbenzene	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
m,p-Xylene	ND	11	2.6	1	B5B0719	02/26/2015	02/26/15 19:06	
Methylene chloride	ND	5.3	5.3	1	B5B0719	02/26/2015	02/26/15 19:06	
MTBE	ND	5.3	0.96	1	B5B0719	02/26/2015	02/26/15 19:06	
n-Butylbenzene	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
n-Propylbenzene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
Naphthalene	ND	5.3	3.4	1	B5B0719	02/26/2015	02/26/15 19:06	
o-Xylene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
sec-Butylbenzene	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
Styrene	ND	5.3	1.4	1	B5B0719	02/26/2015	02/26/15 19:06	
tert-Amyl methyl ether	ND	5.3	1.1	1	B5B0719	02/26/2015	02/26/15 19:06	
tert-Butanol	ND	110	21	1	B5B0719	02/26/2015	02/26/15 19:06	
tert-Butylbenzene	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
Tetrachloroethene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
Toluene	ND	5.3	0.94	1	B5B0719	02/26/2015	02/26/15 19:06	
trans-1,2-Dichloroethene	ND	5.3	1.5	1	B5B0719	02/26/2015	02/26/15 19:06	
trans-1,3-Dichloropropene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
Trichloroethene	ND	5.3	1.3	1	B5B0719	02/26/2015	02/26/15 19:06	
Trichlorofluoromethane	ND	5.3	1.9	1	B5B0719	02/26/2015	02/26/15 19:06	
Vinyl acetate	ND	53	11	1	B5B0719	02/26/2015	02/26/15 19:06	
Vinyl chloride	ND	5.3	1.1	1	B5B0719	02/26/2015	02/26/15 19:06	
Surrogate: 1,2-Dichloroethane-d4	*110 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 19:06*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 19:06*	
Surrogate: Dibromofluoromethane	*101 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 19:06*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 19:06*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-153-0
Lab ID: 1500725-16

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.43**	2.0	0.25	1	B5C0013	03/02/2015	03/03/15 15:44	J
Arsenic	**5.4**	1.0	0.19	1	B5C0013	03/02/2015	03/03/15 15:44	
Barium	**56**	1.0	0.14	1	B5C0013	03/02/2015	03/03/15 15:44	
Beryllium	**0.31**	1.0	0.04	1	B5C0013	03/02/2015	03/03/15 15:44	J
Cadmium	**0.86**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:44	J
Chromium	**14**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:44	
Cobalt	**4.1**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:44	
Copper	**15**	2.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:44	
Lead	**6.8**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:44	
Molybdenum	**3.1**	1.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:44	
...ickel	**18**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:44	
...nium	**1.6**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:44	
Silver	ND	1.0	0.06	1	B5C0013	03/02/2015	03/03/15 15:44	
Thallium	ND	1.0	0.20	1	B5C0013	03/02/2015	03/03/15 15:44	
Vanadium	**25**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:44	
Zinc	**55**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:44	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:24	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:24	
Surrogate: 4-Bromofluorobenzene	*97.3 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 14:24*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**4.5**	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 10:26	
C23-C32	12	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 10:26	
Surrogate: p-Terphenyl	*84.9 %*	*40 - 112*			B5B0726	02/26/2015	*02/27/15 10:26*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
...-Trichloroethane	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
1,1,2,2-Tetrachloroethane	ND	4.2	1.6	1	B5B0719	02/26/2015	02/26/15 19:24	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-153-0

Lab ID: 1500725-16

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
1,1-Dichloroethane	ND	4.2	0.81	1	B5B0719	02/26/2015	02/26/15 19:24	
1,1-Dichloroethene	ND	4.2	0.94	1	B5B0719	02/26/2015	02/26/15 19:24	
1,1-Dichloropropene	ND	4.2	1.3	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2,3-Trichloropropane	ND	4.2	1.5	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2,3-Trichlorobenzene	ND	4.2	2.3	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2,4-Trichlorobenzene	ND	4.2	1.7	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2,4-Trimethylbenzene	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2-Dibromo-3-chloropropane	ND	8.3	1.8	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2-Dibromoethane	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2-Dichlorobenzene	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2-Dichloroethane	ND	4.2	0.72	1	B5B0719	02/26/2015	02/26/15 19:24	
1,2-Dichloropropane	ND	4.2	2.8	1	B5B0719	02/26/2015	02/26/15 19:24	
1,3,5-Trimethylbenzene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
1,3-Dichlorobenzene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
1,3-Dichloropropane	ND	4.2	0.92	1	B5B0719	02/26/2015	02/26/15 19:24	
1,4-Dichlorobenzene	ND	4.2	1.5	1	B5B0719	02/26/2015	02/26/15 19:24	
2,2-Dichloropropane	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
2-Chlorotoluene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
4-Chlorotoluene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
4-Isopropyltoluene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
Benzene	ND	4.2	0.98	1	B5B0719	02/26/2015	02/26/15 19:24	
Bromobenzene	ND	4.2	1.4	1	B5B0719	02/26/2015	02/26/15 19:24	
Bromochloromethane	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
Bromodichloromethane	ND	4.2	1.3	1	B5B0719	02/26/2015	02/26/15 19:24	
Bromoform	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
Bromomethane	ND	4.2	2.2	1	B5B0719	02/26/2015	02/26/15 19:24	
Carbon disulfide	ND	4.2	1.9	1	B5B0719	02/26/2015	02/26/15 19:24	
Carbon tetrachloride	ND	4.2	1.3	1	B5B0719	02/26/2015	02/26/15 19:24	
Chlorobenzene	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
Chloroethane	ND	4.2	4.1	1	B5B0719	02/26/2015	02/26/15 19:24	
Chloroform	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
Chloromethane	ND	4.2	0.62	1	B5B0719	02/26/2015	02/26/15 19:24	
cis-1,2-Dichloroethene	ND	4.2	0.98	1	B5B0719	02/26/2015	02/26/15 19:24	
cis-1,3-Dichloropropene	ND	4.2	1.9	1	B5B0719	02/26/2015	02/26/15 19:24	
Di-isopropyl ether	ND	4.2	0.84	1	B5B0719	02/26/2015	02/26/15 19:24	
Dibromochloromethane	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
Dibromomethane	ND	4.2	1.6	1	B5B0719	02/26/2015	02/26/15 19:24	
Dichlorodifluoromethane	ND	4.2	0.61	1	B5B0719	02/26/2015	02/26/15 19:24	
Ethyl Acetate	ND	42	11	1	B5B0719	02/26/2015	02/26/15 19:24	
Ethyl Ether	ND	42	10	1	B5B0719	02/26/2015	02/26/15 19:24	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200

Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23

Report To : Anne Perez/Kristy Edblad

Reported : 03/09/2015

Client Sample ID 1278-153-0

Lab ID: 1500725-16

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.2	0.97	1	B5B0719	02/26/2015	02/26/15 19:24	
Ethylbenzene	ND	4.2	0.93	1	B5B0719	02/26/2015	02/26/15 19:24	
Freon-113	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
Hexachlorobutadiene	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
Isopropylbenzene	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
m,p-Xylene	ND	8.3	2.1	1	B5B0719	02/26/2015	02/26/15 19:24	
Methylene chloride	ND	4.2	4.2	1	B5B0719	02/26/2015	02/26/15 19:24	
MTBE	ND	4.2	0.75	1	B5B0719	02/26/2015	02/26/15 19:24	
n-Butylbenzene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
n-Propylbenzene	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
Naphthalene	ND	4.2	2.6	1	B5B0719	02/26/2015	02/26/15 19:24	
...ylene	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
...-Butylbenzene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
Styrene	ND	4.2	1.1	1	B5B0719	02/26/2015	02/26/15 19:24	
tert-Amyl methyl ether	ND	4.2	0.85	1	B5B0719	02/26/2015	02/26/15 19:24	
tert-Butanol	ND	83	17	1	B5B0719	02/26/2015	02/26/15 19:24	
tert-Butylbenzene	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
Tetrachloroethene	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
Toluene	ND	4.2	0.74	1	B5B0719	02/26/2015	02/26/15 19:24	
trans-1,2-Dichloroethene	ND	4.2	1.2	1	B5B0719	02/26/2015	02/26/15 19:24	
trans-1,3-Dichloropropene	ND	4.2	0.98	1	B5B0719	02/26/2015	02/26/15 19:24	
Trichloroethene	ND	4.2	1.0	1	B5B0719	02/26/2015	02/26/15 19:24	
Trichlorofluoromethane	ND	4.2	1.5	1	B5B0719	02/26/2015	02/26/15 19:24	
Vinyl acetate	ND	42	8.9	1	B5B0719	02/26/2015	02/26/15 19:24	
Vinyl chloride	ND	4.2	0.85	1	B5B0719	02/26/2015	02/26/15 19:24	
Surrogate: 1,2-Dichloroethane-d4	*106 %*		*20 - 189*		B5B0719	02/26/2015	*02/26/15 19:24*	
Surrogate: 4-Bromofluorobenzene	*100 %*		*20 - 173*		B5B0719	02/26/2015	*02/26/15 19:24*	
Surrogate: Dibromofluoromethane	*98.6 %*		*26 - 178*		B5B0719	02/26/2015	*02/26/15 19:24*	
Surrogate: Toluene-d8	*99.4 %*		*31 - 166*		B5B0719	02/26/2015	*02/26/15 19:24*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-153-1.5
Lab ID: 1500725-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.49**	**2.0**	0.25	1	B5C0013	03/02/2015	03/03/15 15:42	J
Arsenic	**4.6**	**1.0**	0.19	1	B5C0013	03/02/2015	03/03/15 15:42	
Barium	**57**	**1.0**	0.14	1	B5C0013	03/02/2015	03/03/15 15:42	
Beryllium	**0.37**	1.0	0.04	1	B5C0013	03/02/2015	03/03/15 15:42	J
Cadmium	**0.49**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:42	J
Chromium	**8.1**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:42	
Cobalt	**9.0**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:42	
Copper	**12**	2.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:42	
Lead	**5.3**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:42	
Molybdenum	**2.8**	1.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:42	
Nickel	**16**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:42	
Selenium	**1.8**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:42	
Silver	ND	1.0	0.06	1	B5C0013	03/02/2015	03/03/15 15:42	
Thallium	ND	1.0	0.20	1	B5C0013	03/02/2015	03/03/15 15:42	
Vanadium	**20**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:42	
Zinc	**49**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:42	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:40	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:40	
Surrogate: 4-Bromofluorobenzene	*98.8 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 14:40*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**3.1**	**1.0**	1.0	1	B5B0726	02/26/2015	02/27/15 09:05	
C23-C32	**5.8**	**1.0**	1.0	1	B5B0726	02/26/2015	02/27/15 09:05	
Surrogate: p-Terphenyl	*66.4 %*	*40 - 112*			B5B0726	02/26/2015	*02/27/15 09:05*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
1,1,1-Trichloroethane	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
1,1,2,2-Tetrachloroethane	ND	5.0	1.9	1	B5B0719	02/26/2015	02/26/15 19:43	

Certificate of Analysis

...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-153-1.5
Lab ID: 1500725-17

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
1,1-Dichloroethane	ND	5.0	0.98	1	B5B0719	02/26/2015	02/26/15 19:43	
1,1-Dichloroethene	ND	5.0	1.1	1	B5B0719	02/26/2015	02/26/15 19:43	
1,1-Dichloropropene	ND	5.0	1.5	1	B5B0719	02/26/2015	02/26/15 19:43	
1,2,3-Trichloropropane	ND	5.0	1.8	1	B5B0719	02/26/2015	02/26/15 19:43	
1,2,3-Trichlorobenzene	ND	5.0	2.7	1	B5B0719	02/26/2015	02/26/15 19:43	
1,2,4-Trichlorobenzene	ND	5.0	2.1	1	B5B0719	02/26/2015	02/26/15 19:43	
1,2,4-Trimethylbenzene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
1,2-Dibromo-3-chloropropane	ND	10	2.1	1	B5B0719	02/26/2015	02/26/15 19:43	
1,2-Dibromoethane	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
1,2-Dichlorobenzene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
...Dichloroethane	ND	5.0	0.87	1	B5B0719	02/26/2015	02/26/15 19:43	
...-Dichloropropane	ND	5.0	3.4	1	B5B0719	02/26/2015	02/26/15 19:43	
1,3,5-Trimethylbenzene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
1,3-Dichlorobenzene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
1,3-Dichloropropane	ND	5.0	1.1	1	B5B0719	02/26/2015	02/26/15 19:43	
1,4-Dichlorobenzene	ND	5.0	1.8	1	B5B0719	02/26/2015	02/26/15 19:43	
2,2-Dichloropropane	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
2-Chlorotoluene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
4-Chlorotoluene	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
4-Isopropyltoluene	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
Benzene	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
Bromobenzene	ND	5.0	1.6	1	B5B0719	02/26/2015	02/26/15 19:43	
Bromochloromethane	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
Bromodichloromethane	ND	5.0	1.6	1	B5B0719	02/26/2015	02/26/15 19:43	
Bromoform	ND	5.0	1.5	1	B5B0719	02/26/2015	02/26/15 19:43	
Bromomethane	ND	5.0	2.6	1	B5B0719	02/26/2015	02/26/15 19:43	
Carbon disulfide	3.1	5.0	2.3	1	B5B0719	02/26/2015	02/26/15 19:43	J
Carbon tetrachloride	ND	5.0	1.5	1	B5B0719	02/26/2015	02/26/15 19:43	
Chlorobenzene	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
Chloroethane	ND	5.0	5.0	1	B5B0719	02/26/2015	02/26/15 19:43	
Chloroform	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
Chloromethane	ND	5.0	0.74	1	B5B0719	02/26/2015	02/26/15 19:43	
cis-1,2-Dichloroethene	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
cis-1,3-Dichloropropene	ND	5.0	2.3	1	B5B0719	02/26/2015	02/26/15 19:43	
Di-isopropyl ether	ND	5.0	1.0	1	B5B0719	02/26/2015	02/26/15 19:43	
Dibromochloromethane	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
...romomethane	ND	5.0	2.0	1	B5B0719	02/26/2015	02/26/15 19:43	
...hlorodifluoromethane	ND	5.0	0.74	1	B5B0719	02/26/2015	02/26/15 19:43	
Ethyl Acetate	ND	50	13	1	B5B0719	02/26/2015	02/26/15 19:43	
Ethyl Ether	ND	50	12	1	B5B0719	02/26/2015	02/26/15 19:43	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-153-1.5
Lab ID: 1500725-17

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
Ethylbenzene	ND	5.0	1.1	1	B5B0719	02/26/2015	02/26/15 19:43	
Freon-113	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
Hexachlorobutadiene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
Isopropylbenzene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
m,p-Xylene	ND	10	2.5	1	B5B0719	02/26/2015	02/26/15 19:43	
Methylene chloride	ND	5.0	5.0	1	B5B0719	02/26/2015	02/26/15 19:43	
MTBE	ND	5.0	0.91	1	B5B0719	02/26/2015	02/26/15 19:43	
n-Butylbenzene	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
n-Propylbenzene	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
Naphthalene	ND	5.0	3.2	1	B5B0719	02/26/2015	02/26/15 19:43	
o-Xylene	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
sec-Butylbenzene	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
Styrene	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
tert-Amyl methyl ether	ND	5.0	1.0	1	B5B0719	02/26/2015	02/26/15 19:43	
tert-Butanol	ND	100	20	1	B5B0719	02/26/2015	02/26/15 19:43	
tert-Butylbenzene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
Tetrachloroethene	ND	5.0	1.3	1	B5B0719	02/26/2015	02/26/15 19:43	
Toluene	ND	5.0	0.89	1	B5B0719	02/26/2015	02/26/15 19:43	
trans-1,2-Dichloroethene	ND	5.0	1.4	1	B5B0719	02/26/2015	02/26/15 19:43	
trans-1,3-Dichloropropene	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
Trichloroethene	ND	5.0	1.2	1	B5B0719	02/26/2015	02/26/15 19:43	
Trichlorofluoromethane	ND	5.0	1.8	1	B5B0719	02/26/2015	02/26/15 19:43	
Vinyl acetate	ND	50	11	1	B5B0719	02/26/2015	02/26/15 19:43	
Vinyl chloride	ND	5.0	1.0	1	B5B0719	02/26/2015	02/26/15 19:43	
Surrogate: 1,2-Dichloroethane-d4	*112 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 19:43*	
Surrogate: 4-Bromofluorobenzene	*98.1 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 19:43*	
Surrogate: Dibromofluoromethane	*102 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 19:43*	
Surrogate: Toluene-d8	*97.7 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 19:43*	

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-3-022415

Lab ID: 1500725-19

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:08	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:08	
Barium	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:08	
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:07	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:08	
Chromium	**0.0009**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:08	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:08	
Copper	**0.0015**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:08	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:08	
Molybdenum	ND	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:08	
Nickel	**0.0005**	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:08	J
nium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:08	
er	**0.0011**	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:08	J
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:08	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:08	
Zinc	**0.0062**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:08	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 14:41	
C4-C8	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 14:41	
Surrogate: 4-Bromofluorobenzene	*94.1 %*	*70 - 130*			B5B0704	02/26/2015	*02/26/15 14:41*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:06	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:06	
Surrogate: p-Terphenyl	*50.0 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 16:06*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 11:41	
-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 11:41	
,,,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 11:41	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 11:41	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-3-022415
Lab ID: 1500725-19

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 11:41	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 11:41	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 11:41	
1,2-Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 11:41	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 11:41	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 11:41	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 11:41	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 11:41	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 11:41	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 11:41	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 11:41	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 11:41	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 11:41	
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 11:41	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 11:41	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 11:41	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 11:41	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 11:41	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 11:41	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 11:41	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 11:41	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 11:41	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 11:41	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 11:41	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 11:41	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 11:41	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 11:41	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 11:41	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 11:41	
Dibromomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 11:41	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 11:41	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 11:41	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 11:41	

Certificate of Analysis

...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID EBB-3-022415
Lab ID: 1500725-19

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 11:41	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 11:41	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 11:41	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 11:41	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 11:41	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 11:41	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 11:41	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 11:41	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 11:41	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 11:41	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 11:41	
...ylene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 11:41	
...Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 11:41	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 11:41	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 11:41	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 11:41	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 11:41	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 11:41	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 11:41	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 11:41	
trans-1,3-Dichloropropene	**1.5**	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 11:41	
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 11:41	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 11:41	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 11:41	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 11:41	
Surrogate: 1,2-Dichloroethane-d4	*89.6 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 11:41*	
Surrogate: 4-Bromofluorobenzene	*99.5 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 11:41*	
Surrogate: Dibromofluoromethane	*91.4 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 11:41*	
Surrogate: Toluene-d8	*85.6 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 11:41*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-152-0
Lab ID: 1500725-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.73**	2.0	0.25	1	B5C0013	03/02/2015	03/03/15 15:50	J
Arsenic	**6.0**	1.0	0.19	1	B5C0013	03/02/2015	03/03/15 15:50	
Barium	**99**	1.0	0.14	1	B5C0013	03/02/2015	03/03/15 15:50	
Beryllium	**0.32**	1.0	0.04	1	B5C0013	03/02/2015	03/03/15 15:50	J
Cadmium	**0.64**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:50	J
Chromium	**15**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:50	
Cobalt	**4.9**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:50	
Copper	**21**	2.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:50	
Lead	**21**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:50	
Molybdenum	**3.1**	1.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:50	
Nickel	**17**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:50	
Selenium	**2.0**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:50	
Silver	ND	1.0	0.06	1	B5C0013	03/02/2015	03/03/15 15:50	
Thallium	ND	1.0	0.20	1	B5C0013	03/02/2015	03/03/15 15:50	
Vanadium	**28**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:50	
Zinc	**130**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:50	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:56	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 14:56	
Surrogate: 4-Bromofluorobenzene	*93.9 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 14:56*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**17**	2.0	2.0	1	B5B0726	02/26/2015	02/27/15 10:42	
C23-C32	**48**	2.0	2.0	1	B5B0726	02/26/2015	02/27/15 10:42	
Surrogate: p-Terphenyl	*83.4 %*	*40 - 112*			B5B0726	02/26/2015	*02/27/15 10:42*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
1,1,1-Trichloroethane	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
1,1,2,2-Tetrachloroethane	ND	4.5	1.8	1	B5B0719	02/26/2015	02/26/15 20:02	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

Client Sample ID 1278-152-0
Lab ID: 1500725-20

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
1,1-Dichloroethane	ND	4.5	0.89	1	B5B0719	02/26/2015	02/26/15 20:02	
1,1-Dichloroethene	ND	4.5	1.0	1	B5B0719	02/26/2015	02/26/15 20:02	
1,1-Dichloropropene	ND	4.5	1.4	1	B5B0719	02/26/2015	02/26/15 20:02	
1,2,3-Trichloropropane	ND	4.5	1.6	1	B5B0719	02/26/2015	02/26/15 20:02	
1,2,3-Trichlorobenzene	ND	4.5	2.5	1	B5B0719	02/26/2015	02/26/15 20:02	
1,2,4-Trichlorobenzene	ND	4.5	1.9	1	B5B0719	02/26/2015	02/26/15 20:02	
1,2,4-Trimethylbenzene	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
1,2-Dibromo-3-chloropropane	ND	9.1	1.9	1	B5B0719	02/26/2015	02/26/15 20:02	
1,2-Dibromoethane	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
1,2-Dichlorobenzene	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
,2-Dichloroethane	ND	4.5	0.79	1	B5B0719	02/26/2015	02/26/15 20:02	
,2-Dichloropropane	ND	4.5	3.1	1	B5B0719	02/26/2015	02/26/15 20:02	
1,3,5-Trimethylbenzene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
1,3-Dichlorobenzene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
1,3-Dichloropropane	ND	4.5	1.0	1	B5B0719	02/26/2015	02/26/15 20:02	
1,4-Dichlorobenzene	ND	4.5	1.6	1	B5B0719	02/26/2015	02/26/15 20:02	
2,2-Dichloropropane	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
2-Chlorotoluene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
4-Chlorotoluene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
4-Isopropyltoluene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
Benzene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Bromobenzene	ND	4.5	1.5	1	B5B0719	02/26/2015	02/26/15 20:02	
Bromochloromethane	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
Bromodichloromethane	ND	4.5	1.4	1	B5B0719	02/26/2015	02/26/15 20:02	
Bromoform	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
Bromomethane	ND	4.5	2.4	1	B5B0719	02/26/2015	02/26/15 20:02	
Carbon disulfide	ND	4.5	2.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Carbon tetrachloride	ND	4.5	1.4	1	B5B0719	02/26/2015	02/26/15 20:02	
Chlorobenzene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Chloroethane	ND	4.5	4.5	1	B5B0719	02/26/2015	02/26/15 20:02	
Chloroform	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
Chloromethane	ND	4.5	0.67	1	B5B0719	02/26/2015	02/26/15 20:02	
cis-1,2-Dichloroethene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
cis-1,3-Dichloropropene	ND	4.5	2.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Di-isopropyl ether	ND	4.5	0.92	1	B5B0719	02/26/2015	02/26/15 20:02	
Dibromochloromethane	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
,2-Dibromomethane	ND	4.5	1.8	1	B5B0719	02/26/2015	02/26/15 20:02	
,ichlorodifluoromethane	ND	4.5	0.67	1	B5B0719	02/26/2015	02/26/15 20:02	
Ethyl Acetate	ND	45	12	1	B5B0719	02/26/2015	02/26/15 20:02	
Ethyl Ether	ND	45	11	1	B5B0719	02/26/2015	02/26/15 20:02	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-152-0
Lab ID: 1500725-20

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Ethylbenzene	ND	4.5	1.0	1	B5B0719	02/26/2015	02/26/15 20:02	
Freon-113	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
Hexachlorobutadiene	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
Isopropylbenzene	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
m,p-Xylene	ND	9.1	2.3	1	B5B0719	02/26/2015	02/26/15 20:02	
Methylene chloride	ND	4.5	4.5	1	B5B0719	02/26/2015	02/26/15 20:02	
MTBE	ND	4.5	0.82	1	B5B0719	02/26/2015	02/26/15 20:02	
n-Butylbenzene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
n-Propylbenzene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Naphthalene	ND	4.5	2.9	1	B5B0719	02/26/2015	02/26/15 20:02	
o-Xylene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
sec-Butylbenzene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
Styrene	ND	4.5	1.2	1	B5B0719	02/26/2015	02/26/15 20:02	
tert-Amyl methyl ether	ND	4.5	0.92	1	B5B0719	02/26/2015	02/26/15 20:02	
tert-Butanol	ND	91	18	1	B5B0719	02/26/2015	02/26/15 20:02	
tert-Butylbenzene	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
Tetrachloroethene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Toluene	ND	4.5	0.80	1	B5B0719	02/26/2015	02/26/15 20:02	
trans-1,2-Dichloroethene	ND	4.5	1.3	1	B5B0719	02/26/2015	02/26/15 20:02	
trans-1,3-Dichloropropene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Trichloroethene	ND	4.5	1.1	1	B5B0719	02/26/2015	02/26/15 20:02	
Trichlorofluoromethane	ND	4.5	1.6	1	B5B0719	02/26/2015	02/26/15 20:02	
Vinyl acetate	ND	45	9.7	1	B5B0719	02/26/2015	02/26/15 20:02	
Vinyl chloride	ND	4.5	0.93	1	B5B0719	02/26/2015	02/26/15 20:02	
Surrogate: 1,2-Dichloroethane-d4	*121 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 20:02*	
Surrogate: 4-Bromofluorobenzene	*102 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 20:02*	
Surrogate: Dibromofluoromethane	*104 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 20:02*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 20:02*	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-152-1.5
Lab ID: 1500725-21

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.56**	2.0	0.25	1	B5C0013	03/02/2015	03/03/15 15:54	J
Arsenic	**7.3**	1.0	0.19	1	B5C0013	03/02/2015	03/03/15 15:54	
Barium	**69**	1.0	0.14	1	B5C0013	03/02/2015	03/03/15 15:54	
Beryllium	**0.51**	1.0	0.04	1	B5C0013	03/02/2015	03/03/15 15:54	J
Cadmium	**0.67**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:54	J
Chromium	**20**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:54	
Cobalt	**5.8**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:54	
Copper	**21**	2.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:54	
Lead	**7.0**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:54	
Molybdenum	**3.2**	1.0	0.05	1	B5C0013	03/02/2015	03/03/15 15:54	
Nickel	**21**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:54	
...nium	**2.4**	1.0	0.15	1	B5C0013	03/02/2015	03/03/15 15:54	
Silver	ND	1.0	0.06	1	B5C0013	03/02/2015	03/03/15 15:54	
Thallium	ND	1.0	0.20	1	B5C0013	03/02/2015	03/03/15 15:54	
Vanadium	**36**	1.0	0.07	1	B5C0013	03/02/2015	03/03/15 15:54	
Zinc	**54**	1.0	0.11	1	B5C0013	03/02/2015	03/03/15 15:54	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:12	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:12	
Surrogate: 4-Bromofluorobenzene	*97.7 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 15:12*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**2.2**	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 09:21	
C23-C32	**5.2**	1.0	1.0	1	B5B0726	02/26/2015	02/27/15 09:21	
Surrogate: p-Terphenyl	*75.2 %*	*40 - 112*			B5B0726	02/26/2015	*02/27/15 09:21*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
...-Trichloroethane	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
1,1,2,2-Tetrachloroethane	ND	6.8	2.6	1	B5B0719	02/26/2015	02/26/15 20:20	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Client Sample ID 1278-152-1.5
Lab ID: 1500725-21

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	6.8	1.7	1	B5B0719	02/26/2015	02/26/15 20:20	
1,1-Dichloroethane	ND	6.8	1.3	1	B5B0719	02/26/2015	02/26/15 20:20	
1,1-Dichloroethene	ND	6.8	1.5	1	B5B0719	02/26/2015	02/26/15 20:20	
1,1-Dichloropropene	ND	6.8	2.1	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2,3-Trichloropropane	ND	6.8	2.5	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2,3-Trichlorobenzene	ND	6.8	3.7	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2,4-Trichlorobenzene	ND	6.8	2.8	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2,4-Trimethylbenzene	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2-Dibromo-3-chloropropane	ND	14	2.9	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2-Dibromoethane	ND	6.8	2.0	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2-Dichlorobenzene	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2-Dichloroethane	ND	6.8	1.2	1	B5B0719	02/26/2015	02/26/15 20:20	
1,2-Dichloropropane	ND	6.8	4.6	1	B5B0719	02/26/2015	02/26/15 20:20	
1,3,5-Trimethylbenzene	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
1,3-Dichlorobenzene	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
1,3-Dichloropropane	ND	6.8	1.5	1	B5B0719	02/26/2015	02/26/15 20:20	
1,4-Dichlorobenzene	ND	6.8	2.4	1	B5B0719	02/26/2015	02/26/15 20:20	
2,2-Dichloropropane	ND	6.8	1.7	1	B5B0719	02/26/2015	02/26/15 20:20	
2-Chlorotoluene	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
4-Chlorotoluene	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
4-Isopropyltoluene	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
Benzene	ND	6.8	1.6	1	B5B0719	02/26/2015	02/26/15 20:20	
Bromobenzene	ND	6.8	2.2	1	B5B0719	02/26/2015	02/26/15 20:20	
Bromochloromethane	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
Bromodichloromethane	ND	6.8	2.1	1	B5B0719	02/26/2015	02/26/15 20:20	
Bromoform	ND	6.8	2.0	1	B5B0719	02/26/2015	02/26/15 20:20	
Bromomethane	ND	6.8	3.6	1	B5B0719	02/26/2015	02/26/15 20:20	
Carbon disulfide	ND	6.8	3.2	1	B5B0719	02/26/2015	02/26/15 20:20	
Carbon tetrachloride	ND	6.8	2.0	1	B5B0719	02/26/2015	02/26/15 20:20	
Chlorobenzene	ND	6.8	1.6	1	B5B0719	02/26/2015	02/26/15 20:20	
Chloroethane	ND	6.8	6.7	1	B5B0719	02/26/2015	02/26/15 20:20	
Chloroform	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
Chloromethane	ND	6.8	1.0	1	B5B0719	02/26/2015	02/26/15 20:20	
cis-1,2-Dichloroethene	ND	6.8	1.6	1	B5B0719	02/26/2015	02/26/15 20:20	
cis-1,3-Dichloropropene	ND	6.8	3.1	1	B5B0719	02/26/2015	02/26/15 20:20	
Di-isopropyl ether	ND	6.8	1.4	1	B5B0719	02/26/2015	02/26/15 20:20	
Dibromochloromethane	ND	6.8	1.7	1	B5B0719	02/26/2015	02/26/15 20:20	
Dibromomethane	ND	6.8	2.7	1	B5B0719	02/26/2015	02/26/15 20:20	
Dichlorodifluoromethane	ND	6.8	1.0	1	B5B0719	02/26/2015	02/26/15 20:20	
Ethyl Acetate	ND	68	18	1	B5B0719	02/26/2015	02/26/15 20:20	
Ethyl Ether	ND	68	16	1	B5B0719	02/26/2015	02/26/15 20:20	

Certificate of Analysis

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Client Sample ID 1278-152-1.5

Lab ID: 1500725-21

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	6.8	1.6	1	B5B0719	02/26/2015	02/26/15 20:20	
Ethylbenzene	ND	6.8	1.5	1	B5B0719	02/26/2015	02/26/15 20:20	
Freon-113	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
Hexachlorobutadiene	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
Isopropylbenzene	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
m,p-Xylene	ND	14	3.4	1	B5B0719	02/26/2015	02/26/15 20:20	
Methylene chloride	ND	6.8	6.8	1	B5B0719	02/26/2015	02/26/15 20:20	
MTBE	ND	6.8	1.2	1	B5B0719	02/26/2015	02/26/15 20:20	
n-Butylbenzene	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
n-Propylbenzene	ND	6.8	1.7	1	B5B0719	02/26/2015	02/26/15 20:20	
Naphthalene	ND	6.8	4.3	1	B5B0719	02/26/2015	02/26/15 20:20	
...vlene	ND	6.8	1.7	1	B5B0719	02/26/2015	02/26/15 20:20	
...-Butylbenzene	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
Styrene	ND	6.8	1.8	1	B5B0719	02/26/2015	02/26/15 20:20	
tert-Amyl methyl ether	ND	6.8	1.4	1	B5B0719	02/26/2015	02/26/15 20:20	
tert-Butanol	ND	140	27	1	B5B0719	02/26/2015	02/26/15 20:20	
tert-Butylbenzene	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
Tetrachloroethene	ND	6.8	1.7	1	B5B0719	02/26/2015	02/26/15 20:20	
Toluene	ND	6.8	1.2	1	B5B0719	02/26/2015	02/26/15 20:20	
trans-1,2-Dichloroethene	ND	6.8	1.9	1	B5B0719	02/26/2015	02/26/15 20:20	
trans-1,3-Dichloropropene	ND	6.8	1.6	1	B5B0719	02/26/2015	02/26/15 20:20	
Trichloroethene	ND	6.8	1.7	1	B5B0719	02/26/2015	02/26/15 20:20	
Trichlorofluoromethane	ND	6.8	2.4	1	B5B0719	02/26/2015	02/26/15 20:20	
Vinyl acetate	ND	68	15	1	B5B0719	02/26/2015	02/26/15 20:20	
Vinyl chloride	ND	6.8	1.4	1	B5B0719	02/26/2015	02/26/15 20:20	
Surrogate: 1,2-Dichloroethane-d4	*119 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 20:20*	
Surrogate: 4-Bromofluorobenzene	*98.7 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 20:20*	
Surrogate: Dibromofluoromethane	*103 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 20:20*	
Surrogate: Toluene-d8	*95.9 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 20:20*	

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QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0012 - EPA 3050B_S									
Blank (B5C0012-BLK1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.205320	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	3.46931	2.0			NR				
Lead	0.252509	1.0			NR				J
Molybdenum	ND	1.0			NR				
Nickel	0.163077	1.0			NR				J
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	2.17478	1.0			NR				
LCS (B5C0012-BS1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Antimony	45.0710	2.0	50.0000		90.1	80 - 120			
Arsenic	44.2199	1.0	50.0000		88.4	80 - 120			
Barium	48.7906	1.0	50.0000		97.6	80 - 120			
Beryllium	47.4462	1.0	50.0000		94.9	80 - 120			
Cadmium	45.7333	1.0	50.0000		91.5	80 - 120			
Chromium	49.3966	1.0	50.0000		98.8	80 - 120			
Cobalt	48.2509	1.0	50.0000		96.5	80 - 120			
Copper	48.6698	2.0	50.0000		97.3	80 - 120			B
Lead	47.3917	1.0	50.0000		94.8	80 - 120			
Molybdenum	51.9388	1.0	50.0000		104	80 - 120			
Nickel	46.3335	1.0	50.0000		92.7	80 - 120			
Selenium	41.3931	1.0	50.0000		82.8	80 - 120			
Silver	45.7813	1.0	50.0000		91.6	80 - 120			
Thallium	46.9380	1.0	50.0000		93.9	80 - 120			
Vanadium	47.8224	1.0	50.0000		95.6	80 - 120			
Zinc	44.8919	1.0	50.0000		89.8	80 - 120			B
Batch B5C0013 - EPA 3050B_S									
Blank (B5C0013-BLK1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.197792	1.0			NR				J

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0013 - EPA 3050B_S (continued)									
Blank (B5C0013-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Cobalt	ND	1.0			NR				
Copper	0.212058	2.0			NR				J
Lead	0.134045	1.0			NR				J
Molybdenum	ND	1.0			NR				
Nickel	0.173585	1.0			NR				J
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.505576	1.0			NR				J
LCS (B5C0013-BS1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Antimony	44.3771	2.0	50.0000		88.8	80 - 120			
Arsenic	43.6241	1.0	50.0000		87.2	80 - 120			
Barium	49.6189	1.0	50.0000		99.2	80 - 120			
...llium	46.5610	1.0	50.0000		93.1	80 - 120			
...mium	46.5338	1.0	50.0000		93.1	80 - 120			
Chromium	49.7470	1.0	50.0000		99.5	80 - 120			
Cobalt	49.2467	1.0	50.0000		98.5	80 - 120			
Copper	48.2798	2.0	50.0000		96.6	80 - 120			
Lead	46.4953	1.0	50.0000		93.0	80 - 120			
Molybdenum	51.6981	1.0	50.0000		103	80 - 120			
Nickel	47.0981	1.0	50.0000		94.2	80 - 120			
Selenium	40.9770	1.0	50.0000		82.0	80 - 120			
Silver	45.8908	1.0	50.0000		91.8	80 - 120			
Thallium	46.4500	1.0	50.0000		92.9	80 - 120			
Vanadium	48.6170	1.0	50.0000		97.2	80 - 120			
Zinc	45.0676	1.0	50.0000		90.1	80 - 120			
Duplicate (B5C0013-DUP1)		Source: 1500725-14			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Antimony	0.554784	2.0		0.460960	NR		18.5	20	J
Arsenic	2.85990	1.0		2.91466	NR		1.90	20	
Barium	177.168	1.0		141.668	NR		22.3	20	R
Beryllium	0.240721	1.0		0.233933	NR		2.86	20	J
Cadmium	0.693944	1.0		0.513549	NR		29.9	20	R, J
Chromium	7.06590	1.0		8.40774	NR		17.3	20	
Cobalt	2.66826	1.0		2.65625	NR		0.451	20	
Copper	21.5344	2.0		19.7751	NR		8.52	20	
Lead	5.52271	1.0		4.59495	NR		18.3	20	
Molybdenum	2.88238	1.0		1.93959	NR		39.1	20	R
Nickel	9.62678	1.0		9.89292	NR		2.73	20	
Selenium	1.39264	1.0		1.43396	NR		2.92	20	
Silver	ND	1.0		ND	NR			20	
...lium	ND	1.0		ND	NR			20	
...dium	18.2924	1.0		19.1508	NR		4.59	20	
Zinc	267.845	1.0		187.487	NR		35.3	20	R

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0013 - EPA 3050B_S (continued)									
Matrix Spike (B5C0013-MS1)		**Source: 1500725-14**				Prepared: 3/2/2015 Analyzed: 3/3/2015			
Antimony	87.5141	2.0	125.000	0.460960	69.6	28 - 106			
Arsenic	101.453	1.0	125.000	2.91466	78.8	57 - 109			
Barium	239.152	1.0	125.000	141.668	78.0	18 - 159			
Beryllium	102.393	1.0	125.000	0.233933	81.7	61 - 107			
Cadmium	94.6076	1.0	125.000	0.513549	75.3	53 - 104			
Chromium	108.395	1.0	125.000	8.40774	80.0	53 - 121			
Cobalt	99.6489	1.0	125.000	2.65625	77.6	55 - 109			
Copper	123.446	2.0	125.000	19.7751	82.9	58 - 124			
Lead	99.8623	1.0	125.000	4.59495	76.2	35 - 129			
Molybdenum	111.823	1.0	125.000	1.93959	87.9	57 - 108			
Nickel	103.472	1.0	125.000	9.89292	74.9	44 - 122			
Selenium	93.3516	1.0	125.000	1.43396	73.5	54 - 104			
Silver	99.9194	1.0	125.000	ND	79.9	60 - 112			
Thallium	94.6282	1.0	125.000	ND	75.7	50 - 103			
Vanadium	118.155	1.0	125.000	19.1508	79.2	54 - 123			
Zinc	265.681	1.0	125.000	187.487	62.6	29 - 132			
Matrix Spike Dup (B5C0013-MSD1)		**Source: 1500725-14**				Prepared: 3/2/2015 Analyzed: 3/3/2015			
Antimony	89.6491	2.0	125.000	0.460960	71.4	28 - 106	2.41	20	
Arsenic	103.198	1.0	125.000	2.91466	80.2	57 - 109	1.71	20	
Barium	233.617	1.0	125.000	141.668	73.6	18 - 159	2.34	20	
Beryllium	103.398	1.0	125.000	0.233933	82.5	61 - 107	0.977	20	
Cadmium	96.6660	1.0	125.000	0.513549	76.9	53 - 104	2.15	20	
Chromium	111.430	1.0	125.000	8.40774	82.4	53 - 121	2.76	20	
Cobalt	101.812	1.0	125.000	2.65625	79.3	55 - 109	2.15	20	
Copper	127.179	2.0	125.000	19.7751	85.9	58 - 124	2.98	20	
Lead	101.612	1.0	125.000	4.59495	77.6	35 - 129	1.74	20	
Molybdenum	114.047	1.0	125.000	1.93959	89.7	57 - 108	1.97	20	
Nickel	105.957	1.0	125.000	9.89292	76.9	44 - 122	2.37	20	
Selenium	95.6943	1.0	125.000	1.43396	75.4	54 - 104	2.48	20	
Silver	103.319	1.0	125.000	ND	82.7	60 - 112	3.35	20	
Thallium	96.4810	1.0	125.000	ND	77.2	50 - 103	1.94	20	
Vanadium	121.970	1.0	125.000	19.1508	82.3	54 - 123	3.18	20	
Zinc	258.086	1.0	125.000	187.487	56.5	29 - 132	2.90	20	
Batch B5C0062 - EPA 3010A_W									
Blank (B5C0062-BLK1)						Prepared: 3/3/2015 Analyzed: 3/4/2015			
Antimony	ND	0.010			NR				
Arsenic	ND	0.010			NR				
Barium	ND	0.0030			NR				
Beryllium	ND	0.0030			NR				
Cadmium	ND	0.0030			NR				
Chromium	9.710E-4	0.0030			NR				J
Cobalt	ND	0.0030			NR				
Copper	0.001759	0.0090			NR				J
Lead	ND	0.0050			NR				

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Blank (B5C0062-BLK1) - Continued					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Molybdenum	ND	0.0050			NR				
Nickel	0.002058	0.0050			NR				J
Selenium	ND	0.010			NR				
Silver	ND	0.0030			NR				
Thallium	ND	0.015			NR				
Vanadium	ND	0.0030			NR				
Zinc	0.004252	0.025			NR				J
LCS (B5C0062-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	0.954611	0.010	1.00000		95.5	80 - 120			
Arsenic	0.881485	0.010	1.00000		88.1	80 - 120			
Barium	0.989988	0.0030	1.00000		99.0	80 - 120			
Beryllium	1.01634	0.0030	1.00000		102	80 - 120			
Cadmium	0.962915	0.0030	1.00000		96.3	80 - 120			
Chromium	0.989438	0.0030	1.00000		98.9	80 - 120			
...lt	0.989686	0.0030	1.00000		99.0	80 - 120			
...pper	0.973899	0.0090	1.00000		97.4	80 - 120			
Lead	0.990508	0.0050	1.00000		99.1	80 - 120			
Molybdenum	0.967244	0.0050	1.00000		96.7	80 - 120			
Nickel	0.967320	0.0050	1.00000		96.7	80 - 120			
Selenium	0.945843	0.010	1.00000		94.6	80 - 120			
Silver	0.985629	0.0030	1.00000		98.6	80 - 120			
Thallium	0.963374	0.015	1.00000		96.3	80 - 120			
Vanadium	1.02540	0.0030	1.00000		103	80 - 120			
Zinc	0.944978	0.025	1.00000		94.5	80 - 120			
Duplicate (B5C0062-DUP1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	0.010		ND	NR			20	
Arsenic	ND	0.010		ND	NR			20	
Barium	0.000519	0.0030		0.000564	NR		8.15	20	J
Beryllium	ND	0.0030		ND	NR			20	
Cadmium	ND	0.0030		ND	NR			20	
Chromium	0.000928	0.0030		0.000903	NR		2.77	20	J
Cobalt	ND	0.0030		ND	NR			20	
Copper	0.001308	0.0090		0.001309	NR		0.126	20	J
Lead	ND	0.0050		ND	NR			20	
Molybdenum	ND	0.0050		0.000486	NR			20	
Nickel	ND	0.0050		ND	NR			20	
Selenium	ND	0.010		ND	NR			20	
Silver	ND	0.0030		0.000731	NR			20	
Thallium	ND	0.015		ND	NR			20	
Vanadium	ND	0.0030		ND	NR			20	
Zinc	0.004721	0.025		4.0129E-3	NR		16.2	20	J
...ix Spike (B5C0062-MS1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.42910	0.010	2.50000	ND	97.2	71 - 129			
Arsenic	2.26662	0.010	2.50000	ND	90.7	80 - 128			

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Matrix Spike (B5C0062-MS1) - Continued		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Barium	2.48027	0.0030	2.50000	0.000564	99.2	77 - 124			
Beryllium	2.55852	0.0030	2.50000	ND	102	88 - 116			
Cadmium	2.43512	0.0030	2.50000	ND	97.4	83 - 116			
Chromium	2.49292	0.0030	2.50000	0.000903	99.7	86 - 116			
Cobalt	2.48154	0.0030	2.50000	ND	99.3	83 - 117			
Copper	2.50852	0.0090	2.50000	0.001309	100	87 - 121			
Lead	2.43611	0.0050	2.50000	ND	97.4	85 - 114			
Molybdenum	2.48584	0.0050	2.50000	0.000486	99.4	81 - 117			
Nickel	2.45526	0.0050	2.50000	ND	98.2	76 - 121			
Selenium	2.40789	0.010	2.50000	ND	96.3	77 - 125			
Silver	2.49917	0.0030	2.50000	0.000731	99.9	77 - 129			
Thallium	2.44110	0.015	2.50000	ND	97.6	51 - 140			
Vanadium	2.61522	0.0030	2.50000	ND	105	86 - 120			
Zinc	2.41301	0.025	2.50000	4.0129E-3	96.4	75 - 123			
Matrix Spike Dup (B5C0062-MSD1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.43388	0.010	2.50000	ND	97.4	71 - 129	0.197	20	
Arsenic	2.27262	0.010	2.50000	ND	90.9	80 - 128	0.264	20	
Barium	2.47755	0.0030	2.50000	0.000564	99.1	77 - 124	0.110	20	
Beryllium	2.53160	0.0030	2.50000	ND	101	88 - 116	1.06	20	
Cadmium	2.43214	0.0030	2.50000	ND	97.3	83 - 116	0.123	20	
Chromium	2.49053	0.0030	2.50000	0.000903	99.6	86 - 116	0.0958	20	
Cobalt	2.47858	0.0030	2.50000	ND	99.1	83 - 117	0.120	20	
Copper	2.49966	0.0090	2.50000	0.001309	99.9	87 - 121	0.354	20	
Lead	2.42680	0.0050	2.50000	ND	97.1	85 - 114	0.383	20	
Molybdenum	2.48272	0.0050	2.50000	0.000486	99.3	81 - 117	0.125	20	
Nickel	2.45250	0.0050	2.50000	ND	98.1	76 - 121	0.113	20	
Selenium	2.41119	0.010	2.50000	ND	96.4	77 - 125	0.137	20	
Silver	2.49298	0.0030	2.50000	0.000731	99.7	77 - 129	0.248	20	
Thallium	2.45002	0.015	2.50000	ND	98.0	51 - 140	0.364	20	
Vanadium	2.61133	0.0030	2.50000	ND	104	86 - 120	0.149	20	
Zinc	2.41345	0.025	2.50000	4.0129E-3	96.4	75 - 123	0.0183	20	
Batch B5C0082 - EPA 3050B_S									
Blank (B5C0082-BLK1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.194625	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.134841	2.0			NR				J
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0082 - EPA 3050B_S (continued)									
Blank (B5C0082-BLK1) - Continued					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.355261	1.0			NR				J
LCS (B5C0082-BS1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Antimony	46.0558	2.0	50.0000		92.1	80 - 120			
Arsenic	44.6972	1.0	50.0000		89.4	80 - 120			
Barium	49.5424	1.0	50.0000		99.1	80 - 120			
Beryllium	49.1148	1.0	50.0000		98.2	80 - 120			
Cadmium	47.3537	1.0	50.0000		94.7	80 - 120			
Chromium	49.8306	1.0	50.0000		99.7	80 - 120			
Cobalt	48.8465	1.0	50.0000		97.7	80 - 120			
Copper	47.3862	2.0	50.0000		94.8	80 - 120			
	49.0984	1.0	50.0000		98.2	80 - 120			
...ybdenum	48.7409	1.0	50.0000		97.5	80 - 120			
Nickel	47.5294	1.0	50.0000		95.1	80 - 120			
Selenium	45.4575	1.0	50.0000		90.9	80 - 120			
Silver	46.7794	1.0	50.0000		93.6	80 - 120			
Thallium	46.8611	1.0	50.0000		93.7	80 - 120			
Vanadium	51.2064	1.0	50.0000		102	80 - 120			
Zinc	46.6048	1.0	50.0000		93.2	80 - 120			
Duplicate (B5C0082-DUP1)		**Source: 1500725-01RE1**			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Antimony	0.735536	2.0		1.19666	NR		47.7	20	J, R
Arsenic	11.0606	1.0		10.4661	NR		5.52	20	
Barium	66.8921	1.0		76.1959	NR		13.0	20	
Beryllium	0.705252	1.0		0.722953	NR		2.48	20	J
Cadmium	0.693517	1.0		0.722442	NR		4.09	20	J
Chromium	26.9573	1.0		27.1280	NR		0.631	20	
Cobalt	9.14702	1.0		9.26558	NR		1.29	20	
Copper	27.9858	2.0		31.0084	NR		10.2	20	
Lead	21.8630	1.0		22.0552	NR		0.875	20	
Molybdenum	0.304624	1.0		0.397171	NR		26.4	20	J, R
Nickel	24.9364	1.0		23.7731	NR		4.78	20	
Selenium	1.14955	1.0		1.40503	NR		20.0	20	R
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	42.0002	1.0		41.1587	NR		2.02	20	
Zinc	60.5020	1.0		60.0768	NR		0.705	20	
Matrix Spike (B5C0082-MS1)		**Source: 1500725-01RE1**			Prepared: 3/4/2015 Analyzed: 3/4/2015				
...mony	94.6802	2.0	125.000	1.19666	74.8	28 - 106			
...ic	110.242	1.0	125.000	10.4661	79.8	57 - 109			
Barium	164.311	1.0	125.000	76.1959	70.5	18 - 159			
Beryllium	110.299	1.0	125.000	0.722953	87.7	61 - 107			

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0082 - EPA 3050B_S (continued)									
Matrix Spike (B5C0082-MS1) - Continued		**Source: 1500725-01RE1**			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Cadmium	101.028	1.0	125.000	0.722442	80.2	53 - 104			
Chromium	130.498	1.0	125.000	27.1280	82.7	53 - 121			
Cobalt	110.386	1.0	125.000	9.26558	80.9	55 - 109			
Copper	142.481	2.0	125.000	31.0084	89.2	58 - 124			
Lead	129.897	1.0	125.000	22.0552	86.3	35 - 129			
Molybdenum	105.989	1.0	125.000	0.397171	84.5	57 - 108			
Nickel	121.505	1.0	125.000	23.7731	78.2	44 - 122			
Selenium	104.461	1.0	125.000	1.40503	82.4	54 - 104			
Silver	109.088	1.0	125.000	ND	87.3	60 - 112			
Thallium	96.4319	1.0	125.000	ND	77.1	50 - 103			
Vanadium	147.129	1.0	125.000	41.1587	84.8	54 - 123			
Zinc	153.322	1.0	125.000	60.0768	74.6	29 - 132			
Matrix Spike Dup (B5C0082-MSD1)		**Source: 1500725-01RE1**			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Antimony	94.4492	2.0	125.000	1.19666	74.6	28 - 106	0.244	20	
Arsenic	114.556	1.0	125.000	10.4661	83.3	57 - 109	3.84	20	
Barium	177.450	1.0	125.000	76.1959	81.0	18 - 159	7.69	20	
Beryllium	112.224	1.0	125.000	0.722953	89.2	61 - 107	1.73	20	
Cadmium	101.593	1.0	125.000	0.722442	80.7	53 - 104	0.557	20	
Chromium	133.219	1.0	125.000	27.1280	84.9	53 - 121	2.06	20	
Cobalt	111.256	1.0	125.000	9.26558	81.6	55 - 109	0.784	20	
Copper	145.795	2.0	125.000	31.0084	91.8	58 - 124	2.30	20	
Lead	125.861	1.0	125.000	22.0552	83.0	35 - 129	3.16	20	
Molybdenum	107.610	1.0	125.000	0.397171	85.8	57 - 108	1.52	20	
Nickel	123.415	1.0	125.000	23.7731	79.7	44 - 122	1.56	20	
Selenium	107.849	1.0	125.000	1.40503	85.2	54 - 104	3.19	20	
Silver	111.486	1.0	125.000	ND	89.2	60 - 112	2.17	20	
Thallium	96.1404	1.0	125.000	ND	76.9	50 - 103	0.303	20	
Vanadium	151.861	1.0	125.000	41.1587	88.6	54 - 123	3.17	20	
Zinc	160.944	1.0	125.000	60.0768	80.7	29 - 132	4.85	20	

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0058 - EPA 245.1/7470_W									
Blank (B5C0058-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20			NR				
LCS (B5C0058-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.6212	0.20	10.0000		106	80 - 120			
Duplicate (B5C0058-DUP1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20		ND	NR			20	
Matrix Spike (B5C0058-MS1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.4453	0.20	10.0000	ND	104	70 - 130			
Matrix Spike Dup (B5C0058-MSD1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.7496	0.20	10.0000	ND	107	70 - 130	2.87	20	
Post Spike (B5C0058-PS1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
...cury	5.27241		5.00000	-0.012331	105	85 - 115			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0015 - EPA 7471_S									
Blank (B5C0015-BLK1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0015-BS1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.751632	0.10	0.833333		90.2	80 - 120			
Duplicate (B5C0015-DUP1)		Source: 1500725-01			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.035510	0.10		0.040618	NR		13.4	20	J
Matrix Spike (B5C0015-MS1)		Source: 1500725-01			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.820076	0.10	0.833333	0.040618	93.5	70 - 130			
Matrix Spike Dup (B5C0015-MSD1)		Source: 1500725-01			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.813129	0.10	0.847458	0.040618	91.2	70 - 130	0.851	20	
Post Spike (B5C0015-PS1)		Source: 1500725-01			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.005770		5.00000E-3	4.874E-4	106	85 - 115			
Batch B5C0016 - EPA 7471_S									
Blank (B5C0016-BLK1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0016-BS1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.825115	0.10	0.833333		99.0	80 - 120			
Duplicate (B5C0016-DUP1)		Source: 1500725-14			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.022193	0.10		0.019187	NR		14.5	20	J
Matrix Spike (B5C0016-MS1)		Source: 1500725-14			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.850191	0.10	0.833333	0.019187	99.7	70 - 130			
Matrix Spike Dup (B5C0016-MSD1)		Source: 1500725-14			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.843851	0.10	0.833333	0.019187	99.0	70 - 130	0.749	20	
Post Spike (B5C0016-PS1)		Source: 1500725-14			Prepared: 3/2/2015 Analyzed: 3/3/2015				
Mercury	0.005815		5.00000E-3	0.000230	112	85 - 115			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0704 - GCVOA_W									
Blank (B5B0704-BLK1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	ND	0.05			NR				
C4-C8	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.1007*		*0.100000*		*101*	*70 - 130*			
LCS (B5B0704-BS1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	0.975000	0.05	1.00000		97.5	70 - 130			
C4-C8	0.412000	0.05	1.00000		41.2	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1016*		*0.100000*		*102*	*70 - 130*			
LCS Dup (B5B0704-BSD1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	0.967000	0.05	1.00000		96.7	70 - 130	0.824	20	
C4-C8	0.411000	0.05	1.00000		41.1	70 - 130	0.243	20	
Surrogate: 4-Bromofluorobenzene	*0.1037*		*0.100000*		*104*	*70 - 130*			
...licate (B5B0704-DUP1)		**Source: 1500727-05**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
...oline Range Organics	0.268000	0.05		0.269000	NR		0.372	20	
C4-C8	0.233000	0.05		0.233000	NR		0.00	20	
Surrogate: 4-Bromofluorobenzene	*0.1005*		*0.100000*		*100*	*70 - 130*			
Batch B5B0723 - GCVOA_S									
Blank (B5B0723-BLK1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1906*		*0.200000*		*95.3*	*37 - 153*			
LCS (B5B0723-BS1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	4.80200	1.0	5.00000		96.0	70 - 130			
C4-C8	3.43700	1.0	5.00000		68.7	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1926*		*0.200000*		*96.3*	*37 - 153*			
Duplicate (B5B0723-DUP1)		**Source: 1500725-03**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
C4-C8	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2124*		*0.200000*		*106*	*37 - 153*			
Matrix Spike (B5B0723-MS1)		**Source: 1500725-03**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	4.28200	1.0	5.00000	ND	85.6	20 - 130			
C4-C8	3.07900	1.0	5.00000	ND	61.6	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1960*		*0.200000*		*98.0*	*37 - 153*			
Matrix Spike Dup (B5B0723-MSD1)		**Source: 1500725-03**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
...line Range Organics	3.97700	1.0	5.00000	ND	79.5	20 - 130	7.39	20	
C4-C8	2.88600	1.0	5.00000	ND	57.7	20 - 130	6.47	20	
Surrogate: 4-Bromofluorobenzene	*0.1982*		*0.200000*		*99.1*	*37 - 153*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0723 - GCVOA_S (continued)									
Matrix Spike Dup (B5B0723-MSD1) - Continued		**Source: 1500725-03**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
Batch B5B0735 - GCVOA_S									
Blank (B5B0735-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1870*		*0.200000*		*93.5*	*33 - 151*			
LCS (B5B0735-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	4.66300	1.0	5.00000		93.3	70 - 130			
C4-C8	3.32400	1.0	5.00000		66.5	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1940*		*0.200000*		*97.0*	*33 - 151*			
Duplicate (B5B0735-DUP1)		**Source: 1500725-15**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
C4-C8	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.1918*		*0.200000*		*95.9*	*33 - 151*			
Matrix Spike (B5B0735-MS1)		**Source: 1500725-15**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	4.16800	1.0	5.00000	ND	83.4	33 - 119			
C4-C8	3.04100	1.0	5.00000	ND	60.8	33 - 119			
Surrogate: 4-Bromofluorobenzene	*0.2033*		*0.200000*		*102*	*33 - 151*			
Matrix Spike Dup (B5B0735-MSD1)		**Source: 1500725-15**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	5.00600	1.0	5.00000	ND	100	33 - 119	18.3	20	
C4-C8	3.62100	1.0	5.00000	ND	72.4	33 - 119	17.4	20	
Surrogate: 4-Bromofluorobenzene	*0.2106*		*0.200000*		*105*	*33 - 151*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0701 - GCSEMI_DRO_LL_S									
Blank (B5B0701-BLK1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.913*		*2.66667*		*71.7*	*40 - 112*			
LCS (B5B0701-BS1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
DRO	24.9340	1.0	33.3333		74.8	51 - 114			
Surrogate: p-Terphenyl	*1.818*		*2.66667*		*68.2*	*40 - 112*			
Duplicate (B5B0701-DUP1)		**Source: 1500725-05**			Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	23.3427	2.0		28.5840	NR		20.2	20	R2
Surrogate: p-Terphenyl	*2.270*		*2.66667*		*85.1*	*40 - 112*			
Matrix Spike (B5B0701-MS1)		**Source: 1500735-01**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
DRO	23.8267	1.0	33.3333	ND	71.5	8 - 121			
ɔate: p-Terphenyl	*2.118*		*2.66667*		*79.4*	*40 - 112*			
Matrix Spike Dup (B5B0701-MSD1)		**Source: 1500735-01**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
DRO	28.6153	1.0	33.3333	ND	85.8	8 - 121	18.3	20	
Surrogate: p-Terphenyl	*2.094*		*2.66667*		*78.5*	*40 - 112*			
Batch B5B0726 - GCSEMI_DRO_LL_S									
Blank (B5B0726-BLK1)					Prepared: 2/26/2015 Analyzed: 2/27/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.033*		*2.66667*		*76.2*	*40 - 112*			
LCS (B5B0726-BS1)					Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	31.5823	1.0	33.3333		94.7	51 - 114			
Surrogate: p-Terphenyl	*1.885*		*2.66667*		*70.7*	*40 - 112*			
Duplicate (B5B0726-DUP1)		**Source: 1500725-14**			Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	20.8140	1.0		13.6287	NR		41.7	20	R2
Surrogate: p-Terphenyl	*2.483*		*2.66667*		*93.1*	*40 - 112*			
Matrix Spike (B5B0726-MS1)		**Source: 1500725-14**			Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	40.7587	1.0	33.3333	13.6287	81.4	8 - 121			
Surrogate: p-Terphenyl	*1.929*		*2.66667*		*72.3*	*40 - 112*			
Matrix Spike Dup (B5B0726-MSD1)		**Source: 1500725-14**			Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	46.2220	1.0	33.3333	13.6287	97.8	8 - 121	12.6	20	
ɔate: p-Terphenyl	*1.662*		*2.66667*		*62.3*	*40 - 112*			
batch B5B0752 - GCSEMI_DRO_W									

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0752 - GCSEMI_DRO_W (continued)									
Blank (B5B0752-BLK1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
C9-C22	ND	0.05			NR				
C23-C32	ND	0.05			NR				
Surrogate: p-Terphenyl	*0.04469*		*8.00000E-2*		*55.9*	*20 - 141*			
LCS (B5B0752-BS1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	0.590440	0.05	1.00000		59.0	29 - 135			
Surrogate: p-Terphenyl	*0.04973*		*8.00000E-2*		*62.2*	*20 - 141*			
LCS Dup (B5B0752-BSD1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	0.654910	0.05	1.00000		65.5	29 - 135	10.4	20	
Surrogate: p-Terphenyl	*0.04453*		*8.00000E-2*		*55.7*	*20 - 141*			

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Polychlorinated Biphenyls by EPA 8082 - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0750 - GCSEMI_PCB/PEST_S									
Blank (B5B0750-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Aroclor 1016	ND	16			NR				
Aroclor 1221	ND	16			NR				
Aroclor 1232	ND	16			NR				
Aroclor 1242	ND	16			NR				
Aroclor 1248	ND	16			NR				
Aroclor 1254	ND	16			NR				
Aroclor 1260	ND	16			NR				
Aroclor 1262	ND	16			NR				
Aroclor 1268	ND	16			NR				
Surrogate: Decachlorobiphenyl	*13.21*		*16.6667*		*79.2*	*8 - 143*			
Surrogate: Tetrachloro-m-xylene	*14.99*		*16.6667*		*89.9*	*27 - 124*			
LCS (B5B0750-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Aroclor 1016	137.329	16	166.667		82.4	67 - 87			
Aroclor 1260	151.158	16	166.667		90.7	71 - 112			
Surrogate: Decachlorobiphenyl	*12.88*		*16.6667*		*77.3*	*8 - 143*			
Surrogate: Tetrachloro-m-xylene	*14.44*		*16.6667*		*86.6*	*27 - 124*			
Duplicate (B5B0750-DUP1)		**Source: 1500725-05**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Aroclor 1016	ND	16		ND	NR			20	
Aroclor 1260	ND	16		ND	NR			20	
Surrogate: Decachlorobiphenyl	*11.24*		*16.6667*		*67.4*	*8 - 143*			
Surrogate: Tetrachloro-m-xylene	*16.01*		*16.6667*		*96.0*	*27 - 124*			
Matrix Spike (B5B0750-MS1)		**Source: 1500721-03**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Aroclor 1016	150.454	16	166.667	ND	90.3	26 - 129			
Aroclor 1260	161.289	16	166.667	ND	96.8	34 - 147			
Surrogate: Decachlorobiphenyl	*14.02*		*16.6667*		*84.1*	*8 - 143*			
Surrogate: Tetrachloro-m-xylene	*15.63*		*16.6667*		*93.8*	*27 - 124*			
Matrix Spike Dup (B5B0750-MSD1)		**Source: 1500721-03**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Aroclor 1016	149.802	16	166.667	ND	89.9	26 - 129	0.434	20	
Aroclor 1260	161.013	16	166.667	ND	96.6	34 - 147	0.171	20	
Surrogate: Decachlorobiphenyl	*14.04*		*16.6667*		*84.3*	*8 - 143*			
Surrogate: Tetrachloro-m-xylene	*15.62*		*16.6667*		*93.7*	*27 - 124*			
Batch B5C0059 - GCSEMI_PCB/PEST_W									
Blank (B5C0059-BLK2)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Aroclor 1016	ND	0.50			NR				
Aroclor 1221	ND	1.0			NR				
Aroclor 1232	ND	0.50			NR				
Aroclor 1242	ND	0.50			NR				
Aroclor 1248	ND	0.50			NR				
Aroclor 1254	ND	0.50			NR				
Aroclor 1260	ND	0.50			NR				

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Polychlorinated Biphenyls by EPA 8082 - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0059 - GCSEMI_PCB/PEST_W (continued)									
Blank (B5C0059-BLK2) - Continued					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Aroclor 1262	ND	0.50			NR				
Aroclor 1268	ND	0.50			NR				
Surrogate: Decachlorobiphenyl	*0.3717*		*0.500000*		*74.3*	*20 - 138*			
Surrogate: Tetrachloro-m-xylene	*0.4428*		*0.500000*		*88.6*	*11 - 133*			
LCS (B5C0059-BS2)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Aroclor 1016	3.93031	0.50	5.00000		78.6	61 - 103			
Aroclor 1260	4.23182	0.50	5.00000		84.6	69 - 118			
Surrogate: Decachlorobiphenyl	*0.3680*		*0.500000*		*73.6*	*20 - 138*			
Surrogate: Tetrachloro-m-xylene	*0.4256*		*0.500000*		*85.1*	*11 - 133*			
LCS Dup (B5C0059-BSD2)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Aroclor 1016	3.92050	0.50	5.00000		78.4	61 - 103	0.250	20	
Aroclor 1260	4.24630	0.50	5.00000		84.9	69 - 118	0.342	20	
Surrogate: Decachlorobiphenyl	*0.3694*		*0.500000*		*73.9*	*20 - 138*			
Surrogate: Tetrachloro-m-xylene	*0.4262*		*0.500000*		*85.2*	*11 - 133*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W									
Blank (B5B0728-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
ichloropropane	ND	0.50			NR				
,3-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Acetate	ND	10			NR				
Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
Blank (B5B0728-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*21.41*		*25.0000*		*85.6*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*25.04*		*25.0000*		*100*	*65 - 132*			
Surrogate: Dibromofluoromethane	*22.76*		*25.0000*		*91.0*	*55 - 138*			
Surrogate: Toluene-d8	*21.13*		*25.0000*		*84.5*	*60 - 120*			
LCS (B5B0728-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.8300	0.50	20.0000		104	61 - 136			
Benzene	41.0000	0.50	40.0000		102	72 - 127			
Chlorobenzene	20.9800	0.50	20.0000		105	78 - 125			
MTBE	17.3100	0.50	20.0000		86.6	60 - 132			
Toluene	44.0400	0.50	40.0000		110	59 - 140			
Trichloroethene	22.0600	0.50	20.0000		110	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	*18.99*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.35*		*25.0000*		*97.4*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.83*		*25.0000*		*79.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.47*		*25.0000*		*81.9*	*60 - 120*			
LCS Dup (B5B0728-BSD1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.0700	0.50	20.0000		100	61 - 136	3.72	20	
Benzene	41.1200	0.50	40.0000		103	72 - 127	0.292	20	
Chlorobenzene	20.7400	0.50	20.0000		104	78 - 125	1.15	20	
MTBE	17.2100	0.50	20.0000		86.0	60 - 132	0.579	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
LCS Dup (B5B0728-BSD1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Toluene	42.6000	0.50	40.0000		106	59 - 140	3.32	20	
Trichloroethene	22.4700	0.50	20.0000		112	67 - 130	1.84	20	
Surrogate: 1,2-Dichloroethane-d4	*19.01*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.16*		*25.0000*		*96.6*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.35*		*25.0000*		*77.4*	*55 - 138*			
Surrogate: Toluene-d8	*20.61*		*25.0000*		*82.4*	*60 - 120*			
Duplicate (B5B0728-DUP1)		**Source: 1500725-19**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
Trichloroethene	ND	0.50		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*21.88*		*25.0000*		*87.5*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.37*		*25.0000*		*97.5*	*65 - 132*			
Surrogate: Dibromofluoromethane	*23.32*		*25.0000*		*93.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.74*		*25.0000*		*83.0*	*60 - 120*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0719 - MSVOA_S									
Blank (B5B0719-BLK1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0719 - MSVOA_S (continued)									
Blank (B5B0719-BLK1) - Continued					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
...hloroethene	ND	5.0			NR				
...ene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*51.43*		*50.0000*		*103*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*48.93*		*50.0000*		*97.9*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.48*		*50.0000*		*99.0*	*26 - 178*			
Surrogate: Toluene-d8	*47.41*		*50.0000*		*94.8*	*31 - 166*			
LCS (B5B0719-BS1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1-Dichloroethene	48.7500	5.0	50.0000		97.5	60 - 130			
Benzene	99.3300	5.0	100.000		99.3	73 - 116			
Chlorobenzene	50.2500	5.0	50.0000		100	82 - 114			
MTBE	54.1900	5.0	50.0000		108	61 - 124			
Toluene	100.770	5.0	100.000		101	75 - 119			
Trichloroethene	52.1200	5.0	50.0000		104	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*43.02*		*50.0000*		*86.0*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.96*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*44.57*		*50.0000*		*89.1*	*26 - 178*			
Surrogate: Toluene-d8	*50.04*		*50.0000*		*100*	*31 - 166*			
LCS Dup (B5B0719-BSD1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1-Dichloroethene	49.6000	5.0	50.0000		99.2	60 - 130	1.73	20	
Benzene	102.150	5.0	100.000		102	73 - 116	2.80	20	
...obenzene	50.4400	5.0	50.0000		101	82 - 114	0.377	20	
...E	57.1300	5.0	50.0000		114	61 - 124	5.28	20	
Toluene	102.970	5.0	100.000		103	75 - 119	2.16	20	

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0719 - MSVOA_S (continued)									
LCS Dup (B5B0719-BSD1) - Continued					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Trichloroethene	53.0300	5.0	50.0000		106	73 - 119	1.73	20	
Surrogate: 1,2-Dichloroethane-d4	*45.46*		*50.0000*		*90.9*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.19*		*50.0000*		*106*	*20 - 173*			
Surrogate: Dibromofluoromethane	*46.23*		*50.0000*		*92.5*	*26 - 178*			
Surrogate: Toluene-d8	*52.01*		*50.0000*		*104*	*31 - 166*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0039 - MSSEMI_S									
Blank (B5C0039-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,2,4-Trichlorobenzene	ND	330			NR				
1,2-Dichlorobenzene	ND	330			NR				
1,3-Dichlorobenzene	ND	330			NR				
1,4-Dichlorobenzene	ND	330			NR				
2,4,5-Trichlorophenol	ND	330			NR				
2,4,6-Trichlorophenol	ND	330			NR				
2,4-Dichlorophenol	ND	1600			NR				
2,4-Dimethylphenol	ND	330			NR				
2,4-Dinitrophenol	ND	1600			NR				
2,4-Dinitrotoluene	ND	330			NR				
2,6-Dinitrotoluene	ND	330			NR				
2-Chloronaphthalene	ND	330			NR				
2-Chlorophenol	ND	330			NR				
2-Methylnaphthalene	ND	330			NR				
2-Methylphenol	ND	330			NR				
roaniline	ND	1600			NR				
itrophenol	ND	330			NR				
3,3'-Dichlorobenzidine	ND	660			NR				
3-Nitroaniline	ND	1600			NR				
4,6-Dinitro-2-methyphenol	ND	1600			NR				
4-Bromophenyl-phenylether	ND	330			NR				
4-Chloro-3-methylphenol	ND	660			NR				
4-Chloroaniline	ND	660			NR				
4-Chlorophenyl-phenylether	ND	330			NR				
4-Methylphenol	ND	330			NR				
4-Nitroaniline	ND	1600			NR				
4-Nitrophenol	ND	330			NR				
Acenaphthene	ND	330			NR				
Acenaphthylene	ND	330			NR				
Anthracene	ND	330			NR				
Benzidine (M)	ND	1600			NR				
Benzo(a)anthracene	ND	330			NR				
Benzo(a)pyrene	ND	330			NR				
Benzo(b)fluoranthene	ND	330			NR				
Benzo(g,h,i)perylene	ND	330			NR				
Benzo(k)fluoranthene	ND	330			NR				
Benzoic acid	ND	1600			NR				
Benzyl alcohol	ND	660			NR				
bis(2-chloroethoxy)methane	ND	330			NR				
bis(2-Chloroethyl)ether	ND	330			NR				
bis(2-chloroisopropyl)ether	ND	330			NR				
bis(2-ethylhexyl)phthalate	ND	330			NR				
Butylbenzylphthalate	ND	330			NR				
ene	ND	330			NR				
butylphthalate	ND	330			NR				
Di-n-octylphthalate	ND	330			NR				

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0039 - MSSEMI_S (continued)									
Blank (B5C0039-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Dibenz(a,h)anthracene	ND	330			NR				
Dibenzofuran	ND	330			NR				
Diethyl phthalate	ND	330			NR				
Dimethyl phthalate	ND	330			NR				
Fluoranthene	ND	330			NR				
Fluorene	ND	330			NR				
Hexachlorobenzene	ND	330			NR				
Hexachlorobutadiene	ND	660			NR				
Hexachlorocyclopentadiene	ND	660			NR				
Hexachloroethane	ND	330			NR				
Indeno(1,2,3-cd)pyrene	ND	330			NR				
Isophorone	ND	330			NR				
N-Nitroso-di-n propylamine	ND	330			NR				
N-Nitrosodiphenylamine	ND	330			NR				
Naphthalene	ND	330			NR				
Nitrobenzene	ND	330			NR				
Pentachlorophenol	ND	1600			NR				
Phenanthrene	ND	330			NR				
Phenol	ND	330			NR				
Pyrene	ND	330			NR				
Pyridine	ND	1600			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*2018*		*3333.33*		*60.5*	*24 - 114*			
Surrogate: 2,4,6-Tribromophenol	*2285*		*3333.33*		*68.5*	*0 - 189*			
Surrogate: 2-Chlorophenol-d4	*2232*		*3333.33*		*67.0*	*23 - 123*			
Surrogate: 2-Fluorobiphenyl	*2299*		*3333.33*		*69.0*	*28 - 128*			
Surrogate: 2-Fluorophenol	*2240*		*3333.33*		*67.2*	*8 - 138*			
Surrogate: 4-Terphenyl-d14	*2609*		*3333.33*		*78.3*	*27 - 154*			
Surrogate: Nitrobenzene-d5	*2278*		*3333.33*		*68.4*	*19 - 129*			
Surrogate: Phenol-d5	*2213*		*3333.33*		*66.4*	*20 - 126*			
LCS (B5C0039-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,2,4-Trichlorobenzene	2665.67	330	3333.33		80.0	67 - 110			
1,4-Dichlorobenzene	2229.33	330	3333.33		66.9	62 - 102			
2,4-Dinitrotoluene	3249.33	330	3333.33		97.5	76 - 137			
2-Chlorophenol	2407.33	330	3333.33		72.2	65 - 105			
4-Chloro-3-methylphenol	2968.67	660	3333.33		89.1	72 - 124			
4-Nitrophenol	3125.67	330	3333.33		93.8	55 - 146			
Acenaphthene	2859.00	330	3333.33		85.8	66 - 112			
N-Nitroso-di-n propylamine	2644.00	330	3333.33		79.3	59 - 127			
Pentachlorophenol	2517.33	1600	3333.33		75.5	51 - 135			
Phenol	2520.00	330	3333.33		75.6	63 - 112			
Pyrene	2918.33	330	3333.33		87.6	67 - 123			
Surrogate: 1,2-Dichlorobenzene-d4	*1961*		*3333.33*		*58.8*	*24 - 114*			
Surrogate: 2,4,6-Tribromophenol	*2734*		*3333.33*		*82.0*	*0 - 189*			
Surrogate: 2-Chlorophenol-d4	*2214*		*3333.33*		*66.4*	*23 - 123*			
Surrogate: 2-Fluorobiphenyl	*2388*		*3333.33*		*71.6*	*28 - 128*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0039 - MSSEMI_S (continued)									
LCS (B5C0039-BS1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Surrogate: 2-Fluorophenol	*2247*		*3333.33*		*67.4*	*8 - 138*			
Surrogate: 4-Terphenyl-d14	*2444*		*3333.33*		*73.3*	*27 - 154*			
Surrogate: Nitrobenzene-d5	*2187*		*3333.33*		*65.6*	*19 - 129*			
Surrogate: Phenol-d5	*2270*		*3333.33*		*68.1*	*20 - 126*			
Duplicate (B5C0039-DUP1)		**Source: 1500725-05**			Prepared: 3/2/2015 Analyzed: 3/3/2015				
1,2,4-Trichlorobenzene	ND	1600		ND	NR			20	D1
1,4-Dichlorobenzene	ND	1600		ND	NR			20	D1
2,4-Dinitrotoluene	ND	1600		ND	NR			20	D1
2-Chlorophenol	ND	1600		ND	NR			20	D1
4-Chloro-3-methylphenol	ND	3300		ND	NR			20	D1
4-Nitrophenol	ND	1600		ND	NR			20	D1
Acenaphthene	ND	1600		ND	NR			20	D1
N-Nitroso-di-n propylamine	ND	1600		ND	NR			20	D1
Pentachlorophenol	ND	8200		ND	NR			20	D1
...ol	ND	1600		ND	NR			20	D1
...ne	ND	1600		ND	NR			20	D1
Surrogate: 1,2-Dichlorobenzene-d4	*1448*		*3333.33*		*43.4*	*24 - 114*			
Surrogate: 2,4,6-Tribromophenol	*1610*		*3333.33*		*48.3*	*0 - 189*			
Surrogate: 2-Chlorophenol-d4	*1638*		*3333.33*		*49.2*	*23 - 123*			
Surrogate: 2-Fluorobiphenyl	*1747*		*3333.33*		*52.4*	*28 - 128*			
Surrogate: 2-Fluorophenol	*1622*		*3333.33*		*48.7*	*8 - 138*			
Surrogate: 4-Terphenyl-d14	*1702*		*3333.33*		*51.1*	*27 - 154*			
Surrogate: Nitrobenzene-d5	*1793*		*3333.33*		*53.8*	*19 - 129*			
Surrogate: Phenol-d5	*1607*		*3333.33*		*48.2*	*20 - 126*			
Matrix Spike (B5C0039-MS1)		**Source: 1500757-44**			Prepared: 3/2/2015 Analyzed: 3/3/2015				
1,2,4-Trichlorobenzene	3205.33	330	3333.33	ND	96.2	56 - 112			
1,4-Dichlorobenzene	2682.67	330	3333.33	ND	80.5	50 - 104			
2,4-Dinitrotoluene	3628.00	330	3333.33	ND	109	60 - 146			
2-Chlorophenol	2899.67	330	3333.33	ND	87.0	48 - 112			
4-Chloro-3-methylphenol	3379.67	660	3333.33	ND	101	38 - 120			
4-Nitrophenol	3555.00	330	3333.33	ND	107	30 - 155			
Acenaphthene	3268.67	330	3333.33	ND	98.1	56 - 116			
N-Nitroso-di-n propylamine	3061.67	330	3333.33	ND	91.9	47 - 130			
Pentachlorophenol	3121.67	1600	3333.33	ND	93.7	18 - 160			
Phenol	2944.33	330	3333.33	ND	88.3	55 - 112			
Pyrene	3396.33	330	3333.33	ND	102	54 - 135			
Surrogate: 1,2-Dichlorobenzene-d4	*2101*		*3333.33*		*63.0*	*24 - 114*			
Surrogate: 2,4,6-Tribromophenol	*3165*		*3333.33*		*95.0*	*0 - 189*			
Surrogate: 2-Chlorophenol-d4	*2650*		*3333.33*		*79.5*	*23 - 123*			
Surrogate: 2-Fluorobiphenyl	*2317*		*3333.33*		*69.5*	*28 - 128*			
Surrogate: 2-Fluorophenol	*2670*		*3333.33*		*80.1*	*8 - 138*			
...ate: 4-Terphenyl-d14	*2436*		*3333.33*		*73.1*	*27 - 154*			
...ate: Nitrobenzene-d5	*2580*		*3333.33*		*77.4*	*19 - 129*			
Surrogate: Phenol-d5	*2653*		*3333.33*		*79.6*	*20 - 126*			

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Semivolatile Organic Compounds by EPA 8270C - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0039 - MSSEMI_S (continued)									
Matrix Spike Dup (B5C0039-MSD1)		**Source: 1500757-44**			Prepared: 3/2/2015 Analyzed: 3/3/2015				
1,2,4-Trichlorobenzene	3366.33	330	3333.33	ND	101	56 - 112	4.90	20	
1,4-Dichlorobenzene	2843.67	330	3333.33	ND	85.3	50 - 104	5.83	20	
2,4-Dinitrotoluene	3708.33	330	3333.33	ND	111	60 - 146	2.19	20	
2-Chlorophenol	3074.67	330	3333.33	ND	92.2	48 - 112	5.86	20	
4-Chloro-3-methylphenol	3549.33	660	3333.33	ND	106	38 - 120	4.90	20	
4-Nitrophenol	3733.67	330	3333.33	ND	112	30 - 155	4.90	20	
Acenaphthene	3428.67	330	3333.33	ND	103	56 - 116	4.78	20	
N-Nitroso-di-n propylamine	3285.67	330	3333.33	ND	98.6	47 - 130	7.06	20	
Pentachlorophenol	3317.00	1600	3333.33	ND	99.5	18 - 160	6.07	20	
Phenol	3141.67	330	3333.33	ND	94.3	55 - 112	6.48	20	
Pyrene	3427.67	330	3333.33	ND	103	54 - 135	0.918	20	
Surrogate: 1,2-Dichlorobenzene-d4	*2160*		*3333.33*		*64.8*	*24 - 114*			
Surrogate: 2,4,6-Tribromophenol	*3217*		*3333.33*		*96.5*	*0 - 189*			
Surrogate: 2-Chlorophenol-d4	*2786*		*3333.33*		*83.6*	*23 - 123*			
Surrogate: 2-Fluorobiphenyl	*2359*		*3333.33*		*70.8*	*28 - 128*			
Surrogate: 2-Fluorophenol	*2761*		*3333.33*		*82.8*	*8 - 138*			
Surrogate: 4-Terphenyl-d14	*2443*		*3333.33*		*73.3*	*27 - 154*			
Surrogate: Nitrobenzene-d5	*2675*		*3333.33*		*80.3*	*19 - 129*			
Surrogate: Phenol-d5	*2796*		*3333.33*		*83.9*	*20 - 126*			
Batch B5C0043 - MSSEMI_W									
Blank (B5C0043-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,2,4-Trichlorobenzene	ND	10			NR				
1,2-Dichlorobenzene	ND	10			NR				
1,3-Dichlorobenzene	ND	10			NR				
1,4-Dichlorobenzene	ND	10			NR				
2,4,5-Trichlorophenol	ND	10			NR				
2,4,6-Trichlorophenol	ND	10			NR				
2,4-Dichlorophenol	ND	10			NR				
2,4-Dimethylphenol	ND	10			NR				
2,4-Dinitrophenol	ND	50			NR				
2,4-Dinitrotoluene	ND	10			NR				
2,6-Dinitrotoluene	ND	10			NR				
2-Chloronaphthalene	ND	10			NR				
2-Chlorophenol	ND	10			NR				
2-Methylnaphthalene	ND	10			NR				
2-Methylphenol	ND	10			NR				
2-Nitroaniline	ND	50			NR				
2-Nitrophenol	ND	10			NR				
3,3'-Dichlorobenzidine	ND	20			NR				
3-Nitroaniline	ND	50			NR				
4,6-Dinitro-2-methyphenol	ND	50			NR				
4-Bromophenyl-phenylether	ND	10			NR				
4-Chloro-3-methylphenol	ND	50			NR				
4-Chloroaniline	ND	20			NR				
4-Chlorophenyl-phenylether	ND	10			NR				

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Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0043 - MSSEMI_W (continued)									
Blank (B5C0043-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
4-Methylphenol	ND	10			NR				
4-Nitroaniline	ND	20			NR				
4-Nitrophenol	ND	50			NR				
Acenaphthene	ND	10			NR				
Acenaphthylene	ND	10			NR				
Anthracene	ND	10			NR				
Benzidine (M)	ND	50			NR				
Benzo(a)anthracene	ND	10			NR				
Benzo(a)pyrene	ND	10			NR				
Benzo(b)fluoranthene	ND	10			NR				
Benzo(g,h,i)perylene	ND	10			NR				
Benzo(k)fluoranthene	ND	10			NR				
Benzoic acid	ND	50			NR				
Benzyl alcohol	ND	20			NR				
...'2-chloroethoxy)methane	ND	10			NR				
...-Chloroethyl)ether	ND	10			NR				
bis(2-chloroisopropyl)ether	ND	10			NR				
bis(2-ethylhexyl)phthalate	ND	10			NR				
Butylbenzylphthalate	ND	10			NR				
Chrysene	ND	10			NR				
Di-n-butylphthalate	ND	10			NR				
Di-n-octylphthalate	ND	10			NR				
Dibenz(a,h)anthracene	ND	10			NR				
Dibenzofuran	ND	10			NR				
Diethyl phthalate	ND	10			NR				
Dimethyl phthalate	ND	10			NR				
Fluoranthene	ND	10			NR				
Fluorene	ND	10			NR				
Hexachlorobenzene	ND	10			NR				
Hexachlorobutadiene	ND	20			NR				
Hexachlorocyclopentadiene	ND	10			NR				
Hexachloroethane	ND	10			NR				
Indeno(1,2,3-cd)pyrene	ND	10			NR				
Isophorone	ND	10			NR				
N-Nitroso-di-n propylamine	ND	10			NR				
N-Nitrosodiphenylamine	ND	10			NR				
Naphthalene	ND	10			NR				
Nitrobenzene	ND	10			NR				
Pentachlorophenol	ND	50			NR				
Phenanthrene	ND	10			NR				
Phenol	ND	10			NR				
Pyrene	ND	10			NR				
P...ridine	ND	50			NR				
...gate: 1,2-Dichlorobenzene-d4	*65.68*		*100.000*		*65.7*	*4 - 111*			
Surrogate: 2,4,6-Tribromophenol	*87.49*		*100.000*		*87.5*	*21 - 162*			
Surrogate: 2-Chlorophenol-d4	*66.65*		*100.000*		*66.6*	*0 - 124*			

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Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0043 - MSSEMI_W (continued)									
Blank (B5C0043-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Surrogate: 2-Fluorobiphenyl	*80.71*		*100.000*		*80.7*	*21 - 118*			
Surrogate: 2-Fluorophenol	*45.66*		*100.000*		*45.7*	*0 - 83*			
Surrogate: 4-Terphenyl-d14	*91.66*		*100.000*		*91.7*	*33 - 150*			
Surrogate: Nitrobenzene-d5	*78.66*		*100.000*		*78.7*	*10 - 117*			
Surrogate: Phenol-d5	*34.27*		*100.000*		*34.3*	*0 - 68*			
LCS (B5C0043-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,2,4-Trichlorobenzene	102.550	10	100.000		103	44 - 118			
1,4-Dichlorobenzene	81.5100	10	100.000		81.5	33 - 113			
2,4-Dinitrotoluene	117.960	10	100.000		118	74 - 140			
2-Chlorophenol	79.8600	10	100.000		79.9	33 - 106			
4-Chloro-3-methylphenol	102.730	50	100.000		103	64 - 117			
4-Nitrophenol	54.3600	50	100.000		54.4	31 - 70			
Acenaphthene	107.480	10	100.000		107	59 - 113			
N-Nitroso-di-n propylamine	99.9000	10	100.000		99.9	43 - 132			
Pentachlorophenol	87.6100	50	100.000		87.6	60 - 128			
Phenol	42.5100	10	100.000		42.5	16 - 57			
Pyrene	106.760	10	100.000		107	68 - 122			
Surrogate: 1,2-Dichlorobenzene-d4	*69.29*		*100.000*		*69.3*	*4 - 111*			
Surrogate: 2,4,6-Tribromophenol	*96.04*		*100.000*		*96.0*	*21 - 162*			
Surrogate: 2-Chlorophenol-d4	*72.04*		*100.000*		*72.0*	*0 - 124*			
Surrogate: 2-Fluorobiphenyl	*89.10*		*100.000*		*89.1*	*21 - 118*			
Surrogate: 2-Fluorophenol	*48.05*		*100.000*		*48.0*	*0 - 83*			
Surrogate: 4-Terphenyl-d14	*84.28*		*100.000*		*84.3*	*33 - 150*			
Surrogate: Nitrobenzene-d5	*83.03*		*100.000*		*83.0*	*10 - 117*			
Surrogate: Phenol-d5	*36.29*		*100.000*		*36.3*	*0 - 68*			
LCS Dup (B5C0043-BSD1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,2,4-Trichlorobenzene	100.140	10	100.000		100	44 - 118	2.38	20	
1,4-Dichlorobenzene	83.0000	10	100.000		83.0	33 - 113	1.81	20	
2,4-Dinitrotoluene	116.200	10	100.000		116	74 - 140	1.50	20	
2-Chlorophenol	80.5200	10	100.000		80.5	33 - 106	0.823	20	
4-Chloro-3-methylphenol	102.810	50	100.000		103	64 - 117	0.0778	20	
4-Nitrophenol	54.2800	50	100.000		54.3	31 - 70	0.147	20	
Acenaphthene	105.350	10	100.000		105	59 - 113	2.00	20	
N-Nitroso-di-n propylamine	99.2800	10	100.000		99.3	43 - 132	0.623	20	
Pentachlorophenol	93.6000	50	100.000		93.6	60 - 128	6.61	20	
Phenol	43.3200	10	100.000		43.3	16 - 57	1.89	20	
Pyrene	106.500	10	100.000		106	68 - 122	0.244	20	
Surrogate: 1,2-Dichlorobenzene-d4	*69.44*		*100.000*		*69.4*	*4 - 111*			
Surrogate: 2,4,6-Tribromophenol	*96.89*		*100.000*		*96.9*	*21 - 162*			
Surrogate: 2-Chlorophenol-d4	*72.28*		*100.000*		*72.3*	*0 - 124*			
Surrogate: 2-Fluorobiphenyl	*86.51*		*100.000*		*86.5*	*21 - 118*			
Surrogate: 2-Fluorophenol	*48.28*		*100.000*		*48.3*	*0 - 83*			
Surrogate: 4-Terphenyl-d14	*87.14*		*100.000*		*87.1*	*33 - 150*			
Surrogate: Nitrobenzene-d5	*81.02*		*100.000*		*81.0*	*10 - 117*			
Surrogate: Phenol-d5	*36.84*		*100.000*		*36.8*	*0 - 68*			

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/09/2015

Notes and Definitions

S4	Surrogate was diluted out.
R2	RPD value outside acceptance criteria due to possible matrix interference.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
D1	Sample required dilution due to possible matrix interference.
B	Analyte detected in the associated method blank.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

AMERISCI

AmeriSci Los Angeles
24416 S. Main Street, Ste 308
Carson, California 90745
TEL: (310) 834-4868 • FAX: (310) 834-4772

PLM Bulk Asbestos Report

Advanced Technology Laboratories
Attn: Diane Galvan
3275 Walnut Street

Signal Hill , CA 90755

Date Received 02/26/15
Date Examined 03/06/15

RE: 1500725

AmeriSci Job # 915022089
P.O. # SC09378
Page 1 **of** 2

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1500725-01 **Location:** 1278-117-0	915022089-01	*No*	NVA [1] by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Non-Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			
1500725-03 **Location:** 1278-118-0	915022089-02	*No*	NVA [1] by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			
1500725-04 **Location:** 1278-116-0	915022089-03	*No*	NVA [1] by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			
1500725-05 **Location:** 1278-115-0	915022089-04	*No*	NVA [1] by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			
1500725-06 **Location:** 1278-114-0	915022089-05	*No*	NVA [1] by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			

See Reporting notes on last page

PLM Bulk Asbestos Report

1500725

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1500725-07	915022089-06	*No*	NVA [1]
Location: 1278-113-0			by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			
1500725-08	915022089-07	*No*	NVA [1]
Location: 1278-112-0			by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Non-Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			
1500725-09	915022089-08	*No*	NVA [1]
Location: 1278-111-0			by John A. Lopez on 03/06/15
Analyst Description: Dark Brown, Heterogeneous, Non-Fibrous, Soil **Asbestos Types:** **Other Material:** NVA			

Reporting Notes:

(1) Qualitative result for soil, dust, or debris sample because of particle and aggregate size variability.

Analyzed By: John A. Lopez _____; Date Analyzed: 3/6/2015 3-6-15

*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0, CA ELAP lab #2922); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By: _____

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725

9150220B

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AmeriSci Los Angeles
3275 Walnut Avenue	24416 South Main Street, Suite 308
Signal Hill, CA 90755	Carson, CA 90745
Phone: 562.989.4045	Phone :(310) 834-4868
Fax: 562.989.6348	Fax: (310) 834-4772
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09378- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500725-01 / 1278-117-0		**Soil**	**02/24/15 08:15**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 08:15		
ATL Lab#: 1500725-02 / EBB-1-022415		**Aqueous**	**02/24/15 08:35**	
Asbestos_TEM_SUB [Asbestos TEM] Amber Unpres - 1000mL	**03/05/15 17:00**	02/26/15 08:35		
ATL Lab#: 1500725-03 / 1278-118-0		**Soil**	**02/24/15 09:00**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 09:00		
ATL Lab#: 1500725-04 / 1278-116-0		**Soil**	**02/24/15 09:20**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 09:20		
ATL Lab#: 1500725-05 / 1278-115-0		**Soil**	**02/24/15 09:35**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 09:35		

Released By	Date	Received By	Date
	2/25/15		2/26/15
	2/26/15 9:24		2/26/15 @ 0930

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725

9150220 89

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500725-06 / 1278-114-0		**Soil**	**02/24/15 10:05**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 10:05		
ATL Lab#: 1500725-07 / 1278-113-0		**Soil**	**02/24/15 10:40**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 10:40		
ATL Lab#: 1500725-08 / 1278-112-0		**Soil**	**02/24/15 11:00**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 11:00		
ATL Lab#: 1500725-09 / 1278-111-0		**Soil**	**02/24/15 11:20**	
Asbestos_PLM_SUB Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 11:20		
ATL Lab#: 1500725-10 / EBB-2-022415		**Aqueous**	**02/24/15 11:50**	
Asbestos_TEM_SUB [Asbestos TEM] Amber Unpres - 1000mL	**03/05/15 17:00**	02/26/15 11:50		

Released By	Date	Received By	Date
			2/24/15 0930
Released By	Date	Received By	Date

AmeriSci Job #: 915022133
Client Name: Advanced Technology Laboratories

Table I
Summary of Transmission Electron Microscopy (TEM) Results for Asbestos (Water)

1500725

AmeriSci Sample #	Client Sample No./Location	Liquid Filtered (liters)	Temp (Celcius)	Structures Detected* (total)	Structures Detected* (>10 µm)	Analytical Sensitivity (MF/L)	Asbestos Conc (total) (MF/L)	Asbestos Conc (>10 µm) (MF/L)	Asbestos Type
01	1500725-02 EBB-1-022415	0.02.	0	NSD	NSD	0.12	<0.12	<0.12	----
02	1500725-10 EBB-2-022415	0.02	0	NSD	NSD	0.12	<0.12	<0.12	----

*fiber criteria (>=0.5 microns, 5:1 aspect ratio); NAD/NSD = no asbestos detected, NA = not analyzed, MF/L = million fibers per liter.

NOTE: Drinking water analysis by EPA-600/4-83-043 (100.1), waste water by EPA-600/4-80-005. Analytical sensitivity calculated as though 1 fiber had been detected on the TEM GRID area analyzed. Samples are refrigerated upon receipt when necessary and filtered within four hours.

Reviewed By: _____ ; Analyzed By: _____ Date: 3/6/2015
Glenn F. Massey

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725

9150222133
~~9150222089~~

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AmeriSci Los Angeles
3275 Walnut Avenue	24416 South Main Street, Suite 308
Signal Hill, CA 90755	Carson, CA 90745
Phone: 562.989.4045	Phone :(310) 834-4868
Fax: 562.989.6348	Fax: (310) 834-4772
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09378- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500725-01 / 1278-117-0		**Soil**	**02/24/15 08:15**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	03/05/15 17:00	08/23/15 08:15		
ATL Lab#: 1500725-02 / EBB-1-022415		**Aqueous**	**02/24/15 08:35**	
Asbestos_TEM_SUB [Asbestos TEM] Amber Unpres - 1000mL	03/05/15 17:00	02/26/15 08:35		
ATL Lab#: 1500725-03 / 1278-118-0		**Soil**	**02/24/15 09:00**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	03/05/15 17:00	08/23/15 09:00		
ATL Lab#: 1500725-04 / 1278-116-0		**Soil**	**02/24/15 09:20**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	03/05/15 17:00	08/23/15 09:20		
ATL Lab#: 1500725-05 / 1278-115-0		**Soil**	**02/24/15 09:35**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	03/05/15 17:00	08/23/15 09:35		

Released By	Date	Received By	Date
[illegible]	2/26/15	[illegible]	2/26/15
[illegible]	2/26/15 9:24	[illegible]	2/26/15 @ 0930

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725

915022133
915022084

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500725-06 / 1278-114-0		**Soil**	**02/24/15 10:05**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 10:05		
ATL Lab#: 1500725-07 / 1278-113-0		**Soil**	**02/24/15 10:40**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 10:40		
ATL Lab#: 1500725-08 / 1278-112-0		**Soil**	**02/24/15 11:00**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 11:00		
ATL Lab#: 1500725-09 / 1278-111-0		**Soil**	**02/24/15 11:20**	
Asbestos_PLM_SUB [Asbestos PLM] Glass Jar - 4 oz	**03/05/15 17:00**	08/23/15 11:20		
ATL Lab#: 1500725-10 / EBB-2-022415		**Aqueous**	**02/24/15 11:50**	
Asbestos_TEM_SUB [Asbestos TEM] Amber Unpres - 1000mL	**03/05/15 17:00**	02/26/15 11:50		

Released By	Date	Received By	Date
			2/24/15 0930
Released By	Date	Received By	Date

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Number of Pages	5
Date Received	02/26/2015
Date Reported	03/06/2015

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76122	02/26/2015	ATL

Project ID: 1500725
Project Name: PO# SC09377

Enclosed please find results of analyses of 1 soil and 1 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
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Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attention: Rachelle Arada

Project ID: 1500725
Date Received 02/26/2015
Date Reported 03/06/2015

Job Number	Order Date	Client
76122	02/26/2015	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 9 samples with the following specification on 02/26/2015.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76122.07	1500725-19	02/24/2015	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
8151A	03/05/2015	2	Normal	ug/L

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76122.01	1500725-11	02/24/2015	Soil	1
76122.02	1500725-12	02/24/2015	Soil	1
76122.03	1500725-14	02/24/2015	Soil	1
76122.04	1500725-15	02/24/2015	Soil	1
76122.05	1500725-16	02/24/2015	Soil	1
76122.06	1500725-17	02/24/2015	Soil	1
76122.08	1500725-20	02/24/2015	Soil	1
76122.09	1500725-21	02/24/2015	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8151A)	03/05/2015	2	Normal	ug/Kg

The samples were analyzed as specified on the enclosed chain of custody. Analytical non-conformances have been noted on the report.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 2

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215

Our Lab I.D.			Method Blank	76122.05			
Client Sample I.D.				1500725-16			
Date Sampled				02/24/2015			
Date Prepared			03/02/2015	03/02/2015			
Preparation Method			3550B	3550B			
Date Analyzed			03/03/2015	03/03/2015			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	20	20	ND	ND			
Bentazon	10	10	ND	ND			
Chloramben	10	10	ND	ND			
2,4-D	10	10	ND	ND			
Dalapon	20	20	ND	ND			
2,4-DB	10	10	ND	ND			
DCPA diacid	20	20	ND	ND			
Dicamba	10	10	ND	ND			
3,5-Dichlorobenzoic acid	10	10	ND	ND			
Dichloroprop	10	10	ND	ND			
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND			
MCPA	2000	2000	ND	ND			
MCPP	2000	2000	ND	ND			
4-Nitrophenol	10	10	ND	ND			
Pentachlorophenol (PCP)	10	10	ND	ND			
Picloram	10	10	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND			
2,4,5-TP	10	10	ND	ND			
Our Lab I.D.			Method Blank	76122.05			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		64.4	54.3			

American Environmental Testing Laboratory Inc.

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 3

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315

Our Lab I.D.			Method Blank	76122.07			
Client Sample I.D.				1500725-19			
Date Sampled				02/24/2015			
Date Prepared			03/03/2015	03/03/2015			
Preparation Method			3510C	3510C			
Date Analyzed			03/04/2015	03/04/2015			
Matrix			Aqueous	Aqueous			
Units			ug/L	ug/L			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	1.0	1.0	ND	ND			
Bentazon	0.5	0.5	ND	ND			
Chloramben	0.5	0.5	ND	ND			
2,4-D	0.5	0.5	ND	ND			
Dalapon	1.0	1.0	ND	ND			
2,4-DB	0.5	0.5	ND	ND			
DCPA diacid	1.0	1.0	ND	ND			
Dicamba	0.5	0.5	ND	ND			
3,5-Dichlorobenzoic acid	0.5	0.5	ND	ND			
Dichloroprop	0.5	0.5	ND	ND			
Dinoseb	0.5	0.5	ND	ND			
MCPA	100	100	ND	ND			
MCPP	100	100	ND	ND			
4-Nitrophenol	0.5	0.5	ND	ND			
Pentachlorophenol (PCP)	0.5	0.5	ND	ND			
Picloram	0.5	0.5	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.5	0.5	ND	ND			
2,4,5-TP	0.5	0.5	ND	ND			
Our Lab I.D.			Method Blank	76122.07			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		65.6	77.9			

American Environmental Testing Laboratory Inc.
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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 4

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315; LCS: Clean Water; LCS Prepared: 03/03/2015; LCS Analyzed: 03/04/2015; Units: ug/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	72.0	144	50.0	72.5	145	<1	50-150	<50	
Dalapon	50.0	54.5	109	50.0	36.3	72.6	40.1	50-150	<50	
2,4-DB	50.0	43.1	86.2	50.0	26.9	53.8	46.3	50-150	<50	
Dicamba	50.0	56.5	113	50.0	43.4	86.8	26.2	50-150	<50	
Dinoseb	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<50	
MCPA	5,000	4,280	85.6	5,000	5,850	117	31.0	50-150	<50	
MCPP	5,000	5,900	118	5,000	2,540	50.8	79.6	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	42.8	85.6	50.0	29.9	59.8	35.5	50-150	<50	
2,4,5-TP	50.0	27.0	53.9	50.0	46.4	92.8	53.0	50-150	<50	
Surrogates										
DCAA	100	65.6	65.6	100	57.9	57.9	12.5	50-150	<20	

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 5

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215; Dup or Spiked Sample: B030215; LCS: Clean Sand; LCS Prepared: 03/02/2015; LCS Analyzed: 03/03/2015; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	29.3	58.6	50.0	26.0	52.0	11.9	50-150	<40	
Dalapon	50.0	57.0	114	50.0	34.4	68.8	49.5	50-150	<40	
2,4-DB	50.0	35.7	71.4	50.0	33.8	67.6	5.5	50-150	<40	
Dicamba	50.0	30.1	60.2	50.0	27.2	54.4	10.1	50-150	<40	
Dichloroprop	50.0	28.3	56.6	50.0	28.7	57.4	1.4	50-150	<40	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	26.7	53.4	50.0	31.0	62.0	14.9	50-150	<40	
MCPA	5,000	5,000	100	5,000	2,550	51.0	64.9	50-150	<40	
MCPP	5,000	3,680	73.6	5,000	3,610	72.2	1.9	50-150	<40	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	29.2	58.4	50.0	33.6	67.2	14.0	50-150	<40	
2,4,5-TP	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<40	
Surrogates										
DCAA	100	76.4	76.4	100	75.4	75.4	1.3	50-150	<40	

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	ABTL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09377- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Samp	Comments
ATL Lab#: 1500725-11 / 1278-155-0		Soil	02/24/15 13:20	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 13:20		
ATL Lab#: 1500725-12 / 1278-155-1.5		Soil	02/24/15 13:30	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 13:30		
ATL Lab#: 1500725-14 / 1278-154-0		Soil	02/24/15 13:45	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 13:45		
ATL Lab#: 1500725-15 / 1278-154-1.5		Soil	02/24/15 13:55	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 13:55		
ATL Lab#: 1500725-16 / 1278-153-0		Soil	02/24/15 14:30	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 14:30		

Released By	Date	Received By	Date
	02/26/15 1200		02/26/15 1200
Released By	Date	Received By	Date

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500725-17 / 1278-153-1.5		**Soil**	**02/24/15 14:40**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	**03/05/15 17:00**	03/10/15 14:40		
ATL Lab#: 1500725-19 / EBB-3-022415		**Aqueous**	**02/24/15 15:00**	
8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	**03/05/15 17:00**	03/03/15 15:00		
ATL Lab#: 1500725-20 / 1278-152-0		**Soil**	**02/24/15 15:05**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	**03/05/15 17:00**	03/10/15 15:05		
ATL Lab#: 1500725-21 / 1278-152-1.5		**Soil**	**02/24/15 15:20**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	**03/05/15 17:00**	03/10/15 15:20		

Released By	Date	Received By	Date	
	02/26/15 1206		02/26/15	1206
Released By	Date	Received By	Date	

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 1 of 2

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

Sample No./ Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides- 8151A	
1278-117-0	2/24/15	0815	SO	40mL VOA(3) 8oz jar(1)	MeOH/ NaHSO4	4	X			X	X	X	X		
EBB-1-022415		0835	AQ	32oz Amber 40mL VOA(3)	HCl	8	X			X	X	X	X		
1278-118-0		0900	SO	40mL VOA(3) 8oz jar(1)	MeOH/ NaHSO4	4	X			X	X	X	X		
1278-116-0		0920	SO			4	X			X	X	X	X		
1278-115-0		0935	SO			4	X			X	X	X	X		
1278-114-0		1005	SO			4	X			X	X	X	X		
1278-113-0		1040	SO			4	X			X	X	X	X		
1278-112-0		1100	SO			4	X			X	X	X	X		
1278-111-0		1120	SO	↓	↓	4	X			X	X	X	X		
EBB-2-022415		1150	AQ	32oz Amber 40mL VOA(3)	HCl	8	X			X	X	X	X		
1278-155-0	↓	1320	SO	40mL VOA(3) 8oz jar(1)	MeOH/ NaHSO4	4	X	X			X			X	

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Paint fleck observed (new paint)

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Sawant / J. Stayno. / T. Walsh *Shipment Method:* Lab Pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a)	*Relinquished by:*	Anuya Sawant	Stantec Consulting	2-24-15	
1(b)	*Received by:*	Edwald Rodriguez	ATL	2-25-15	1350
2(a)	*Relinquished by:*	Edwald Rodriguez	ATL	2-25	1910
2(b)	*Received by:*	FEDEX	ATL	2/26/15	1810
3(a)	*Relinquished by:*				
3(b)	*Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____
Page 2 of 2

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1278-155-1.5	2/24/15	1330	SO	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	4	X	X			X			X		
1278-155-3.5	↓	1335	↓	↓	↓	↓	X	X			X			X		On Hold
1278-154-0	↓	1345	↓	↓	↓	↓	X	X			X			X		Paint flux observed (new paint)
1278-154-1.5	↓	1355	↓	↓	↓	↓	X	X			X			X		
1278-153-0	↓	1430	↓	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	5	X	X			X			X		Paint flux observed (new paint)
1278-153-1.5	↓	1440	↓	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	4	X	X			X			X		
1278-153-3.5	↓	1450	↓	↓	↓	4	X	X			X			X		On Hold
EBB-3-022415	↓	1500	AQ	32oz Amber/ Poly 500mL/ 40mL VOA/3	~~HCl~~ HCl	9	X	X			X			X		
1278-152-0	↓	1505	SO	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	4	X	X			X			X		
1278-152-1.5	↓	1520	↓	↓	↓	4	X	X			X			X		
1278-152-3.5	↓	1530	↓	↓	↓	4	X	X			X			X		On Hold

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Sawant / J. Stagno / T. Walsh Shipment Method: Lab Pickup Airbill Number:

Signature	Print Name	Company	Date	Time
1(a) Relinquished by: [signature]	Anuya Sawant	Stantec consulting	2-24-15	
1(b) Received by: [signature]	Edward Rodriguez	ATL	2-25-15	1350
2(a) Relinquished by: [signature]	Edward Rodriguez	ATL	2-25-15	1810
2(b) Received by: [signature]	FP Dowa	ATL	2/25/15	1810
3(a) Relinquished by:				
3(b) Received by:				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____
Page 1 of 2

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1266

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix*	Container & Size**	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1278-117-0	2/24/15	0815	SO	40ml VOA (3) 8oz jar (1)	MeOH / NaHSO4	4	X			X	X	X	X			
EBB-1-022415		0835	AQ	32oz Amber (4) 40ml VOA (3)	HCl	8	X			X	X	X	X			
1278-118-0		0900	SO	40ml VOA (3) 8oz jar (1)	MeOH / NaHSO4	4	X			X	X	X	X			
1278-116-0		0920	SO			4	X			X	X	X	X			
1278-115-0		0935	SO			4	X			X	X	X	X			
1278-114-0		1005	SO			4	X			X	X	X	X			
1278-113-0		1040	SO			4	X			X	X	X	X			
1278-112-0		1100	SO			4	X			X	X	X	X			
1278-111-0		1120	SO			4	X			X	X	X	X			No 8151A
EBB-2-022415		1150	AQ	32oz Amber (4) 40ml VOA (3)	HCl	8	X			X	X	X	X			Analysis
1278-155-0		1320	SO	40ml VOA (3) 8oz jar (1)	MeOH / NaHSO4	4	X	X			X					Paint flux observed (new paint)

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other 5 days

REPORTING REQUIREMENTS: ☐ Mtl & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A Sawant / J Stayne / T. Walsh Shipment Method: Lab Pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a) Relinquished by:	[signature]	Anuya Sawant	Stantec Consulting		
1(b) Received by:	[signature]	Edward Rodriguez	ATL	2-25-15	1550
2(a) Relinquished by:					
2(b) Received by:					
3(a) Relinquished by:					
3(b) Received by:					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar M = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____
Page 2 of 2

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1266

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix*	Container & Size**	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/8035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A	REMARKS/ PRECAUTIONS
1278-155-1.5	2/24/15	1330	SO	40mL VOA 8026 [illegible]	MeOH/ NaHSO4	4	X	X			X				No 8151A Analysis
1278-155-3.5	↓	1335	↓	↓	↓	↓	X	X			X				On Hold
1278-154-0		1345					X	X			X				Paint flux observed (new paint)
1278-154-1.5		1355		↓	↓	↓	X	X			X				
1278-153-0		1430		40mL VOA 8260B [illegible]	MeOH/ NaHSO4	5	X	X			X			X	Paint flux observed (new paint)
1278-153-1.5		1440		40mL VOA 8026 [illegible]	MeOH/ NaHSO4	4	X	X			X				
1278-153-3.5		1450	↓	↓	↓	4	X	X			X				On Hold
EBB-3-022415		1500	AQ	32 [illegible]	HCl	9	X	X			X			X	
1278-152-0		1505	SO	40mL VOA 8026 [illegible]	MeOH/ NaHSO4	4	X	X			X				
1278-152-1.5		1520	↓	↓	↓	4	X	X			X				
1278-152-3.5	↓	1530	↓	↓	↓	4	X	X			X				On Hold

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MS & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Sawant / J. Stagni / T. Walsh Shipment Method: Lab Pickup Airbill Number:

Signature	Print Name	Company	Date	Time
1(a) Relinquished by: Anuya	Anuya Sawant	Stantec consulting		
1(b) Received by: [signature]	Edward Rodriguez	ATC	2-25-15	1550
2(a) Relinquished by:				
2(b) Received by:				
3(a) Relinquished by:				
3(b) Received by:				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500725

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Report To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone: (805) 230-1266
Fax: (805) 230-1277

Invoice To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone :(805) 230-1266
Fax: (805) 230-1277

Date Due:	03/04/15 17:00 (5 day TAT)	Date Received:	02/25/15 13:50
Received By:	Ron Diwa	Date Logged In:	02/25/15 15:02
Logged In By:	Carmen Aguila	Shipped by:	ATL

Please review the checklist below. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues. If you have any questions or further instructions, please contact your Project Manager at (526) 989-4045.

Sample(s) received on ice?	Yes	☐	No	☑
Sample(s) received on blue ice?	Yes	☑	No	☐
Cooler temperature within acceptance limit?	Yes	☑	No	☐
Shipping container received in good condition?	Not Applicable			
Custody seals present on shipping container?	Yes	☐	No	☑
Custody seals intact on shipping container?	Not Applicable			
Custody seals present on sample bottles?	Yes	☐	No	☑
Custody seals intact on sample bottles?	Not Applicable			
Chain of Custody (COC) present?	Yes	☑	No	☐
Sampler name present in COC?	Yes	☑	No	☐
COC signed when relinquished and received?	Yes	☑	No	☐
COC agrees with sample labels?	Yes	☐	No	☑
Samples in proper container/bottle?	Yes	☑	No	☐
Sample containers intact?	Yes	☑	No	☐
Sufficient sample amount for indicated tests?	Yes	☑	No	☐
All samples received within holding time?	Yes	☑	No	☐
Water for VOC -- Were VOA vials submitted?	Yes	☑	No	☐
Water samples submitted?	Yes	☑	No	☐
VOA vials for VOC meet headspace criteria?	Yes	☑	No	☐
Water samples meet preservation criteria?	Yes	☑	No	☐

cooler #1	Temp: 5.5 °C
cooler #2	Temp: 5.2 °C

Sample Receipt Comments:

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500725

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Water sample for metals- filter and preserve per client's instruction.
Sample for metals for EBB-2-022415 received unlabeled bagged together with voas labeled EBB-2-022415.
Received 3-voa vials unlabeled bagged together with samples EBB-3-022415.

ADVANCED TECHNOLOGY
LABORATORIES

March 06, 2015

Anne Perez/Kristy Edblad
Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Tel: (805) 230-1266
Fax:(805) 230-1277

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500726

Client Reference : 185832023, 200.0003, Caltrans 07A3322-23

Enclosed are the results for sample(s) received on February 25, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1278-101-0	1500726-01	Soil	2/24/15 12:10	2/25/15 13:50
1278-102-0	1500726-02	Soil	2/24/15 11:56	2/25/15 13:50
1278-103-0	1500726-03	Soil	2/24/15 11:08	2/25/15 13:50
1278-104-0	1500726-04	Soil	2/24/15 10:57	2/25/15 13:50
1278-105-0	1500726-05	Soil	2/24/15 10:48	2/25/15 13:50
1278-106-0	1500726-06	Soil	2/24/15 10:28	2/25/15 13:50
1278-107-0	1500726-07	Soil	2/24/15 10:14	2/25/15 13:50
1278-108-0	1500726-08	Soil	2/24/15 9:58	2/25/15 13:50
1278-109-0	1500726-09	Soil	2/24/15 9:20	2/25/15 13:50
1278-110-0	1500726-10	Soil	2/24/15 12:28	2/25/15 13:50
1278-110-1.5	1500726-11	Soil	2/24/15 12:35	2/25/15 13:50
1278-149-0	1500726-13	Soil	2/24/15 15:25	2/25/15 13:50
1278-149-1.5	1500726-14	Soil	2/24/15 15:33	2/25/15 13:50
1278-150-0	1500726-16	Soil	2/24/15 14:46	2/25/15 13:50
1278-150-1.5	1500726-17	Soil	2/24/15 14:52	2/25/15 13:50
1278-150-3	1500726-18	Soil	2/24/15 15:16	2/25/15 13:50
1278-151-0	1500726-19	Soil	2/24/15 14:00	2/25/15 13:50
1278-151-1.5	1500726-20	Soil	2/24/15 14:10	2/25/15 13:50
EBA-1-022415	1500726-22	Water	2/24/15 9:40	2/25/15 13:50
EBA-2-022415	1500726-23	Water	2/24/15 13:20	2/25/15 13:50
EBA-3-022415	1500726-24	Water	2/24/15 16:20	2/25/15 13:50

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

CASE NARRATIVE

The samples for EPA 8151 (Chlorinated Herbicides) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

Documentation pertaining to additional analyses/change order available upon request.

EPA 8260 analysis was performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Lead by ICP-AES EPA 6010B

Analyte: Lead **Analyst: RR**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500726-01	1278-101-0	12	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 11:47	
1500726-02	1278-102-0	7.4	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 11:49	
1500726-03	1278-103-0	33	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 11:52	
1500726-04	1278-104-0	12	mg/kg	0.99	0.07	1	B5C0092	03/04/2015	03/04/15 11:54	
1500726-05	1278-105-0	7.6	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 11:56	
1500726-06	1278-106-0	10	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 11:58	
1500726-07	1278-107-0	13	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 12:00	
1500726-08	1278-108-0	12	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 12:06	
1500726-09	1278-109-0	12	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 12:08	
1500726-10	1278-110-0	10	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 12:10	
1500726-11	1278-110-1.5	7.1	mg/kg	1.0	0.07	1	B5C0092	03/04/2015	03/04/15 12:16	

Lead by ICP-AES EPA 6010B

Analyte: Lead **Analyst: RR**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500726-22	EBA-1-022415	ND	mg/L	0.0050	0.0014	1	B5C0064	03/03/2015	03/04/15 08:59	
1500726-23	EBA-2-022415	ND	mg/L	0.0050	0.0014	1	B5C0064	03/03/2015	03/04/15 09:13	

Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500726-24	EBA-3-022415	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:07	

Certificate of Analysis

...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Mercury by AA (Cold Vapor) EPA 7471A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500726-13	1278-149-0	0.03	mg/kg	0.10	0.009	1	B5C0024	03/03/2015	03/03/15 16:25	J
1500726-14	1278-149-1.5	0.03	mg/kg	0.10	0.009	1	B5C0024	03/03/2015	03/03/15 16:27	J
1500726-16	1278-150-0	0.02	mg/kg	0.10	0.009	1	B5C0024	03/03/2015	03/03/15 16:29	J
1500726-17	1278-150-1.5	0.01	mg/kg	0.10	0.009	1	B5C0024	03/03/2015	03/03/15 16:31	J
1500726-18	1278-150-3	0.02	mg/kg	0.10	0.009	1	B5C0024	03/03/2015	03/03/15 16:33	J
1500726-19	1278-151-0	0.03	mg/kg	0.10	0.009	1	B5C0025	03/03/2015	03/03/15 16:39	J
1500726-20	1278-151-1.5	0.02	mg/kg	0.10	0.009	1	B5C0025	03/03/2015	03/03/15 17:38	J

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-101-0
Lab ID: 1500726-01

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 18:17	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 18:17	
Surrogate: 4-Bromofluorobenzene	*96.3 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 18:17*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	40	10	10	5	B5B0726	02/26/2015	02/27/15 11:30	
C23-C32	280	10	10	5	B5B0726	02/26/2015	02/27/15 11:30	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0726	02/26/2015	*02/27/15 11:30*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
1,1,1-Trichloroethane	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
1,1,2,2-Tetrachloroethane	ND	4.1	1.6	1	B5B0719	02/26/2015	02/26/15 20:39	
1,1,2-Trichloroethane	ND	4.1	0.99	1	B5B0719	02/26/2015	02/26/15 20:39	
1,1-Dichloroethane	ND	4.1	0.80	1	B5B0719	02/26/2015	02/26/15 20:39	
1,1-Dichloroethene	ND	4.1	0.92	1	B5B0719	02/26/2015	02/26/15 20:39	
1,1-Dichloropropene	ND	4.1	1.3	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2,3-Trichloropropane	ND	4.1	1.5	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2,3-Trichlorobenzene	ND	4.1	2.2	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2,4-Trichlorobenzene	ND	4.1	1.7	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2,4-Trimethylbenzene	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2-Dibromo-3-chloropropane	ND	8.2	1.7	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2-Dibromoethane	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2-Dichlorobenzene	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2-Dichloroethane	ND	4.1	0.71	1	B5B0719	02/26/2015	02/26/15 20:39	
1,2-Dichloropropane	ND	4.1	2.8	1	B5B0719	02/26/2015	02/26/15 20:39	
1,3,5-Trimethylbenzene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
1,3-Dichlorobenzene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
1,3-Dichloropropane	ND	4.1	0.90	1	B5B0719	02/26/2015	02/26/15 20:39	
1,4-Dichlorobenzene	ND	4.1	1.4	1	B5B0719	02/26/2015	02/26/15 20:39	
2,2-Dichloropropane	ND	4.1	0.99	1	B5B0719	02/26/2015	02/26/15 20:39	
2-Chlorotoluene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
4-Chlorotoluene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
4-Isopropyltoluene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
Benzene	ND	4.1	0.96	1	B5B0719	02/26/2015	02/26/15 20:39	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-101-0
Lab ID: 1500726-01

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.1	1.3	1	B5B0719	02/26/2015	02/26/15 20:39	
Bromochloromethane	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
Bromodichloromethane	ND	4.1	1.3	1	B5B0719	02/26/2015	02/26/15 20:39	
Bromoform	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
Bromomethane	ND	4.1	2.1	1	B5B0719	02/26/2015	02/26/15 20:39	
Carbon disulfide	ND	4.1	1.9	1	B5B0719	02/26/2015	02/26/15 20:39	
Carbon tetrachloride	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
Chlorobenzene	ND	4.1	0.98	1	B5B0719	02/26/2015	02/26/15 20:39	
Chloroethane	ND	4.1	4.0	1	B5B0719	02/26/2015	02/26/15 20:39	
Chloroform	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
Chloromethane	ND	4.1	0.61	1	B5B0719	02/26/2015	02/26/15 20:39	
...1,2-Dichloroethene	ND	4.1	0.96	1	B5B0719	02/26/2015	02/26/15 20:39	
...1,3-Dichloropropene	ND	4.1	1.9	1	B5B0719	02/26/2015	02/26/15 20:39	
Di-isopropyl ether	ND	4.1	0.82	1	B5B0719	02/26/2015	02/26/15 20:39	
Dibromochloromethane	ND	4.1	1.0	1	B5B0719	02/26/2015	02/26/15 20:39	
Dibromomethane	ND	4.1	1.6	1	B5B0719	02/26/2015	02/26/15 20:39	
Dichlorodifluoromethane	ND	4.1	0.60	1	B5B0719	02/26/2015	02/26/15 20:39	
Ethyl Acetate	ND	41	11	1	B5B0719	02/26/2015	02/26/15 20:39	
Ethyl Ether	ND	41	9.8	1	B5B0719	02/26/2015	02/26/15 20:39	
Ethyl tert-butyl ether	ND	4.1	0.95	1	B5B0719	02/26/2015	02/26/15 20:39	
Ethylbenzene	ND	4.1	0.91	1	B5B0719	02/26/2015	02/26/15 20:39	
Freon-113	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
Hexachlorobutadiene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
Isopropylbenzene	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
m,p-Xylene	ND	8.2	2.0	1	B5B0719	02/26/2015	02/26/15 20:39	
Methylene chloride	ND	4.1	4.1	1	B5B0719	02/26/2015	02/26/15 20:39	
MTBE	ND	4.1	0.74	1	B5B0719	02/26/2015	02/26/15 20:39	
n-Butylbenzene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
n-Propylbenzene	ND	4.1	1.0	1	B5B0719	02/26/2015	02/26/15 20:39	
Naphthalene	ND	4.1	2.6	1	B5B0719	02/26/2015	02/26/15 20:39	
o-Xylene	ND	4.1	1.0	1	B5B0719	02/26/2015	02/26/15 20:39	
sec-Butylbenzene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
Styrene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
tert-Amyl methyl ether	ND	4.1	0.83	1	B5B0719	02/26/2015	02/26/15 20:39	
tert-Butanol	ND	82	16	1	B5B0719	02/26/2015	02/26/15 20:39	
tert-Butylbenzene	ND	4.1	1.1	1	B5B0719	02/26/2015	02/26/15 20:39	
Tetrachloroethene	ND	4.1	1.0	1	B5B0719	02/26/2015	02/26/15 20:39	
...ene	ND	4.1	0.72	1	B5B0719	02/26/2015	02/26/15 20:39	
...s-1,2-Dichloroethene	ND	4.1	1.2	1	B5B0719	02/26/2015	02/26/15 20:39	
trans-1,3-Dichloropropene	ND	4.1	0.96	1	B5B0719	02/26/2015	02/26/15 20:39	
Trichloroethene	ND	4.1	0.99	1	B5B0719	02/26/2015	02/26/15 20:39	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-101-0
Lab ID: 1500726-01

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.1	1.5	1	B5B0719	02/26/2015	02/26/15 20:39	
Vinyl acetate	ND	41	8.7	1	B5B0719	02/26/2015	02/26/15 20:39	
Vinyl chloride	ND	4.1	0.83	1	B5B0719	02/26/2015	02/26/15 20:39	
Surrogate: 1,2-Dichloroethane-d4	*113 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 20:39*	
Surrogate: 4-Bromofluorobenzene	*94.3 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 20:39*	
Surrogate: Dibromofluoromethane	*98.0 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 20:39*	
Surrogate: Toluene-d8	*98.0 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 20:39*	

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-102-0
Lab ID: 1500726-02

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:27	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:27	
Surrogate: 4-Bromofluorobenzene	*95.3 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 15:27*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	15	4.0	4.0	2	B5B0726	02/26/2015	02/27/15 10:58	
C23-C32	110	4.0	4.0	2	B5B0726	02/26/2015	02/27/15 10:58	
Surrogate: p-Terphenyl	*59.6 %*	*26 - 123*			B5B0726	02/26/2015	*02/27/15 10:58*	

ıtile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
1,1,1-Trichloroethane	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
1,1,2,2-Tetrachloroethane	ND	4.7	1.8	1	B5B0719	02/26/2015	02/26/15 20:58	
1,1,2-Trichloroethane	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
1,1-Dichloroethane	ND	4.7	0.92	1	B5B0719	02/26/2015	02/26/15 20:58	
1,1-Dichloroethene	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
1,1-Dichloropropene	ND	4.7	1.4	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2,3-Trichloropropane	ND	4.7	1.7	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2,3-Trichlorobenzene	ND	4.7	2.6	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2,4-Trichlorobenzene	ND	4.7	1.9	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2,4-Trimethylbenzene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2-Dibromo-3-chloropropane	ND	9.4	2.0	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2-Dibromoethane	ND	4.7	1.4	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2-Dichlorobenzene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2-Dichloroethane	ND	4.7	0.82	1	B5B0719	02/26/2015	02/26/15 20:58	
1,2-Dichloropropane	ND	4.7	3.2	1	B5B0719	02/26/2015	02/26/15 20:58	
1,3,5-Trimethylbenzene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
1,3-Dichlorobenzene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
1,3-Dichloropropane	ND	4.7	1.0	1	B5B0719	02/26/2015	02/26/15 20:58	
1,4-Dichlorobenzene	ND	4.7	1.7	1	B5B0719	02/26/2015	02/26/15 20:58	
2,2-Dichloropropane	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
2-Chlorotoluene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
4-Chlorotoluene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
4-Isopropyltoluene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Benzene	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-102-0
Lab ID: 1500726-02

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.7	1.5	1	B5B0719	02/26/2015	02/26/15 20:58	
Bromochloromethane	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
Bromodichloromethane	ND	4.7	1.5	1	B5B0719	02/26/2015	02/26/15 20:58	
Bromoform	ND	4.7	1.4	1	B5B0719	02/26/2015	02/26/15 20:58	
Bromomethane	ND	4.7	2.5	1	B5B0719	02/26/2015	02/26/15 20:58	
Carbon disulfide	ND	4.7	2.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Carbon tetrachloride	ND	4.7	1.4	1	B5B0719	02/26/2015	02/26/15 20:58	
Chlorobenzene	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
Chloroethane	ND	4.7	4.7	1	B5B0719	02/26/2015	02/26/15 20:58	
Chloroform	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
Chloromethane	ND	4.7	0.70	1	B5B0719	02/26/2015	02/26/15 20:58	
cis-1,2-Dichloroethene	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
cis-1,3-Dichloropropene	ND	4.7	2.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Di-isopropyl ether	ND	4.7	0.95	1	B5B0719	02/26/2015	02/26/15 20:58	
Dibromochloromethane	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Dibromomethane	ND	4.7	1.9	1	B5B0719	02/26/2015	02/26/15 20:58	
Dichlorodifluoromethane	ND	4.7	0.70	1	B5B0719	02/26/2015	02/26/15 20:58	
Ethyl Acetate	ND	47	12	1	B5B0719	02/26/2015	02/26/15 20:58	
Ethyl Ether	ND	47	11	1	B5B0719	02/26/2015	02/26/15 20:58	
Ethyl tert-butyl ether	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
Ethylbenzene	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
Freon-113	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Hexachlorobutadiene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
Isopropylbenzene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
m,p-Xylene	ND	9.4	2.3	1	B5B0719	02/26/2015	02/26/15 20:58	
Methylene chloride	ND	4.7	4.7	1	B5B0719	02/26/2015	02/26/15 20:58	
MTBE	ND	4.7	0.85	1	B5B0719	02/26/2015	02/26/15 20:58	
n-Butylbenzene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
n-Propylbenzene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Naphthalene	ND	4.7	3.0	1	B5B0719	02/26/2015	02/26/15 20:58	
o-Xylene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
sec-Butylbenzene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Styrene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
tert-Amyl methyl ether	ND	4.7	0.96	1	B5B0719	02/26/2015	02/26/15 20:58	
tert-Butanol	ND	94	19	1	B5B0719	02/26/2015	02/26/15 20:58	
tert-Butylbenzene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
Tetrachloroethene	ND	4.7	1.2	1	B5B0719	02/26/2015	02/26/15 20:58	
Toluene	ND	4.7	0.83	1	B5B0719	02/26/2015	02/26/15 20:58	
trans-1,2-Dichloroethene	ND	4.7	1.3	1	B5B0719	02/26/2015	02/26/15 20:58	
trans-1,3-Dichloropropene	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	
Trichloroethene	ND	4.7	1.1	1	B5B0719	02/26/2015	02/26/15 20:58	

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-102-0
Lab ID: 1500726-02

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.7	1.7	1	B5B0719	02/26/2015	02/26/15 20:58	
Vinyl acetate	ND	47	10	1	B5B0719	02/26/2015	02/26/15 20:58	
Vinyl chloride	ND	4.7	0.96	1	B5B0719	02/26/2015	02/26/15 20:58	
Surrogate: 1,2-Dichloroethane-d4	*115 %*	*20 - 189*			B5B0719	02/26/2015	*02/26/15 20:58*	
Surrogate: 4-Bromofluorobenzene	*97.3 %*	*20 - 173*			B5B0719	02/26/2015	*02/26/15 20:58*	
Surrogate: Dibromofluoromethane	*100 %*	*26 - 178*			B5B0719	02/26/2015	*02/26/15 20:58*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5B0719	02/26/2015	*02/26/15 20:58*	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-103-0
Lab ID: 1500726-03

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:43	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:43	
Surrogate: 4-Bromofluorobenzene	*95.9 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 15:43*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	81	20	20	10	B5B0726	02/26/2015	02/27/15 11:46	
C23-C32	480	20	20	10	B5B0726	02/26/2015	02/27/15 11:46	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0726	02/26/2015	*02/27/15 11:46*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
1,1,1-Trichloroethane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
1,1,2,2-Tetrachloroethane	ND	4.3	1.7	1	B5B0720	02/26/2015	02/26/15 22:50	
1,1,2-Trichloroethane	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	
1,1-Dichloroethane	ND	4.3	0.84	1	B5B0720	02/26/2015	02/26/15 22:50	
1,1-Dichloroethene	ND	4.3	0.97	1	B5B0720	02/26/2015	02/26/15 22:50	
1,1-Dichloropropene	ND	4.3	1.3	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2,3-Trichloropropane	ND	4.3	1.6	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2,3-Trichlorobenzene	ND	4.3	2.3	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2,4-Trichlorobenzene	ND	4.3	1.8	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2,4-Trimethylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2-Dibromo-3-chloropropane	ND	8.6	1.8	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2-Dibromoethane	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2-Dichlorobenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2-Dichloroethane	ND	4.3	0.75	1	B5B0720	02/26/2015	02/26/15 22:50	
1,2-Dichloropropane	ND	4.3	2.9	1	B5B0720	02/26/2015	02/26/15 22:50	
1,3,5-Trimethylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
1,3-Dichlorobenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
1,3-Dichloropropane	ND	4.3	0.94	1	B5B0720	02/26/2015	02/26/15 22:50	
1,4-Dichlorobenzene	ND	4.3	1.5	1	B5B0720	02/26/2015	02/26/15 22:50	
2,2-Dichloropropane	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	
2-Chlorotoluene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
4-Chlorotoluene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
4-Isopropyltoluene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
Benzene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	

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...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-103-0
Lab ID: 1500726-03

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.3	1.4	1	B5B0720	02/26/2015	02/26/15 22:50	
Bromochloromethane	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
Bromodichloromethane	ND	4.3	1.3	1	B5B0720	02/26/2015	02/26/15 22:50	
Bromoform	ND	4.3	1.3	1	B5B0720	02/26/2015	02/26/15 22:50	
Bromomethane	ND	4.3	2.3	1	B5B0720	02/26/2015	02/26/15 22:50	
Carbon disulfide	ND	4.3	2.0	1	B5B0720	02/26/2015	02/26/15 22:50	
Carbon tetrachloride	ND	4.3	1.3	1	B5B0720	02/26/2015	02/26/15 22:50	
Chlorobenzene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	
Chloroethane	ND	4.3	4.2	1	B5B0720	02/26/2015	02/26/15 22:50	
Chloroform	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
Chloromethane	ND	4.3	0.64	1	B5B0720	02/26/2015	02/26/15 22:50	
...,2-Dichloroethene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	
...,3-Dichloropropene	ND	4.3	2.0	1	B5B0720	02/26/2015	02/26/15 22:50	
Di-isopropyl ether	ND	4.3	0.87	1	B5B0720	02/26/2015	02/26/15 22:50	
Dibromochloromethane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
Dibromomethane	ND	4.3	1.7	1	B5B0720	02/26/2015	02/26/15 22:50	
Dichlorodifluoromethane	ND	4.3	0.63	1	B5B0720	02/26/2015	02/26/15 22:50	
Ethyl Acetate	ND	43	11	1	B5B0720	02/26/2015	02/26/15 22:50	
Ethyl Ether	ND	43	10	1	B5B0720	02/26/2015	02/26/15 22:50	
Ethyl tert-butyl ether	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	
Ethylbenzene	ND	4.3	0.96	1	B5B0720	02/26/2015	02/26/15 22:50	
Freon-113	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
Hexachlorobutadiene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
Isopropylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
m,p-Xylene	ND	8.6	2.1	1	B5B0720	02/26/2015	02/26/15 22:50	
Methylene chloride	ND	4.3	4.3	1	B5B0720	02/26/2015	02/26/15 22:50	
MTBE	ND	4.3	0.77	1	B5B0720	02/26/2015	02/26/15 22:50	
n-Butylbenzene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
n-Propylbenzene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	
Naphthalene	ND	4.3	2.7	1	B5B0720	02/26/2015	02/26/15 22:50	
o-Xylene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
sec-Butylbenzene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
Styrene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
tert-Amyl methyl ether	ND	4.3	0.88	1	B5B0720	02/26/2015	02/26/15 22:50	
tert-Butanol	ND	86	17	1	B5B0720	02/26/2015	02/26/15 22:50	
tert-Butylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
Tetrachloroethene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/26/15 22:50	
...hene	ND	4.3	0.76	1	B5B0720	02/26/2015	02/26/15 22:50	
...-1,2-Dichloroethene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/26/15 22:50	
trans-1,3-Dichloropropene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	
Trichloroethene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/26/15 22:50	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-103-0
Lab ID: 1500726-03

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.3	1.5	1	B5B0720	02/26/2015	02/26/15 22:50	
Vinyl acetate	ND	43	9.2	1	B5B0720	02/26/2015	02/26/15 22:50	
Vinyl chloride	ND	4.3	0.88	1	B5B0720	02/26/2015	02/26/15 22:50	
Surrogate: 1,2-Dichloroethane-d4	*110 %*	*20 - 189*			B5B0720	02/26/2015	*02/26/15 22:50*	
Surrogate: 4-Bromofluorobenzene	*97.1 %*	*20 - 173*			B5B0720	02/26/2015	*02/26/15 22:50*	
Surrogate: Dibromofluoromethane	*102 %*	*26 - 178*			B5B0720	02/26/2015	*02/26/15 22:50*	
Surrogate: Toluene-d8	*98.2 %*	*31 - 166*			B5B0720	02/26/2015	*02/26/15 22:50*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-104-0
Lab ID: 1500726-04

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:59	
C4-C8	ND	1.0	0.20	1	B5B0735	02/27/2015	02/27/15 15:59	
Surrogate: 4-Bromofluorobenzene	*98.7 %*	*37 - 153*			B5B0735	02/27/2015	*02/27/15 15:59*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	54	10	10	5	B5B0726	02/26/2015	02/27/15 11:14	
C23-C32	270	10	10	5	B5B0726	02/26/2015	02/27/15 11:14	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0726	02/26/2015	*02/27/15 11:14*	S4

...tile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
1,1,1-Trichloroethane	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
1,1,2,2-Tetrachloroethane	ND	5.7	2.2	1	B5B0720	02/26/2015	02/26/15 23:08	
1,1,2-Trichloroethane	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
1,1-Dichloroethane	ND	5.7	1.1	1	B5B0720	02/26/2015	02/26/15 23:08	
1,1-Dichloroethene	ND	5.7	1.3	1	B5B0720	02/26/2015	02/26/15 23:08	
1,1-Dichloropropene	ND	5.7	1.8	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2,3-Trichloropropane	ND	5.7	2.1	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2,3-Trichlorobenzene	ND	5.7	3.1	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2,4-Trichlorobenzene	ND	5.7	2.3	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2,4-Trimethylbenzene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2-Dibromoethane	ND	5.7	1.7	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2-Dichlorobenzene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2-Dichloroethane	ND	5.7	1.0	1	B5B0720	02/26/2015	02/26/15 23:08	
1,2-Dichloropropane	ND	5.7	3.9	1	B5B0720	02/26/2015	02/26/15 23:08	
1,3,5-Trimethylbenzene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
1,3-Dichlorobenzene	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
1,3-Dichloropropane	ND	5.7	1.3	1	B5B0720	02/26/2015	02/26/15 23:08	
1,4-Dichlorobenzene	ND	5.7	2.0	1	B5B0720	02/26/2015	02/26/15 23:08	
2,2-Dichloropropane	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
...hlorotoluene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
...lorotoluene	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
4-Isopropyltoluene	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
Benzene	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-104-0

Lab ID: 1500726-04

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	5.7	1.9	1	B5B0720	02/26/2015	02/26/15 23:08	
Bromochloromethane	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
Bromodichloromethane	ND	5.7	1.8	1	B5B0720	02/26/2015	02/26/15 23:08	
Bromoform	ND	5.7	1.7	1	B5B0720	02/26/2015	02/26/15 23:08	
Bromomethane	ND	5.7	3.0	1	B5B0720	02/26/2015	02/26/15 23:08	
Carbon disulfide	6.2	5.7	2.7	1	B5B0720	02/26/2015	02/26/15 23:08	
Carbon tetrachloride	ND	5.7	1.7	1	B5B0720	02/26/2015	02/26/15 23:08	
Chlorobenzene	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
Chloroethane	ND	5.7	5.7	1	B5B0720	02/26/2015	02/26/15 23:08	
Chloroform	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
Chloromethane	ND	5.7	0.85	1	B5B0720	02/26/2015	02/26/15 23:08	
cis-1,2-Dichloroethene	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
cis-1,3-Dichloropropene	ND	5.7	2.6	1	B5B0720	02/26/2015	02/26/15 23:08	
Di-isopropyl ether	ND	5.7	1.2	1	B5B0720	02/26/2015	02/26/15 23:08	
Dibromochloromethane	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
Dibromomethane	ND	5.7	2.3	1	B5B0720	02/26/2015	02/26/15 23:08	
Dichlorodifluoromethane	ND	5.7	0.85	1	B5B0720	02/26/2015	02/26/15 23:08	
Ethyl Acetate	ND	57	15	1	B5B0720	02/26/2015	02/26/15 23:08	
Ethyl Ether	ND	57	14	1	B5B0720	02/26/2015	02/26/15 23:08	
Ethyl tert-butyl ether	ND	5.7	1.3	1	B5B0720	02/26/2015	02/26/15 23:08	
Ethylbenzene	ND	5.7	1.3	1	B5B0720	02/26/2015	02/26/15 23:08	
Freon-113	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
Hexachlorobutadiene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
Isopropylbenzene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
m,p-Xylene	ND	11	2.9	1	B5B0720	02/26/2015	02/26/15 23:08	
Methylene chloride	ND	5.7	5.7	1	B5B0720	02/26/2015	02/26/15 23:08	
MTBE	ND	5.7	1.0	1	B5B0720	02/26/2015	02/26/15 23:08	
n-Butylbenzene	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
n-Propylbenzene	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
Naphthalene	ND	5.7	3.6	1	B5B0720	02/26/2015	02/26/15 23:08	
o-Xylene	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
sec-Butylbenzene	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
Styrene	ND	5.7	1.5	1	B5B0720	02/26/2015	02/26/15 23:08	
tert-Amyl methyl ether	ND	5.7	1.2	1	B5B0720	02/26/2015	02/26/15 23:08	
tert-Butanol	ND	110	23	1	B5B0720	02/26/2015	02/26/15 23:08	
tert-Butylbenzene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
Tetrachloroethene	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	
Toluene	ND	5.7	1.0	1	B5B0720	02/26/2015	02/26/15 23:08	
trans-1,2-Dichloroethene	ND	5.7	1.6	1	B5B0720	02/26/2015	02/26/15 23:08	
trans-1,3-Dichloropropene	ND	5.7	1.3	1	B5B0720	02/26/2015	02/26/15 23:08	
Trichloroethene	ND	5.7	1.4	1	B5B0720	02/26/2015	02/26/15 23:08	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-104-0

Lab ID: 1500726-04

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	5.7	2.1	1	B5B0720	02/26/2015	02/26/15 23:08	
Vinyl acetate	ND	57	12	1	B5B0720	02/26/2015	02/26/15 23:08	
Vinyl chloride	ND	5.7	1.2	1	B5B0720	02/26/2015	02/26/15 23:08	
Surrogate: 1,2-Dichloroethane-d4	*112 %*	*20 - 189*			B5B0720	02/26/2015	*02/26/15 23:08*	
Surrogate: 4-Bromofluorobenzene	*92.9 %*	*20 - 173*			B5B0720	02/26/2015	*02/26/15 23:08*	
Surrogate: Dibromofluoromethane	*102 %*	*26 - 178*			B5B0720	02/26/2015	*02/26/15 23:08*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5B0720	02/26/2015	*02/26/15 23:08*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-105-0
Lab ID: 1500726-05

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 18:33	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 18:33	
Surrogate: 4-Bromofluorobenzene	*97.4 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 18:33*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**170**	10	10	5	B5B0739	02/27/2015	02/27/15 20:52	
C23-C32	**370**	10	10	5	B5B0739	02/27/2015	02/27/15 20:52	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 20:52*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
1,1,1-Trichloroethane	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
1,1,2,2-Tetrachloroethane	ND	5.0	2.0	1	B5B0720	02/26/2015	02/26/15 23:27	
1,1,2-Trichloroethane	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
1,1-Dichloroethane	ND	5.0	0.98	1	B5B0720	02/26/2015	02/26/15 23:27	
1,1-Dichloroethene	ND	5.0	1.1	1	B5B0720	02/26/2015	02/26/15 23:27	
1,1-Dichloropropene	ND	5.0	1.5	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2,3-Trichloropropane	ND	5.0	1.8	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2,3-Trichlorobenzene	ND	5.0	2.7	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2,4-Trichlorobenzene	ND	5.0	2.1	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2,4-Trimethylbenzene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2-Dibromo-3-chloropropane	ND	10	2.1	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2-Dibromoethane	ND	5.0	1.5	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2-Dichlorobenzene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2-Dichloroethane	ND	5.0	0.88	1	B5B0720	02/26/2015	02/26/15 23:27	
1,2-Dichloropropane	ND	5.0	3.4	1	B5B0720	02/26/2015	02/26/15 23:27	
1,3,5-Trimethylbenzene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
1,3-Dichlorobenzene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
1,3-Dichloropropane	ND	5.0	1.1	1	B5B0720	02/26/2015	02/26/15 23:27	
1,4-Dichlorobenzene	ND	5.0	1.8	1	B5B0720	02/26/2015	02/26/15 23:27	
2,2-Dichloropropane	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
2-Chlorotoluene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
4-Chlorotoluene	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
4-Isopropyltoluene	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
Benzene	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-105-0
Lab ID: 1500726-05

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	5.0	1.6	1	B5B0720	02/26/2015	02/26/15 23:27	
Bromochloromethane	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
Bromodichloromethane	ND	5.0	1.6	1	B5B0720	02/26/2015	02/26/15 23:27	
Bromoform	ND	5.0	1.5	1	B5B0720	02/26/2015	02/26/15 23:27	
Bromomethane	ND	5.0	2.6	1	B5B0720	02/26/2015	02/26/15 23:27	
Carbon disulfide	4.3	5.0	2.3	1	B5B0720	02/26/2015	02/26/15 23:27	J
Carbon tetrachloride	ND	5.0	1.5	1	B5B0720	02/26/2015	02/26/15 23:27	
Chlorobenzene	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
Chloroethane	ND	5.0	5.0	1	B5B0720	02/26/2015	02/26/15 23:27	
Chloroform	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
Chloromethane	ND	5.0	0.75	1	B5B0720	02/26/2015	02/26/15 23:27	
',2-Dichloroethene	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
-1,3-Dichloropropene	ND	5.0	2.3	1	B5B0720	02/26/2015	02/26/15 23:27	
Di-isopropyl ether	ND	5.0	1.0	1	B5B0720	02/26/2015	02/26/15 23:27	
Dibromochloromethane	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
Dibromomethane	ND	5.0	2.0	1	B5B0720	02/26/2015	02/26/15 23:27	
Dichlorodifluoromethane	ND	5.0	0.74	1	B5B0720	02/26/2015	02/26/15 23:27	
Ethyl Acetate	ND	50	13	1	B5B0720	02/26/2015	02/26/15 23:27	
Ethyl Ether	ND	50	12	1	B5B0720	02/26/2015	02/26/15 23:27	
Ethyl tert-butyl ether	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
Ethylbenzene	ND	5.0	1.1	1	B5B0720	02/26/2015	02/26/15 23:27	
Freon-113	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
Hexachlorobutadiene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
Isopropylbenzene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
m,p-Xylene	ND	10	2.5	1	B5B0720	02/26/2015	02/26/15 23:27	
Methylene chloride	ND	5.0	5.0	1	B5B0720	02/26/2015	02/26/15 23:27	
MTBE	ND	5.0	0.91	1	B5B0720	02/26/2015	02/26/15 23:27	
n-Butylbenzene	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
n-Propylbenzene	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
Naphthalene	ND	5.0	3.2	1	B5B0720	02/26/2015	02/26/15 23:27	
o-Xylene	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
sec-Butylbenzene	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
Styrene	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
tert-Amyl methyl ether	ND	5.0	1.0	1	B5B0720	02/26/2015	02/26/15 23:27	
tert-Butanol	ND	100	20	1	B5B0720	02/26/2015	02/26/15 23:27	
tert-Butylbenzene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
Tetrachloroethene	ND	5.0	1.3	1	B5B0720	02/26/2015	02/26/15 23:27	
uene	ND	5.0	0.89	1	B5B0720	02/26/2015	02/26/15 23:27	
s-1,2-Dichloroethene	ND	5.0	1.4	1	B5B0720	02/26/2015	02/26/15 23:27	
trans-1,3-Dichloropropene	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	
Trichloroethene	ND	5.0	1.2	1	B5B0720	02/26/2015	02/26/15 23:27	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-105-0
Lab ID: 1500726-05

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	5.0	1.8	1	B5B0720	02/26/2015	02/26/15 23:27	
Vinyl acetate	ND	50	11	1	B5B0720	02/26/2015	02/26/15 23:27	
Vinyl chloride	ND	5.0	1.0	1	B5B0720	02/26/2015	02/26/15 23:27	
Surrogate: 1,2-Dichloroethane-d4	*115 %*	*20 - 189*			B5B0720	02/26/2015	*02/26/15 23:27*	
Surrogate: 4-Bromofluorobenzene	*94.5 %*	*20 - 173*			B5B0720	02/26/2015	*02/26/15 23:27*	
Surrogate: Dibromofluoromethane	*105 %*	*26 - 178*			B5B0720	02/26/2015	*02/26/15 23:27*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0720	02/26/2015	*02/26/15 23:27*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-106-0
Lab ID: 1500726-06

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 18:49	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 18:49	
Surrogate: 4-Bromofluorobenzene	*94.2 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 18:49*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	81	20	20	10	B5B0739	02/27/2015	02/27/15 21:41	
C23-C32	510	20	20	10	B5B0739	02/27/2015	02/27/15 21:41	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 21:41*	S4

tile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
1,1,1-Trichloroethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5B0720	02/26/2015	02/26/15 23:46	
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
1,1-Dichloroethane	ND	4.4	0.87	1	B5B0720	02/26/2015	02/26/15 23:46	
1,1-Dichloroethene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/26/15 23:46	
1,1-Dichloropropene	ND	4.4	1.4	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2,4-Trimethylbenzene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2-Dibromo-3-chloropropane	ND	8.9	1.9	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2-Dibromoethane	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2-Dichloroethane	ND	4.4	0.77	1	B5B0720	02/26/2015	02/26/15 23:46	
1,2-Dichloropropane	ND	4.4	3.0	1	B5B0720	02/26/2015	02/26/15 23:46	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
1,3-Dichloropropane	ND	4.4	0.98	1	B5B0720	02/26/2015	02/26/15 23:46	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5B0720	02/26/2015	02/26/15 23:46	
2,2-Dichloropropane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
2-Chlorotoluene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
4-Chlorotoluene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
4-Isopropyltoluene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
Benzene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/26/15 23:46	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-106-0
Lab ID: 1500726-06

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.4	1.5	1	B5B0720	02/26/2015	02/26/15 23:46	
Bromochloromethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
Bromodichloromethane	ND	4.4	1.4	1	B5B0720	02/26/2015	02/26/15 23:46	
Bromoform	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
Bromomethane	ND	4.4	2.3	1	B5B0720	02/26/2015	02/26/15 23:46	
Carbon disulfide	3.3	4.4	2.1	1	B5B0720	02/26/2015	02/26/15 23:46	J
Carbon tetrachloride	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
Chlorobenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
Chloroethane	ND	4.4	4.4	1	B5B0720	02/26/2015	02/26/15 23:46	
Chloroform	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
Chloromethane	ND	4.4	0.66	1	B5B0720	02/26/2015	02/26/15 23:46	
cis-1,2-Dichloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5B0720	02/26/2015	02/26/15 23:46	
Di-isopropyl ether	ND	4.4	0.90	1	B5B0720	02/26/2015	02/26/15 23:46	
Dibromochloromethane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
Dibromomethane	ND	4.4	1.8	1	B5B0720	02/26/2015	02/26/15 23:46	
Dichlorodifluoromethane	ND	4.4	0.66	1	B5B0720	02/26/2015	02/26/15 23:46	
Ethyl Acetate	ND	44	12	1	B5B0720	02/26/2015	02/26/15 23:46	
Ethyl Ether	ND	44	11	1	B5B0720	02/26/2015	02/26/15 23:46	
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5B0720	02/26/2015	02/26/15 23:46	
Ethylbenzene	ND	4.4	0.99	1	B5B0720	02/26/2015	02/26/15 23:46	
Freon-113	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
Hexachlorobutadiene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
Isopropylbenzene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
m,p-Xylene	ND	8.9	2.2	1	B5B0720	02/26/2015	02/26/15 23:46	
Methylene chloride	ND	4.4	4.4	1	B5B0720	02/26/2015	02/26/15 23:46	
MTBE	ND	4.4	0.80	1	B5B0720	02/26/2015	02/26/15 23:46	
n-Butylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
n-Propylbenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
Naphthalene	ND	4.4	2.8	1	B5B0720	02/26/2015	02/26/15 23:46	
o-Xylene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
sec-Butylbenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
Styrene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
tert-Amyl methyl ether	ND	4.4	0.91	1	B5B0720	02/26/2015	02/26/15 23:46	
tert-Butanol	ND	89	18	1	B5B0720	02/26/2015	02/26/15 23:46	
tert-Butylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/26/15 23:46	
Tetrachloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	
Toluene	ND	4.4	0.79	1	B5B0720	02/26/2015	02/26/15 23:46	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/26/15 23:46	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/26/15 23:46	
Trichloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/26/15 23:46	

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-106-0
Lab ID: 1500726-06

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.4	1.6	1	B5B0720	02/26/2015	02/26/15 23:46	
Vinyl acetate	ND	44	9.5	1	B5B0720	02/26/2015	02/26/15 23:46	
Vinyl chloride	ND	4.4	0.91	1	B5B0720	02/26/2015	02/26/15 23:46	
Surrogate: 1,2-Dichloroethane-d4	*114 %*	*20 - 189*			B5B0720	02/26/2015	*02/26/15 23:46*	
Surrogate: 4-Bromofluorobenzene	*94.4 %*	*20 - 173*			B5B0720	02/26/2015	*02/26/15 23:46*	
Surrogate: Dibromofluoromethane	*102 %*	*26 - 178*			B5B0720	02/26/2015	*02/26/15 23:46*	
Surrogate: Toluene-d8	*98.1 %*	*31 - 166*			B5B0720	02/26/2015	*02/26/15 23:46*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-107-0
Lab ID: 1500726-07

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:04	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:04	
Surrogate: 4-Bromofluorobenzene	*95.0 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 19:04*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**78**	20	20	10	B5B0739	02/27/2015	02/27/15 21:57	
C23-C32	**680**	20	20	10	B5B0739	02/27/2015	02/27/15 21:57	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 21:57*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
1,1,1-Trichloroethane	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
1,1,2,2-Tetrachloroethane	ND	4.6	1.8	1	B5B0720	02/26/2015	02/27/15 00:04	
1,1,2-Trichloroethane	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
1,1-Dichloroethane	ND	4.6	0.90	1	B5B0720	02/26/2015	02/27/15 00:04	
1,1-Dichloroethene	ND	4.6	1.0	1	B5B0720	02/26/2015	02/27/15 00:04	
1,1-Dichloropropene	ND	4.6	1.4	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2,3-Trichloropropane	ND	4.6	1.7	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2,3-Trichlorobenzene	ND	4.6	2.5	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2,4-Trichlorobenzene	ND	4.6	1.9	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2,4-Trimethylbenzene	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2-Dibromo-3-chloropropane	ND	9.2	2.0	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2-Dibromoethane	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2-Dichlorobenzene	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2-Dichloroethane	ND	4.6	0.80	1	B5B0720	02/26/2015	02/27/15 00:04	
1,2-Dichloropropane	ND	4.6	3.1	1	B5B0720	02/26/2015	02/27/15 00:04	
1,3,5-Trimethylbenzene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
1,3-Dichlorobenzene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
1,3-Dichloropropane	ND	4.6	1.0	1	B5B0720	02/26/2015	02/27/15 00:04	
1,4-Dichlorobenzene	ND	4.6	1.6	1	B5B0720	02/26/2015	02/27/15 00:04	
2,2-Dichloropropane	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
2-Chlorotoluene	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
4-Chlorotoluene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
4-Isopropyltoluene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
Benzene	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-107-0

Lab ID: 1500726-07

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.6	1.5	1	B5B0720	02/26/2015	02/27/15 00:04	
Bromochloromethane	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
Bromodichloromethane	ND	4.6	1.4	1	B5B0720	02/26/2015	02/27/15 00:04	
Bromoform	ND	4.6	1.4	1	B5B0720	02/26/2015	02/27/15 00:04	
Bromomethane	ND	4.6	2.4	1	B5B0720	02/26/2015	02/27/15 00:04	
Carbon disulfide	ND	4.6	2.1	1	B5B0720	02/26/2015	02/27/15 00:04	
Carbon tetrachloride	ND	4.6	1.4	1	B5B0720	02/26/2015	02/27/15 00:04	
Chlorobenzene	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
Chloroethane	ND	4.6	4.5	1	B5B0720	02/26/2015	02/27/15 00:04	
Chloroform	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
Chloromethane	ND	4.6	0.68	1	B5B0720	02/26/2015	02/27/15 00:04	
...1,2-Dichloroethene	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
...1,3-Dichloropropene	ND	4.6	2.1	1	B5B0720	02/26/2015	02/27/15 00:04	
Di-isopropyl ether	ND	4.6	0.93	1	B5B0720	02/26/2015	02/27/15 00:04	
Dibromochloromethane	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
Dibromomethane	ND	4.6	1.8	1	B5B0720	02/26/2015	02/27/15 00:04	
Dichlorodifluoromethane	ND	4.6	0.68	1	B5B0720	02/26/2015	02/27/15 00:04	
Ethyl Acetate	ND	46	12	1	B5B0720	02/26/2015	02/27/15 00:04	
Ethyl Ether	ND	46	11	1	B5B0720	02/26/2015	02/27/15 00:04	
Ethyl tert-butyl ether	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
Ethylbenzene	ND	4.6	1.0	1	B5B0720	02/26/2015	02/27/15 00:04	
Freon-113	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
Hexachlorobutadiene	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
Isopropylbenzene	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
m,p-Xylene	ND	9.2	2.3	1	B5B0720	02/26/2015	02/27/15 00:04	
Methylene chloride	ND	4.6	4.6	1	B5B0720	02/26/2015	02/27/15 00:04	
MTBE	ND	4.6	0.83	1	B5B0720	02/26/2015	02/27/15 00:04	
n-Butylbenzene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
n-Propylbenzene	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
Naphthalene	ND	4.6	2.9	1	B5B0720	02/26/2015	02/27/15 00:04	
o-Xylene	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
sec-Butylbenzene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
Styrene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
tert-Amyl methyl ether	ND	4.6	0.94	1	B5B0720	02/26/2015	02/27/15 00:04	
tert-Butanol	ND	92	18	1	B5B0720	02/26/2015	02/27/15 00:04	
tert-Butylbenzene	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
Tetrachloroethene	ND	4.6	1.2	1	B5B0720	02/26/2015	02/27/15 00:04	
...luene	ND	4.6	0.81	1	B5B0720	02/26/2015	02/27/15 00:04	
...s-1,2-Dichloroethene	ND	4.6	1.3	1	B5B0720	02/26/2015	02/27/15 00:04	
trans-1,3-Dichloropropene	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	
Trichloroethene	ND	4.6	1.1	1	B5B0720	02/26/2015	02/27/15 00:04	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-107-0
Lab ID: 1500726-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.6	1.6	1	B5B0720	02/26/2015	02/27/15 00:04	
Vinyl acetate	ND	46	9.8	1	B5B0720	02/26/2015	02/27/15 00:04	
Vinyl chloride	ND	4.6	0.94	1	B5B0720	02/26/2015	02/27/15 00:04	
Surrogate: 1,2-Dichloroethane-d4	*112 %*	*20 - 189*			B5B0720	02/26/2015	*02/27/15 00:04*	
Surrogate: 4-Bromofluorobenzene	*97.9 %*	*20 - 173*			B5B0720	02/26/2015	*02/27/15 00:04*	
Surrogate: Dibromofluoromethane	*99.4 %*	*26 - 178*			B5B0720	02/26/2015	*02/27/15 00:04*	
Surrogate: Toluene-d8	*102 %*	*31 - 166*			B5B0720	02/26/2015	*02/27/15 00:04*	

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...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-108-0
Lab ID: 1500726-08

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:20	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:20	
Surrogate: 4-Bromofluorobenzene	*97.8 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 19:20*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**33**	10	10	5	B5B0739	02/27/2015	02/27/15 20:36	
C23-C32	**240**	10	10	5	B5B0739	02/27/2015	02/27/15 20:36	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 20:36*	S4

...tile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
1,1,1-Trichloroethane	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5B0729	02/27/2015	02/27/15 11:02	
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
1,1-Dichloroethane	ND	4.4	0.86	1	B5B0729	02/27/2015	02/27/15 11:02	
1,1-Dichloroethene	ND	4.4	0.99	1	B5B0729	02/27/2015	02/27/15 11:02	
1,1-Dichloropropene	ND	4.4	1.3	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2-Dibromo-3-chloropropane	ND	8.8	1.9	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2-Dibromoethane	ND	4.4	1.3	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2-Dichlorobenzene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2-Dichloroethane	ND	4.4	0.76	1	B5B0729	02/27/2015	02/27/15 11:02	
1,2-Dichloropropane	ND	4.4	3.0	1	B5B0729	02/27/2015	02/27/15 11:02	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
1,3-Dichloropropane	ND	4.4	0.96	1	B5B0729	02/27/2015	02/27/15 11:02	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5B0729	02/27/2015	02/27/15 11:02	
2,2-Dichloropropane	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
...Chlorotoluene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
...lorotoluene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
4-Isopropyltoluene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
Benzene	ND	4.4	1.0	1	B5B0729	02/27/2015	02/27/15 11:02	

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-108-0
Lab ID: 1500726-08

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.4	1.4	1	B5B0729	02/27/2015	02/27/15 11:02	
Bromochloromethane	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
Bromodichloromethane	ND	4.4	1.4	1	B5B0729	02/27/2015	02/27/15 11:02	
Bromoform	ND	4.4	1.3	1	B5B0729	02/27/2015	02/27/15 11:02	
Bromomethane	ND	4.4	2.3	1	B5B0729	02/27/2015	02/27/15 11:02	
Carbon disulfide	3.9	4.4	2.0	1	B5B0729	02/27/2015	02/27/15 11:02	J
Carbon tetrachloride	ND	4.4	1.3	1	B5B0729	02/27/2015	02/27/15 11:02	
Chlorobenzene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
Chloroethane	ND	4.4	4.3	1	B5B0729	02/27/2015	02/27/15 11:02	
Chloroform	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
Chloromethane	ND	4.4	0.65	1	B5B0729	02/27/2015	02/27/15 11:02	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5B0729	02/27/2015	02/27/15 11:02	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5B0729	02/27/2015	02/27/15 11:02	
Di-isopropyl ether	ND	4.4	0.89	1	B5B0729	02/27/2015	02/27/15 11:02	
Dibromochloromethane	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
Dibromomethane	ND	4.4	1.7	1	B5B0729	02/27/2015	02/27/15 11:02	
Dichlorodifluoromethane	ND	4.4	0.65	1	B5B0729	02/27/2015	02/27/15 11:02	
Ethyl Acetate	ND	44	12	1	B5B0729	02/27/2015	02/27/15 11:02	
Ethyl Ether	ND	44	11	1	B5B0729	02/27/2015	02/27/15 11:02	
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5B0729	02/27/2015	02/27/15 11:02	
Ethylbenzene	ND	4.4	0.98	1	B5B0729	02/27/2015	02/27/15 11:02	
Freon-113	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
Hexachlorobutadiene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
Isopropylbenzene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
m,p-Xylene	ND	8.8	2.2	1	B5B0729	02/27/2015	02/27/15 11:02	
Methylene chloride	ND	4.4	4.4	1	B5B0729	02/27/2015	02/27/15 11:02	
MTBE	ND	4.4	0.79	1	B5B0729	02/27/2015	02/27/15 11:02	
n-Butylbenzene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
n-Propylbenzene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
Naphthalene	ND	4.4	2.8	1	B5B0729	02/27/2015	02/27/15 11:02	
o-Xylene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
sec-Butylbenzene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
Styrene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
tert-Amyl methyl ether	ND	4.4	0.90	1	B5B0729	02/27/2015	02/27/15 11:02	
tert-Butanol	ND	88	18	1	B5B0729	02/27/2015	02/27/15 11:02	
tert-Butylbenzene	ND	4.4	1.2	1	B5B0729	02/27/2015	02/27/15 11:02	
Tetrachloroethene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	
Toluene	ND	4.4	0.78	1	B5B0729	02/27/2015	02/27/15 11:02	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5B0729	02/27/2015	02/27/15 11:02	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5B0729	02/27/2015	02/27/15 11:02	
Trichloroethene	ND	4.4	1.1	1	B5B0729	02/27/2015	02/27/15 11:02	

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-108-0
Lab ID: 1500726-08

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.4	1.6	1	B5B0729	02/27/2015	02/27/15 11:02	
Vinyl acetate	ND	44	9.4	1	B5B0729	02/27/2015	02/27/15 11:02	
Vinyl chloride	ND	4.4	0.90	1	B5B0729	02/27/2015	02/27/15 11:02	
Surrogate: 1,2-Dichloroethane-d4	*116 %*		*20 - 189*		B5B0729	02/27/2015	*02/27/15 11:02*	
Surrogate: 4-Bromofluorobenzene	*86.1 %*		*20 - 173*		B5B0729	02/27/2015	*02/27/15 11:02*	
Surrogate: Dibromofluoromethane	*107 %*		*26 - 178*		B5B0729	02/27/2015	*02/27/15 11:02*	
Surrogate: Toluene-d8	*98.0 %*		*31 - 166*		B5B0729	02/27/2015	*02/27/15 11:02*	

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Client Sample ID 1278-109-0
Lab ID: 1500726-09

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:36	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:36	
Surrogate: 4-Bromofluorobenzene	*96.9 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 19:36*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**47**	20	20	10	B5B0739	02/27/2015	02/27/15 21:08	
C23-C32	**430**	20	20	10	B5B0739	02/27/2015	02/27/15 21:08	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 21:08*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
1,1,1-Trichloroethane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
1,1,2,2-Tetrachloroethane	ND	4.3	1.7	1	B5B0720	02/26/2015	02/27/15 00:42	
1,1,2-Trichloroethane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
1,1-Dichloroethane	ND	4.3	0.85	1	B5B0720	02/26/2015	02/27/15 00:42	
1,1-Dichloroethene	ND	4.3	0.98	1	B5B0720	02/26/2015	02/27/15 00:42	
1,1-Dichloropropene	ND	4.3	1.3	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2,3-Trichloropropane	ND	4.3	1.6	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2,3-Trichlorobenzene	ND	4.3	2.3	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2,4-Trichlorobenzene	ND	4.3	1.8	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2,4-Trimethylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2-Dibromo-3-chloropropane	ND	8.7	1.8	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2-Dibromoethane	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2-Dichlorobenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2-Dichloroethane	ND	4.3	0.75	1	B5B0720	02/26/2015	02/27/15 00:42	
1,2-Dichloropropane	ND	4.3	2.9	1	B5B0720	02/26/2015	02/27/15 00:42	
1,3,5-Trimethylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
1,3-Dichlorobenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
1,3-Dichloropropane	ND	4.3	0.95	1	B5B0720	02/26/2015	02/27/15 00:42	
1,4-Dichlorobenzene	ND	4.3	1.5	1	B5B0720	02/26/2015	02/27/15 00:42	
2,2-Dichloropropane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
2-Chlorotoluene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
4-Chlorotoluene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
4-Isopropyltoluene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
Benzene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/27/15 00:42	

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Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-109-0
Lab ID: 1500726-09

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.3	1.4	1	B5B0720	02/26/2015	02/27/15 00:42	
Bromochloromethane	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
Bromodichloromethane	ND	4.3	1.3	1	B5B0720	02/26/2015	02/27/15 00:42	
Bromoform	ND	4.3	1.3	1	B5B0720	02/26/2015	02/27/15 00:42	
Bromomethane	ND	4.3	2.3	1	B5B0720	02/26/2015	02/27/15 00:42	
Carbon disulfide	3.7	4.3	2.0	1	B5B0720	02/26/2015	02/27/15 00:42	J
Carbon tetrachloride	ND	4.3	1.3	1	B5B0720	02/26/2015	02/27/15 00:42	
Chlorobenzene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/27/15 00:42	
Chloroethane	ND	4.3	4.3	1	B5B0720	02/26/2015	02/27/15 00:42	
Chloroform	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
Chloromethane	ND	4.3	0.64	1	B5B0720	02/26/2015	02/27/15 00:42	
...1,2-Dichloroethene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/27/15 00:42	
...1,3-Dichloropropene	ND	4.3	2.0	1	B5B0720	02/26/2015	02/27/15 00:42	
Di-isopropyl ether	ND	4.3	0.88	1	B5B0720	02/26/2015	02/27/15 00:42	
Dibromochloromethane	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
Dibromomethane	ND	4.3	1.7	1	B5B0720	02/26/2015	02/27/15 00:42	
Dichlorodifluoromethane	ND	4.3	0.64	1	B5B0720	02/26/2015	02/27/15 00:42	
Ethyl Acetate	ND	43	11	1	B5B0720	02/26/2015	02/27/15 00:42	
Ethyl Ether	ND	43	10	1	B5B0720	02/26/2015	02/27/15 00:42	
Ethyl tert-butyl ether	ND	4.3	1.0	1	B5B0720	02/26/2015	02/27/15 00:42	
Ethylbenzene	ND	4.3	0.97	1	B5B0720	02/26/2015	02/27/15 00:42	
Freon-113	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
Hexachlorobutadiene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
Isopropylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
m,p-Xylene	ND	8.7	2.2	1	B5B0720	02/26/2015	02/27/15 00:42	
Methylene chloride	ND	4.3	4.3	1	B5B0720	02/26/2015	02/27/15 00:42	
MTBE	ND	4.3	0.78	1	B5B0720	02/26/2015	02/27/15 00:42	
n-Butylbenzene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
n-Propylbenzene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
Naphthalene	ND	4.3	2.8	1	B5B0720	02/26/2015	02/27/15 00:42	
o-Xylene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
sec-Butylbenzene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
Styrene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
tert-Amyl methyl ether	ND	4.3	0.88	1	B5B0720	02/26/2015	02/27/15 00:42	
tert-Butanol	ND	87	17	1	B5B0720	02/26/2015	02/27/15 00:42	
tert-Butylbenzene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
Tetrachloroethene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	
...luene	ND	4.3	0.77	1	B5B0720	02/26/2015	02/27/15 00:42	
...-1,2-Dichloroethene	ND	4.3	1.2	1	B5B0720	02/26/2015	02/27/15 00:42	
trans-1,3-Dichloropropene	ND	4.3	1.0	1	B5B0720	02/26/2015	02/27/15 00:42	
Trichloroethene	ND	4.3	1.1	1	B5B0720	02/26/2015	02/27/15 00:42	

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Client Sample ID 1278-109-0
Lab ID: 1500726-09

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.3	1.6	1	B5B0720	02/26/2015	02/27/15 00:42	
Vinyl acetate	ND	43	9.2	1	B5B0720	02/26/2015	02/27/15 00:42	
Vinyl chloride	ND	4.3	0.89	1	B5B0720	02/26/2015	02/27/15 00:42	
Surrogate: 1,2-Dichloroethane-d4	*111 %*	*20 - 189*			B5B0720	02/26/2015	*02/27/15 00:42*	
Surrogate: 4-Bromofluorobenzene	*96.1 %*	*20 - 173*			B5B0720	02/26/2015	*02/27/15 00:42*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5B0720	02/26/2015	*02/27/15 00:42*	
Surrogate: Toluene-d8	*105 %*	*31 - 166*			B5B0720	02/26/2015	*02/27/15 00:42*	

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Client Sample ID 1278-110-0
Lab ID: 1500726-10

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:52	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 19:52	
Surrogate: 4-Bromofluorobenzene	*94.5 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 19:52*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	3.4	1.0	1.0	1	B5B0739	02/27/2015	02/27/15 19:48	
C23-C32	6.4	1.0	1.0	1	B5B0739	02/27/2015	02/27/15 19:48	
Surrogate: p-Terphenyl	*82.8 %*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 19:48*	

..tile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
1,1,1-Trichloroethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5B0720	02/26/2015	02/27/15 01:00	
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
1,1-Dichloroethane	ND	4.4	0.86	1	B5B0720	02/26/2015	02/27/15 01:00	
1,1-Dichloroethene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:00	
1,1-Dichloropropene	ND	4.4	1.4	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2-Dibromo-3-chloropropane	ND	8.8	1.9	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2-Dibromoethane	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2-Dichloroethane	ND	4.4	0.77	1	B5B0720	02/26/2015	02/27/15 01:00	
1,2-Dichloropropane	ND	4.4	3.0	1	B5B0720	02/26/2015	02/27/15 01:00	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
1,3-Dichloropropane	ND	4.4	0.97	1	B5B0720	02/26/2015	02/27/15 01:00	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5B0720	02/26/2015	02/27/15 01:00	
2,2-Dichloropropane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
..hlorotoluene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
..lorotoluene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
4-Isopropyltoluene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
Benzene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:00	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-110-0
Lab ID: 1500726-10

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.4	1.4	1	B5B0720	02/26/2015	02/27/15 01:00	
Bromochloromethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
Bromodichloromethane	ND	4.4	1.4	1	B5B0720	02/26/2015	02/27/15 01:00	
Bromoform	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:00	
Bromomethane	ND	4.4	2.3	1	B5B0720	02/26/2015	02/27/15 01:00	
Carbon disulfide	ND	4.4	2.0	1	B5B0720	02/26/2015	02/27/15 01:00	
Carbon tetrachloride	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:00	
Chlorobenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
Chloroethane	ND	4.4	4.4	1	B5B0720	02/26/2015	02/27/15 01:00	
Chloroform	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:00	
Chloromethane	ND	4.4	0.65	1	B5B0720	02/26/2015	02/27/15 01:00	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:00	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5B0720	02/26/2015	02/27/15 01:00	
Di-isopropyl ether	ND	4.4	0.89	1	B5B0720	02/26/2015	02/27/15 01:00	
Dibromochloromethane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
Dibromomethane	ND	4.4	1.7	1	B5B0720	02/26/2015	02/27/15 01:00	
Dichlorodifluoromethane	ND	4.4	0.65	1	B5B0720	02/26/2015	02/27/15 01:00	
Ethyl Acetate	ND	44	12	1	B5B0720	02/26/2015	02/27/15 01:00	
Ethyl Ether	ND	44	11	1	B5B0720	02/26/2015	02/27/15 01:00	
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:00	
Ethylbenzene	ND	4.4	0.99	1	B5B0720	02/26/2015	02/27/15 01:00	
Freon-113	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
Hexachlorobutadiene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
Isopropylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
m,p-Xylene	ND	8.8	2.2	1	B5B0720	02/26/2015	02/27/15 01:00	
Methylene chloride	ND	4.4	4.4	1	B5B0720	02/26/2015	02/27/15 01:00	
MTBE	ND	4.4	0.80	1	B5B0720	02/26/2015	02/27/15 01:00	
n-Butylbenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
n-Propylbenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
Naphthalene	ND	4.4	2.8	1	B5B0720	02/26/2015	02/27/15 01:00	
o-Xylene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
sec-Butylbenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
Styrene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
tert-Amyl methyl ether	ND	4.4	0.90	1	B5B0720	02/26/2015	02/27/15 01:00	
tert-Butanol	ND	88	18	1	B5B0720	02/26/2015	02/27/15 01:00	
tert-Butylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:00	
Tetrachloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	
Toluene	ND	4.4	0.78	1	B5B0720	02/26/2015	02/27/15 01:00	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:00	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:00	
Trichloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:00	

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...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-110-0
Lab ID: 1500726-10

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.4	1.6	1	B5B0720	02/26/2015	02/27/15 01:00	
Vinyl acetate	ND	44	9.4	1	B5B0720	02/26/2015	02/27/15 01:00	
Vinyl chloride	ND	4.4	0.90	1	B5B0720	02/26/2015	02/27/15 01:00	
Surrogate: 1,2-Dichloroethane-d4	*115 %*	*20 - 189*			B5B0720	02/26/2015	*02/27/15 01:00*	
Surrogate: 4-Bromofluorobenzene	*93.8 %*	*20 - 173*			B5B0720	02/26/2015	*02/27/15 01:00*	
Surrogate: Dibromofluoromethane	*103 %*	*26 - 178*			B5B0720	02/26/2015	*02/27/15 01:00*	
Surrogate: Toluene-d8	*99.3 %*	*31 - 166*			B5B0720	02/26/2015	*02/27/15 01:00*	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-110-1.5
Lab ID: 1500726-11

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 20:07	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 20:07	
Surrogate: 4-Bromofluorobenzene	*94.1 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 20:07*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	3.2	1.0	1.0	1	B5B0739	02/27/2015	02/27/15 19:31	
C23-C32	7.1	1.0	1.0	1	B5B0739	02/27/2015	02/27/15 19:31	
Surrogate: p-Terphenyl	*87.1 %*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 19:31*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
1,1,1-Trichloroethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5B0720	02/26/2015	02/27/15 01:19	
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
1,1-Dichloroethane	ND	4.4	0.87	1	B5B0720	02/26/2015	02/27/15 01:19	
1,1-Dichloroethene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:19	
1,1-Dichloropropene	ND	4.4	1.4	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2,4-Trimethylbenzene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2-Dibromo-3-chloropropane	ND	8.9	1.9	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2-Dibromoethane	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2-Dichloroethane	ND	4.4	0.77	1	B5B0720	02/26/2015	02/27/15 01:19	
1,2-Dichloropropane	ND	4.4	3.0	1	B5B0720	02/26/2015	02/27/15 01:19	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
1,3-Dichloropropane	ND	4.4	0.98	1	B5B0720	02/26/2015	02/27/15 01:19	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5B0720	02/26/2015	02/27/15 01:19	
2,2-Dichloropropane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
2-Chlorotoluene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
4-Chlorotoluene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
4-Isopropyltoluene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
Benzene	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:19	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-110-1.5
Lab ID: 1500726-11

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromobenzene	ND	4.4	1.5	1	B5B0720	02/26/2015	02/27/15 01:19	
Bromochloromethane	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
Bromodichloromethane	ND	4.4	1.4	1	B5B0720	02/26/2015	02/27/15 01:19	
Bromoform	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
Bromomethane	ND	4.4	2.3	1	B5B0720	02/26/2015	02/27/15 01:19	
Carbon disulfide	ND	4.4	2.1	1	B5B0720	02/26/2015	02/27/15 01:19	
Carbon tetrachloride	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
Chlorobenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
Chloroethane	ND	4.4	4.4	1	B5B0720	02/26/2015	02/27/15 01:19	
Chloroform	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
Chloromethane	ND	4.4	0.66	1	B5B0720	02/26/2015	02/27/15 01:19	
...,2-Dichloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
...,3-Dichloropropene	ND	4.4	2.0	1	B5B0720	02/26/2015	02/27/15 01:19	
Di-isopropyl ether	ND	4.4	0.90	1	B5B0720	02/26/2015	02/27/15 01:19	
Dibromochloromethane	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
Dibromomethane	ND	4.4	1.8	1	B5B0720	02/26/2015	02/27/15 01:19	
Dichlorodifluoromethane	ND	4.4	0.66	1	B5B0720	02/26/2015	02/27/15 01:19	
Ethyl Acetate	ND	44	12	1	B5B0720	02/26/2015	02/27/15 01:19	
Ethyl Ether	ND	44	11	1	B5B0720	02/26/2015	02/27/15 01:19	
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5B0720	02/26/2015	02/27/15 01:19	
Ethylbenzene	ND	4.4	0.99	1	B5B0720	02/26/2015	02/27/15 01:19	
Freon-113	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
Hexachlorobutadiene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
Isopropylbenzene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
m,p-Xylene	ND	8.9	2.2	1	B5B0720	02/26/2015	02/27/15 01:19	
Methylene chloride	ND	4.4	4.4	1	B5B0720	02/26/2015	02/27/15 01:19	
MTBE	ND	4.4	0.80	1	B5B0720	02/26/2015	02/27/15 01:19	
n-Butylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
n-Propylbenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
Naphthalene	ND	4.4	2.8	1	B5B0720	02/26/2015	02/27/15 01:19	
o-Xylene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
sec-Butylbenzene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
Styrene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
tert-Amyl methyl ether	ND	4.4	0.91	1	B5B0720	02/26/2015	02/27/15 01:19	
tert-Butanol	ND	89	18	1	B5B0720	02/26/2015	02/27/15 01:19	
tert-Butylbenzene	ND	4.4	1.2	1	B5B0720	02/26/2015	02/27/15 01:19	
Tetrachloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	
...iene	ND	4.4	0.79	1	B5B0720	02/26/2015	02/27/15 01:19	
...-1,2-Dichloroethene	ND	4.4	1.3	1	B5B0720	02/26/2015	02/27/15 01:19	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5B0720	02/26/2015.	02/27/15 01:19	
Trichloroethene	ND	4.4	1.1	1	B5B0720	02/26/2015	02/27/15 01:19	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-110-1.5
Lab ID: 1500726-11

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichlorofluoromethane	ND	4.4	1.6	1	B5B0720	02/26/2015	02/27/15 01:19	
Vinyl acetate	ND	44	9.5	1	B5B0720	02/26/2015	02/27/15 01:19	
Vinyl chloride	ND	4.4	0.91	1	B5B0720	02/26/2015	02/27/15 01:19	
Surrogate: 1,2-Dichloroethane-d4	*113 %*	*20 - 189*			B5B0720	02/26/2015	*02/27/15 01:19*	
Surrogate: 4-Bromofluorobenzene	*95.4 %*	*20 - 173*			B5B0720	02/26/2015	*02/27/15 01:19*	
Surrogate: Dibromofluoromethane	*104 %*	*26 - 178*			B5B0720	02/26/2015	*02/27/15 01:19*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5B0720	02/26/2015	*02/27/15 01:19*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-149-0
Lab ID: 1500726-13

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.0**	2.0	0.25	1	B5C0017	03/03/2015	03/04/15 13:04	J
Arsenic	**6.9**	1.0	0.19	1	B5C0017	03/03/2015	03/04/15 13:04	
Barium	**77**	1.0	0.14	1	B5C0017	03/03/2015	03/04/15 13:04	
Beryllium	**0.97**	1.0	0.04	1	B5C0017	03/03/2015	03/04/15 13:03	J
Cadmium	**1.1**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:04	
Chromium	**21**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:04	
Cobalt	**7.4**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:04	
Copper	**24**	2.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:04	
Lead	**73**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:04	
Molybdenum	**1.8**	1.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:04	
Nickel	**19**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:04	
ntum	**1.3**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:04	
Silver	ND	1.0	0.06	1	B5C0017	03/03/2015	03/04/15 13:04	
Thallium	ND	1.0	0.20	1	B5C0017	03/03/2015	03/04/15 13:04	
Vanadium	**40**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:04	
Zinc	**57**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:04	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 20:24	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 20:24	
Surrogate: 4-Bromofluorobenzene	*96.2 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 20:24*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	19	10	10	5	B5B0739	02/27/2015	02/27/15 20:20	
C23-C32	150	10	10	5	B5B0739	02/27/2015	02/27/15 20:20	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 20:20*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
,2-Tetrachloroethane	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
,1-Trichloroethane	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
1,1,2,2-Tetrachloroethane	ND	6.1	2.4	1	B5B0720	02/26/2015	02/27/15 01:38	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-149-0
Lab ID: 1500726-13

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
1,1-Dichloroethane	ND	6.1	1.2	1	B5B0720	02/26/2015	02/27/15 01:38	
1,1-Dichloroethene	ND	6.1	1.4	1	B5B0720	02/26/2015	02/27/15 01:38	
1,1-Dichloropropene	ND	6.1	1.9	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2,3-Trichloropropane	ND	6.1	2.2	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2,3-Trichlorobenzene	ND	6.1	3.3	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2,4-Trichlorobenzene	ND	6.1	2.5	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2,4-Trimethylbenzene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2-Dibromo-3-chloropropane	ND	12	2.6	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2-Dibromoethane	ND	6.1	1.8	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2-Dichlorobenzene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2-Dichloroethane	ND	6.1	1.1	1	B5B0720	02/26/2015	02/27/15 01:38	
1,2-Dichloropropane	ND	6.1	4.2	1	B5B0720	02/26/2015	02/27/15 01:38	
1,3,5-Trimethylbenzene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
1,3-Dichlorobenzene	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
1,3-Dichloropropane	ND	6.1	1.3	1	B5B0720	02/26/2015	02/27/15 01:38	
1,4-Dichlorobenzene	ND	6.1	2.2	1	B5B0720	02/26/2015	02/27/15 01:38	
2,2-Dichloropropane	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
2-Chlorotoluene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
4-Chlorotoluene	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
4-Isopropyltoluene	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
Benzene	ND	6.1	1.4	1	B5B0720	02/26/2015	02/27/15 01:38	
Bromobenzene	ND	6.1	2.0	1	B5B0720	02/26/2015	02/27/15 01:38	
Bromochloromethane	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
Bromodichloromethane	ND	6.1	1.9	1	B5B0720	02/26/2015	02/27/15 01:38	
Bromoform	ND	6.1	1.8	1	B5B0720	02/26/2015	02/27/15 01:38	
Bromomethane	ND	6.1	3.2	1	B5B0720	02/26/2015	02/27/15 01:38	
Carbon disulfide	ND	6.1	2.8	1	B5B0720	02/26/2015	02/27/15 01:38	
Carbon tetrachloride	ND	6.1	1.8	1	B5B0720	02/26/2015	02/27/15 01:38	
Chlorobenzene	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
Chloroethane	ND	6.1	6.0	1	B5B0720	02/26/2015	02/27/15 01:38	
Chloroform	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
Chloromethane	ND	6.1	0.90	1	B5B0720	02/26/2015	02/27/15 01:38	
cis-1,2-Dichloroethene	ND	6.1	1.4	1	B5B0720	02/26/2015	02/27/15 01:38	
cis-1,3-Dichloropropene	ND	6.1	2.8	1	B5B0720	02/26/2015	02/27/15 01:38	
Di-isopropyl ether	ND	6.1	1.2	1	B5B0720	02/26/2015	02/27/15 01:38	
Dibromochloromethane	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
Dibromomethane	ND	6.1	2.4	1	B5B0720	02/26/2015	02/27/15 01:38	
Dichlorodifluoromethane	ND	6.1	0.90	1	B5B0720	02/26/2015	02/27/15 01:38	
Ethyl Acetate	ND	61	16	1	B5B0720	02/26/2015	02/27/15 01:38	
Ethyl Ether	ND	61	15	1	B5B0720	02/26/2015	02/27/15 01:38	

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-149-0

Lab ID: 1500726-13

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	6.1	1.4	1	B5B0720	02/26/2015	02/27/15 01:38	
Ethylbenzene	ND	6.1	1.4	1	B5B0720	02/26/2015	02/27/15 01:38	
Freon-113	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
Hexachlorobutadiene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
Isopropylbenzene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
m,p-Xylene	ND	12	3.0	1	B5B0720	02/26/2015	02/27/15 01:38	
Methylene chloride	ND	6.1	6.1	1	B5B0720	02/26/2015	02/27/15 01:38	
MTBE	ND	6.1	1.1	1	B5B0720	02/26/2015	02/27/15 01:38	
n-Butylbenzene	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
n-Propylbenzene	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
Naphthalene	ND	6.1	3.9	1	B5B0720	02/26/2015	02/27/15 01:38	
vlene	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
-Butylbenzene	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
Styrene	ND	6.1	1.6	1	B5B0720	02/26/2015	02/27/15 01:38	
tert-Amyl methyl ether	ND	6.1	1.2	1	B5B0720	02/26/2015	02/27/15 01:38	
tert-Butanol	ND	120	24	1	B5B0720	02/26/2015	02/27/15 01:38	
tert-Butylbenzene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
Tetrachloroethene	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
Toluene	ND	6.1	1.1	1	B5B0720	02/26/2015	02/27/15 01:38	
trans-1,2-Dichloroethene	ND	6.1	1.7	1	B5B0720	02/26/2015	02/27/15 01:38	
trans-1,3-Dichloropropene	ND	6.1	1.4	1	B5B0720	02/26/2015	02/27/15 01:38	
Trichloroethene	ND	6.1	1.5	1	B5B0720	02/26/2015	02/27/15 01:38	
Trichlorofluoromethane	ND	6.1	2.2	1	B5B0720	02/26/2015	02/27/15 01:38	
Vinyl acetate	ND	61	13	1	B5B0720	02/26/2015	02/27/15 01:38	
Vinyl chloride	ND	6.1	1.2	1	B5B0720	02/26/2015	02/27/15 01:38	
Surrogate: 1,2-Dichloroethane-d4	*112 %*	*20 - 189*			B5B0720	02/26/2015	*02/27/15 01:38*	
Surrogate: 4-Bromofluorobenzene	*97.2 %*	*20 - 173*			B5B0720	02/26/2015	*02/27/15 01:38*	
Surrogate: Dibromofluoromethane	*103 %*	*26 - 178*			B5B0720	02/26/2015	*02/27/15 01:38*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0720	02/26/2015	*02/27/15 01:38*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-149-1.5
Lab ID: 1500726-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0017	03/03/2015	03/04/15 13:07	
Arsenic	**11**	1.0	0.19	1	B5C0017	03/03/2015	03/04/15 13:07	
Barium	**59**	1.0	0.14	1	B5C0017	03/03/2015	03/04/15 13:07	
Beryllium	**1.1**	1.0	0.04	1	B5C0017	03/03/2015	03/04/15 13:06	
Cadmium	**1.1**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:07	
Chromium	**35**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:07	
Cobalt	**8.4**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:07	
Copper	**43**	2.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:07	
Lead	**21**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:07	
Molybdenum	ND	1.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:07	
Nickel	**28**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:07	
Selenium	**1.6**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:07	
Silver	ND	1.0	0.06	1	B5C0017	03/03/2015	03/04/15 13:07	
Thallium	ND	1.0	0.20	1	B5C0017	03/03/2015	03/04/15 13:07	
Vanadium	**54**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:07	
Zinc	**69**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:07	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 20:40	
C4-C8	ND	1.0	0.20	1	B5B0754	02/27/2015	02/27/15 20:40	
Surrogate: 4-Bromofluorobenzene	*96.8 %*	*37 - 153*			B5B0754	02/27/2015	*02/27/15 20:40*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**4.9**	1.0	1.0	1	B5B0739	02/27/2015	02/27/15 20:04	
C23-C32	**29**	1.0	1.0	1	B5B0739	02/27/2015	02/27/15 20:04	
Surrogate: p-Terphenyl	*82.3 %*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 20:04*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
1,1,1-Trichloroethane	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
1,1,2,2-Tetrachloroethane	ND	5.2	2.0	1	B5B0729	02/27/2015	02/27/15 12:17	
1,1,2-Trichloroethane	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-149-1.5

Lab ID: 1500726-14

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.2	1.0	1	B5B0729	02/27/2015	02/27/15 12:17	
1,1-Dichloroethene	ND	5.2	1.2	1	B5B0729	02/27/2015	02/27/15 12:17	
1,1-Dichloropropene	ND	5.2	1.6	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2,3-Trichloropropane	ND	5.2	1.9	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2,3-Trichlorobenzene	ND	5.2	2.8	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2,4-Trichlorobenzene	ND	5.2	2.1	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2,4-Trimethylbenzene	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2-Dibromoethane	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2-Dichlorobenzene	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
1,2-Dichloroethane	ND	5.2	0.91	1	B5B0729	02/27/2015	02/27/15 12:17	
...Dichloropropane	ND	5.2	3.6	1	B5B0729	02/27/2015	02/27/15 12:17	
...,5-Trimethylbenzene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
1,3-Dichlorobenzene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
1,3-Dichloropropane	ND	5.2	1.1	1	B5B0729	02/27/2015	02/27/15 12:17	
1,4-Dichlorobenzene	ND	5.2	1.9	1	B5B0729	02/27/2015	02/27/15 12:17	
2,2-Dichloropropane	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
2-Chlorotoluene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
4-Chlorotoluene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
4-Isopropyltoluene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
Benzene	ND	5.2	1.2	1	B5B0729	02/27/2015	02/27/15 12:17	
Bromobenzene	ND	5.2	1.7	1	B5B0729	02/27/2015	02/27/15 12:17	
Bromochloromethane	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
Bromodichloromethane	ND	5.2	1.6	1	B5B0729	02/27/2015	02/27/15 12:17	
Bromoform	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
Bromomethane	ND	5.2	2.7	1	B5B0729	02/27/2015	02/27/15 12:17	
Carbon disulfide	ND	5.2	2.4	1	B5B0729	02/27/2015	02/27/15 12:17	
Carbon tetrachloride	ND	5.2	1.6	1	B5B0729	02/27/2015	02/27/15 12:17	
Chlorobenzene	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
Chloroethane	ND	5.2	5.2	1	B5B0729	02/27/2015	02/27/15 12:17	
Chloroform	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
Chloromethane	ND	5.2	0.77	1	B5B0729	02/27/2015	02/27/15 12:17	
cis-1,2-Dichloroethene	ND	5.2	1.2	1	B5B0729	02/27/2015	02/27/15 12:17	
cis-1,3-Dichloropropene	ND	5.2	2.4	1	B5B0729	02/27/2015	02/27/15 12:17	
Di-isopropyl ether	ND	5.2	1.1	1	B5B0729	02/27/2015	02/27/15 12:17	
Dibromochloromethane	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
Dibromomethane	ND	5.2	2.1	1	B5B0729	02/27/2015	02/27/15 12:17	
...hlorodifluoromethane	ND	5.2	0.77	1	B5B0729	02/27/2015	02/27/15 12:17	
...l Acetate	ND	52	14	1	B5B0729	02/27/2015	02/27/15 12:17	
Ethyl Ether	ND	52	13	1	B5B0729	02/27/2015	02/27/15 12:17	
Ethyl tert-butyl ether	ND	5.2	1.2	1	B5B0729	02/27/2015	02/27/15 12:17	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-149-1.5
Lab ID: 1500726-14

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.2	1.2	1	B5B0729	02/27/2015	02/27/15 12:17	
Freon-113	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
Hexachlorobutadiene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
Isopropylbenzene	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
m,p-Xylene	ND	10	2.6	1	B5B0729	02/27/2015	02/27/15 12:17	
Methylene chloride	ND	5.2	5.2	1	B5B0729	02/27/2015	02/27/15 12:17	
MTBE	ND	5.2	0.94	1	B5B0729	02/27/2015	02/27/15 12:17	
n-Butylbenzene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
n-Propylbenzene	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
Naphthalene	ND	5.2	3.3	1	B5B0729	02/27/2015	02/27/15 12:17	
o-Xylene	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
sec-Butylbenzene	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
Styrene	ND	5.2	1.4	1	B5B0729	02/27/2015	02/27/15 12:17	
tert-Amyl methyl ether	ND	5.2	1.1	1	B5B0729	02/27/2015	02/27/15 12:17	
tert-Butanol	ND	100	21	1	B5B0729	02/27/2015	02/27/15 12:17	
tert-Butylbenzene	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
Tetrachloroethene	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
Toluene	ND	5.2	0.92	1	B5B0729	02/27/2015	02/27/15 12:17	
trans-1,2-Dichloroethene	ND	5.2	1.5	1	B5B0729	02/27/2015	02/27/15 12:17	
trans-1,3-Dichloropropene	ND	5.2	1.2	1	B5B0729	02/27/2015	02/27/15 12:17	
Trichloroethene	ND	5.2	1.3	1	B5B0729	02/27/2015	02/27/15 12:17	
Trichlorofluoromethane	ND	5.2	1.9	1	B5B0729	02/27/2015	02/27/15 12:17	
Vinyl acetate	ND	52	11	1	B5B0729	02/27/2015	02/27/15 12:17	
Vinyl chloride	ND	5.2	1.1	1	B5B0729	02/27/2015	02/27/15 12:17	
Surrogate: 1,2-Dichloroethane-d4	*121 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 12:17*	
Surrogate: 4-Bromofluorobenzene	*99.2 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 12:17*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 12:17*	
Surrogate: Toluene-d8	*102 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 12:17*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-150-0
Lab ID: 1500726-16

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.3**	2.0	0.25	1	B5C0017	03/03/2015	03/04/15 13:12	J
Arsenic	**4.6**	1.0	0.19	1	B5C0017	03/03/2015	03/04/15 13:12	
Barium	**92**	1.0	0.14	1	B5C0017	03/03/2015	03/04/15 13:11	
Beryllium	**0.91**	1.0	0.04	1	B5C0017	03/03/2015	03/04/15 13:10	J
Cadmium	**0.66**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:12	J
Chromium	**15**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:11	
Cobalt	**6.2**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:12	
Copper	**17**	2.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:11	
Lead	**16**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:12	
Molybdenum	**0.33**	1.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:11	J
...kel	**12**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:12	
...ium	**1.0**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:12	
Silver	ND	1.0	0.06	1	B5C0017	03/03/2015	03/04/15 13:11	
Thallium	ND	1.0	0.20	1	B5C0017	03/03/2015	03/04/15 13:12	
Vanadium	**41**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:11	
Zinc	**37**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	03/02/2015	02/27/15 23:18	
C4-C8	ND	1.0	0.20	1	B5B0755	03/02/2015	02/27/15 23:18	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*37 - 153*			B5B0755	03/02/2015	*02/27/15 23:18*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**38**	20	20	10	B5B0739	02/27/2015	02/27/15 21:25	
C23-C32	**380**	20	20	10	B5B0739	02/27/2015	02/27/15 21:25	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0739	02/27/2015	*02/27/15 21:25*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
...,1-Trichloroethane	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
1,1,2,2-Tetrachloroethane	ND	5.0	1.9	1	B5B0729	02/27/2015	02/27/15 12:36	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-150-0

Lab ID: 1500726-16

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
1,1-Dichloroethane	ND	5.0	0.97	1	B5B0729	02/27/2015	02/27/15 12:36	
1,1-Dichloroethene	ND	5.0	1.1	1	B5B0729	02/27/2015	02/27/15 12:36	
1,1-Dichloropropene	ND	5.0	1.5	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2,3-Trichloropropane	ND	5.0	1.8	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2,3-Trichlorobenzene	ND	5.0	2.7	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2,4-Trichlorobenzene	ND	5.0	2.0	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2,4-Trimethylbenzene	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2-Dibromo-3-chloropropane	ND	9.9	2.1	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2-Dibromoethane	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2-Dichlorobenzene	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2-Dichloroethane	ND	5.0	0.86	1	B5B0729	02/27/2015	02/27/15 12:36	
1,2-Dichloropropane	ND	5.0	3.4	1	B5B0729	02/27/2015	02/27/15 12:36	
1,3,5-Trimethylbenzene	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
1,3-Dichlorobenzene	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
1,3-Dichloropropane	ND	5.0	1.1	1	B5B0729	02/27/2015	02/27/15 12:36	
1,4-Dichlorobenzene	ND	5.0	1.8	1	B5B0729	02/27/2015	02/27/15 12:36	
2,2-Dichloropropane	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
2-Chlorotoluene	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
4-Chlorotoluene	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
4-Isopropyltoluene	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
Benzene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Bromobenzene	ND	5.0	1.6	1	B5B0729	02/27/2015	02/27/15 12:36	
Bromochloromethane	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
Bromodichloromethane	ND	5.0	1.5	1	B5B0729	02/27/2015	02/27/15 12:36	
Bromoform	ND	5.0	1.5	1	B5B0729	02/27/2015	02/27/15 12:36	
Bromomethane	ND	5.0	2.6	1	B5B0729	02/27/2015	02/27/15 12:36	
Carbon disulfide	2.7	5.0	2.3	1	B5B0729	02/27/2015	02/27/15 12:36	J
Carbon tetrachloride	ND	5.0	1.5	1	B5B0729	02/27/2015	02/27/15 12:36	
Chlorobenzene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Chloroethane	ND	5.0	4.9	1	B5B0729	02/27/2015	02/27/15 12:36	
Chloroform	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
Chloromethane	ND	5.0	0.74	1	B5B0729	02/27/2015	02/27/15 12:36	
cis-1,2-Dichloroethene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
cis-1,3-Dichloropropene	ND	5.0	2.3	1	B5B0729	02/27/2015	02/27/15 12:36	
Di-isopropyl ether	ND	5.0	1.0	1	B5B0729	02/27/2015	02/27/15 12:36	
Dibromochloromethane	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Dibromomethane	ND	5.0	2.0	1	B5B0729	02/27/2015	02/27/15 12:36	
Dichlorodifluoromethane	ND	5.0	0.73	1	B5B0729	02/27/2015	02/27/15 12:36	
Ethyl Acetate	ND	50	13	1	B5B0729	02/27/2015	02/27/15 12:36	
Ethyl Ether	ND	50	12	1	B5B0729	02/27/2015	02/27/15 12:36	

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Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23

Report To : Anne Perez/Kristy Edblad

Reported : 03/06/2015

Client Sample ID 1278-150-0

Lab ID: 1500726-16

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Ethylbenzene	ND	5.0	1.1	1	B5B0729	02/27/2015	02/27/15 12:36	
Freon-113	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
Hexachlorobutadiene	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
Isopropylbenzene	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
m,p-Xylene	ND	9.9	2.5	1	B5B0729	02/27/2015	02/27/15 12:36	
Methylene chloride	ND	5.0	5.0	1	B5B0729	02/27/2015	02/27/15 12:36	
MTBE	ND	5.0	0.89	1	B5B0729	02/27/2015	02/27/15 12:36	
n-Butylbenzene	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
n-Propylbenzene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Naphthalene	ND	5.0	3.2	1	B5B0729	02/27/2015	02/27/15 12:36	
ylene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Butylbenzene	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
Styrene	ND	5.0	1.3	1	B5B0729	02/27/2015	02/27/15 12:36	
tert-Amyl methyl ether	ND	5.0	1.0	1	B5B0729	02/27/2015	02/27/15 12:36	
tert-Butanol	ND	99	20	1	B5B0729	02/27/2015	02/27/15 12:36	
tert-Butylbenzene	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
Tetrachloroethene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Toluene	ND	5.0	0.88	1	B5B0729	02/27/2015	02/27/15 12:36	
trans-1,2-Dichloroethene	ND	5.0	1.4	1	B5B0729	02/27/2015	02/27/15 12:36	
trans-1,3-Dichloropropene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Trichloroethene	ND	5.0	1.2	1	B5B0729	02/27/2015	02/27/15 12:36	
Trichlorofluoromethane	ND	5.0	1.8	1	B5B0729	02/27/2015	02/27/15 12:36	
Vinyl acetate	ND	50	11	1	B5B0729	02/27/2015	02/27/15 12:36	
Vinyl chloride	ND	5.0	1.0	1	B5B0729	02/27/2015	02/27/15 12:36	
Surrogate: 1,2-Dichloroethane-d4	*116 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 12:36*	
Surrogate: 4-Bromofluorobenzene	*97.6 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 12:36*	
Surrogate: Dibromofluoromethane	*103 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 12:36*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 12:36*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-150-1.5
Lab ID: 1500726-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.81**	**2.0**	0.25	1	B5C0017	03/03/2015	03/04/15 13:15	J
Arsenic	**7.2**	1.0	0.19	1	B5C0017	03/03/2015	03/04/15 13:15	
Barium	**77**	1.0	0.14	1	B5C0017	03/03/2015	03/04/15 13:15	
Beryllium	**0.80**	1.0	0.04	1	B5C0017	03/03/2015	03/04/15 13:14	J
Cadmium	**0.73**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:15	J
Chromium	**19**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:15	
Cobalt	**7.4**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:15	
Copper	**30**	2.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:15	
Lead	**47**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:15	
Molybdenum	**0.17**	1.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:15	J
Nickel	**19**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:15	
Selenium	**1.0**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:15	
Silver	ND	1.0	0.06	1	B5C0017	03/03/2015	03/04/15 13:15	
Thallium	ND	1.0	0.20	1	B5C0017	03/03/2015	03/04/15 13:15	
Vanadium	**38**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:15	
Zinc	**55**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:15	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	03/02/2015	02/27/15 23:34	
C4-C8	ND	1.0	0.20	1	B5B0755	03/02/2015	02/27/15 23:34	
Surrogate: 4-Bromofluorobenzene	*99.0 %*	*37 - 153*			B5B0755	03/02/2015	*02/27/15 23:34*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**4.9**	2.0	2.0	2	B5B0751	02/27/2015	03/02/15 23:48	
C23-C32	**56**	2.0	2.0	2	B5B0751	02/27/2015	03/02/15 23:48	
Surrogate: p-Terphenyl	*61.2 %*	*26 - 123*			B5B0751	02/27/2015	*03/02/15 23:48*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
1,1,1-Trichloroethane	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
1,1,2,2-Tetrachloroethane	ND	5.6	2.2	1	B5B0729	02/27/2015	02/27/15 12:54	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-150-1.5
Lab ID: 1500726-17

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
1,1-Dichloroethane	ND	5.6	1.1	1	B5B0729	02/27/2015	02/27/15 12:54	
1,1-Dichloroethene	ND	5.6	1.3	1	B5B0729	02/27/2015	02/27/15 12:54	
1,1-Dichloropropene	ND	5.6	1.7	1	B5B0729	02/27/2015	02/27/15 12:54	
1,2,3-Trichloropropane	ND	5.6	2.1	1	B5B0729	02/27/2015	02/27/15 12:54	
1,2,3-Trichlorobenzene	ND	5.6	3.1	1	B5B0729	02/27/2015	02/27/15 12:54	
1,2,4-Trichlorobenzene	ND	5.6	2.3	1	B5B0729	02/27/2015	02/27/15 12:54	
1,2,4-Trimethylbenzene	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5B0729	02/27/2015	02/27/15 12:54	
1,2-Dibromoethane	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
1,2-Dichlorobenzene	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
...Dichloroethane	ND	5.6	0.98	1	B5B0729	02/27/2015	02/27/15 12:54	
...Dichloropropane	ND	5.6	3.8	1	B5B0729	02/27/2015	02/27/15 12:54	
1,3,5-Trimethylbenzene	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
1,3-Dichlorobenzene	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
1,3-Dichloropropane	ND	5.6	1.2	1	B5B0729	02/27/2015	02/27/15 12:54	
1,4-Dichlorobenzene	ND	5.6	2.0	1	B5B0729	02/27/2015	02/27/15 12:54	
2,2-Dichloropropane	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
2-Chlorotoluene	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
4-Chlorotoluene	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
4-Isopropyltoluene	**1.7**	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	J
Benzene	ND	5.6	1.3	1	B5B0729	02/27/2015	02/27/15 12:54	
Bromobenzene	ND	5.6	1.8	1	B5B0729	02/27/2015	02/27/15 12:54	
Bromochloromethane	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
Bromodichloromethane	ND	5.6	1.8	1	B5B0729	02/27/2015	02/27/15 12:54	
Bromoform	ND	5.6	1.7	1	B5B0729	02/27/2015	02/27/15 12:54	
Bromomethane	ND	5.6	3.0	1	B5B0729	02/27/2015	02/27/15 12:54	
Carbon disulfide	ND	5.6	2.6	1	B5B0729	02/27/2015	02/27/15 12:54	
Carbon tetrachloride	ND	5.6	1.7	1	B5B0729	02/27/2015	02/27/15 12:54	
Chlorobenzene	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
Chloroethane	ND	5.6	5.6	1	B5B0729	02/27/2015	02/27/15 12:54	
Chloroform	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
Chloromethane	ND	5.6	0.84	1	B5B0729	02/27/2015	02/27/15 12:54	
cis-1,2-Dichloroethene	ND	5.6	1.3	1	B5B0729	02/27/2015	02/27/15 12:54	
cis-1,3-Dichloropropene	ND	5.6	2.6	1	B5B0729	02/27/2015	02/27/15 12:54	
Di-isopropyl ether	ND	5.6	1.1	1	B5B0729	02/27/2015	02/27/15 12:54	
Dibromochloromethane	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
...romomethane	ND	5.6	2.2	1	B5B0729	02/27/2015	02/27/15 12:54	
...lorodifluoromethane	ND	5.6	0.83	1	B5B0729	02/27/2015	02/27/15 12:54	
Ethyl Acetate	ND	56	15	1	B5B0729	02/27/2015	02/27/15 12:54	
Ethyl Ether	ND	56	14	1	B5B0729	02/27/2015	02/27/15 12:54	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-150-1.5
Lab ID: 1500726-17

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.6	1.3	1	B5B0729	02/27/2015	02/27/15 12:54	
Ethylbenzene	ND	5.6	1.3	1	B5B0729	02/27/2015	02/27/15 12:54	
Freon-113	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
Hexachlorobutadiene	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
Isopropylbenzene	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
m,p-Xylene	ND	11	2.8	1	B5B0729	02/27/2015	02/27/15 12:54	
Methylene chloride	ND	5.6	5.6	1	B5B0729	02/27/2015	02/27/15 12:54	
MTBE	ND	5.6	1.0	1	B5B0729	02/27/2015	02/27/15 12:54	
n-Butylbenzene	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
n-Propylbenzene	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
Naphthalene	ND	5.6	3.6	1	B5B0729	02/27/2015	02/27/15 12:54	
o-Xylene	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
sec-Butylbenzene	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
Styrene	ND	5.6	1.5	1	B5B0729	02/27/2015	02/27/15 12:54	
tert-Amyl methyl ether	ND	5.6	1.2	1	B5B0729	02/27/2015	02/27/15 12:54	
tert-Butanol	ND	110	23	1	B5B0729	02/27/2015	02/27/15 12:54	
tert-Butylbenzene	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
Tetrachloroethene	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
Toluene	ND	5.6	1.0	1	B5B0729	02/27/2015	02/27/15 12:54	
trans-1,2-Dichloroethene	ND	5.6	1.6	1	B5B0729	02/27/2015	02/27/15 12:54	
trans-1,3-Dichloropropene	ND	5.6	1.3	1	B5B0729	02/27/2015	02/27/15 12:54	
Trichloroethene	ND	5.6	1.4	1	B5B0729	02/27/2015	02/27/15 12:54	
Trichlorofluoromethane	ND	5.6	2.0	1	B5B0729	02/27/2015	02/27/15 12:54	
Vinyl acetate	ND	56	12	1	B5B0729	02/27/2015	02/27/15 12:54	
Vinyl chloride	ND	5.6	1.2	1	B5B0729	02/27/2015	02/27/15 12:54	
Surrogate: 1,2-Dichloroethane-d4	*120 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 12:54*	
Surrogate: 4-Bromofluorobenzene	*97.9 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 12:54*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 12:54*	
Surrogate: Toluene-d8	*97.7 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 12:54*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-150-3
Lab ID: 1500726-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.4**	2.0	0.25	1	B5C0017	03/03/2015	03/04/15 13:19	J
Arsenic	**7.5**	1.0	0.19	1	B5C0017	03/03/2015	03/04/15 13:19	
Barium	**100**	1.0	0.14	1	B5C0017	03/03/2015	03/04/15 13:18	
Beryllium	**1.1**	1.0	0.04	1	B5C0017	03/03/2015	03/04/15 13:18	
Cadmium	**0.77**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:19	J
Chromium	**25**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:18	
Cobalt	**7.5**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:19	
Copper	**33**	2.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:18	
Lead	**19**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:19	
Molybdenum	**0.19**	1.0	0.05	1	B5C0017	03/03/2015	03/04/15 13:18	J
...ckel	**20**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:18	
...nium	**1.0**	1.0	0.15	1	B5C0017	03/03/2015	03/04/15 13:19	
Silver	ND	1.0	0.06	1	B5C0017	03/03/2015	03/04/15 13:18	
Thallium	ND	1.0	0.20	1	B5C0017	03/03/2015	03/04/15 13:19	
Vanadium	**49**	1.0	0.07	1	B5C0017	03/03/2015	03/04/15 13:18	
Zinc	**56**	1.0	0.11	1	B5C0017	03/03/2015	03/04/15 13:18	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	03/02/2015	02/27/15 23:49	
C4-C8	ND	1.0	0.20	1	B5B0755	03/02/2015	02/27/15 23:49	
Surrogate: 4-Bromofluorobenzene	*96.8 %*	*37 - 153*			B5B0755	03/02/2015	*02/27/15 23:49*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	24	20	20	10	B5B0751	02/27/2015	03/03/15 00:04	
C23-C32	**300**	20	20	10	B5B0751	02/27/2015	03/03/15 00:04	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0751	02/27/2015	*03/03/15 00:04*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
,1-Trichloroethane	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
1,1,2,2-Tetrachloroethane	ND	3.9	1.5	1	B5B0729	02/27/2015	02/27/15 13:13	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-150-3
Lab ID: 1500726-18

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	3.9	0.94	1	B5B0729	02/27/2015	02/27/15 13:13	
1,1-Dichloroethane	ND	3.9	0.76	1	B5B0729	02/27/2015	02/27/15 13:13	
1,1-Dichloroethene	ND	3.9	0.88	1	B5B0729	02/27/2015	02/27/15 13:13	
1,1-Dichloropropene	ND	3.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2,3-Trichloropropane	ND	3.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2,3-Trichlorobenzene	ND	3.9	2.1	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2,4-Trichlorobenzene	ND	3.9	1.6	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2,4-Trimethylbenzene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2-Dibromo-3-chloropropane	ND	7.8	1.7	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2-Dibromoethane	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2-Dichlorobenzene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2-Dichloroethane	ND	3.9	0.68	1	B5B0729	02/27/2015	02/27/15 13:13	
1,2-Dichloropropane	ND	3.9	2.6	1	B5B0729	02/27/2015	02/27/15 13:13	
1,3,5-Trimethylbenzene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
1,3-Dichlorobenzene	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
1,3-Dichloropropane	ND	3.9	0.85	1	B5B0729	02/27/2015	02/27/15 13:13	
1,4-Dichlorobenzene	ND	3.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:13	
2,2-Dichloropropane	ND	3.9	0.94	1	B5B0729	02/27/2015	02/27/15 13:13	
2-Chlorotoluene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
4-Chlorotoluene	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
4-Isopropyltoluene	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
Benzene	ND	3.9	0.92	1	B5B0729	02/27/2015	02/27/15 13:13	
Bromobenzene	ND	3.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:13	
Bromochloromethane	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
Bromodichloromethane	ND	3.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:13	
Bromoform	ND	3.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:13	
Bromomethane	ND	3.9	2.0	1	B5B0729	02/27/2015	02/27/15 13:13	
Carbon disulfide	ND	3.9	1.8	1	B5B0729	02/27/2015	02/27/15 13:13	
Carbon tetrachloride	ND	3.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:13	
Chlorobenzene	ND	3.9	0.94	1	B5B0729	02/27/2015	02/27/15 13:13	
Chloroethane	ND	3.9	3.8	1	B5B0729	02/27/2015	02/27/15 13:13	
Chloroform	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
Chloromethane	ND	3.9	0.58	1	B5B0729	02/27/2015	02/27/15 13:13	
cis-1,2-Dichloroethene	ND	3.9	0.92	1	B5B0729	02/27/2015	02/27/15 13:13	
cis-1,3-Dichloropropene	ND	3.9	1.8	1	B5B0729	02/27/2015	02/27/15 13:13	
Di-isopropyl ether	ND	3.9	0.78	1	B5B0729	02/27/2015	02/27/15 13:13	
Dibromochloromethane	ND	3.9	0.95	1	B5B0729	02/27/2015	02/27/15 13:13	
Dibromomethane	ND	3.9	1.5	1	B5B0729	02/27/2015	02/27/15 13:13	
Dichlorodifluoromethane	ND	3.9	0.57	1	B5B0729	02/27/2015	02/27/15 13:13	
Ethyl Acetate	ND	39	10	1	B5B0729	02/27/2015	02/27/15 13:13	
Ethyl Ether	ND	39	9.3	1	B5B0729	02/27/2015	02/27/15 13:13	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-150-3
Lab ID: 1500726-18

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	3.9	0.90	1	B5B0729	02/27/2015	02/27/15 13:13	
Ethylbenzene	ND	3.9	0.87	1	B5B0729	02/27/2015	02/27/15 13:13	
Freon-113	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
Hexachlorobutadiene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
Isopropylbenzene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
m,p-Xylene	ND	7.8	1.9	1	B5B0729	02/27/2015	02/27/15 13:13	
Methylene chloride	ND	3.9	3.9	1	B5B0729	02/27/2015	02/27/15 13:13	
MTBE	ND	3.9	0.70	1	B5B0729	02/27/2015	02/27/15 13:13	
n-Butylbenzene	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
n-Propylbenzene	ND	3.9	0.95	1	B5B0729	02/27/2015	02/27/15 13:13	
Naphthalene	ND	3.9	2.5	1	B5B0729	02/27/2015	02/27/15 13:13	
...lene	ND	3.9	0.95	1	B5B0729	02/27/2015	02/27/15 13:13	
...-Butylbenzene	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
Styrene	ND	3.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:13	
tert-Amyl methyl ether	ND	3.9	0.79	1	B5B0729	02/27/2015	02/27/15 13:13	
tert-Butanol	ND	78	16	1	B5B0729	02/27/2015	02/27/15 13:13	
tert-Butylbenzene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
Tetrachloroethene	ND	3.9	0.98	1	B5B0729	02/27/2015	02/27/15 13:13	
Toluene	ND	3.9	0.69	1	B5B0729	02/27/2015	02/27/15 13:13	
trans-1,2-Dichloroethene	ND	3.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:13	
trans-1,3-Dichloropropene	ND	3.9	0.91	1	B5B0729	02/27/2015	02/27/15 13:13	
Trichloroethene	ND	3.9	0.94	1	B5B0729	02/27/2015	02/27/15 13:13	
Trichlorofluoromethane	ND	3.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:13	
Vinyl acetate	ND	39	8.3	1	B5B0729	02/27/2015	02/27/15 13:13	
Vinyl chloride	ND	3.9	0.79	1	B5B0729	02/27/2015	02/27/15 13:13	
Surrogate: 1,2-Dichloroethane-d4	*116 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 13:13*	
Surrogate: 4-Bromofluorobenzene	*94.5 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 13:13*	
Surrogate: Dibromofluoromethane	*103 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 13:13*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 13:13*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-151-0
Lab ID: 1500726-19

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	4.0	0.51	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Arsenic	**6.4**	2.0	0.37	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Barium	**96**	2.0	0.29	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Beryllium	**0.92**	2.0	0.08	2	B5C0019	03/03/2015	03/04/15 14:37	D5, J
Cadmium	**1.4**	2.0	0.23	2	B5C0019	03/03/2015	03/04/15 14:38	D5, J
Chromium	**24**	2.0	0.14	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Cobalt	**7.8**	2.0	0.30	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Copper	**26**	4.0	0.10	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Lead	**68**	2.0	0.14	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Molybdenum	**1.6**	2.0	0.11	2	B5C0019	03/03/2015	03/04/15 14:38	D5, J
Nickel	**23**	2.0	0.14	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Selenium	**1.0**	2.0	0.31	2	B5C0019	03/03/2015	03/04/15 14:38	D5, J
Silver	ND	2.0	0.13	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Thallium	ND	2.0	0.41	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Vanadium	**44**	2.0	0.15	2	B5C0019	03/03/2015	03/04/15 14:38	D5
Zinc	**89**	2.0	0.22	2	B5C0019	03/03/2015	03/04/15 14:38	D5

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	03/02/2015	02/28/15 00:05	
C4-C8	ND	1.0	0.20	1	B5B0755	03/02/2015	02/28/15 00:05	
Surrogate: 4-Bromofluorobenzene	*96.0 %*	*37 - 153*			B5B0755	03/02/2015	*02/28/15 00:05*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**27**	20	20	10	B5B0751	02/27/2015	03/03/15 00:20	
C23-C32	**230**	20	20	10	B5B0751	02/27/2015	03/03/15 00:20	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0751	02/27/2015	*03/03/15 00:20*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
1,1,1-Trichloroethane	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
1,1,2,2-Tetrachloroethane	ND	6.5	2.5	1	B5B0729	02/27/2015	02/27/15 13:32	

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Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-151-0
Lab ID: 1500726-19

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
1,1-Dichloroethane	ND	6.5	1.3	1	B5B0729	02/27/2015	02/27/15 13:32	
1,1-Dichloroethene	ND	6.5	1.5	1	B5B0729	02/27/2015	02/27/15 13:32	
1,1-Dichloropropene	ND	6.5	2.0	1	B5B0729	02/27/2015	02/27/15 13:32	
1,2,3-Trichloropropane	ND	6.5	2.4	1	B5B0729	02/27/2015	02/27/15 13:32	
1,2,3-Trichlorobenzene	ND	6.5	3.5	1	B5B0729	02/27/2015	02/27/15 13:32	
1,2,4-Trichlorobenzene	ND	6.5	2.6	1	B5B0729	02/27/2015	02/27/15 13:32	
1,2,4-Trimethylbenzene	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
1,2-Dibromo-3-chloropropane	ND	13	2.8	1	B5B0729	02/27/2015	02/27/15 13:32	
1,2-Dibromoethane	ND	6.5	1.9	1	B5B0729	02/27/2015	02/27/15 13:32	
1,2-Dichlorobenzene	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
Dichloroethane	ND	6.5	1.1	1	B5B0729	02/27/2015	02/27/15 13:32	
Dichloropropane	ND	6.5	4.4	1	B5B0729	02/27/2015	02/27/15 13:32	
1,3,5-Trimethylbenzene	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
1,3-Dichlorobenzene	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
1,3-Dichloropropane	ND	6.5	1.4	1	B5B0729	02/27/2015	02/27/15 13:32	
1,4-Dichlorobenzene	ND	6.5	2.3	1	B5B0729	02/27/2015	02/27/15 13:32	
2,2-Dichloropropane	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
2-Chlorotoluene	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
4-Chlorotoluene	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
4-Isopropyltoluene	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
Benzene	1.7	6.5	1.5	1	B5B0729	02/27/2015	02/27/15 13:32	J
Bromobenzene	ND	6.5	2.1	1	B5B0729	02/27/2015	02/27/15 13:32	
Bromochloromethane	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
Bromodichloromethane	ND	6.5	2.0	1	B5B0729	02/27/2015	02/27/15 13:32	
Bromoform	ND	6.5	1.9	1	B5B0729	02/27/2015	02/27/15 13:32	
Bromomethane	ND	6.5	3.4	1	B5B0729	02/27/2015	02/27/15 13:32	
Carbon disulfide	ND	6.5	3.0	1	B5B0729	02/27/2015	02/27/15 13:32	
Carbon tetrachloride	ND	6.5	1.9	1	B5B0729	02/27/2015	02/27/15 13:32	
Chlorobenzene	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
Chloroethane	ND	6.5	6.4	1	B5B0729	02/27/2015	02/27/15 13:32	
Chloroform	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
Chloromethane	ND	6.5	0.96	1	B5B0729	02/27/2015	02/27/15 13:32	
cis-1,2-Dichloroethene	ND	6.5	1.5	1	B5B0729	02/27/2015	02/27/15 13:32	
cis-1,3-Dichloropropene	ND	6.5	3.0	1	B5B0729	02/27/2015	02/27/15 13:32	
Di-isopropyl ether	ND	6.5	1.3	1	B5B0729	02/27/2015	02/27/15 13:32	
Dibromochloromethane	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
romomethane	ND	6.5	2.6	1	B5B0729	02/27/2015	02/27/15 13:32	
lorodifluoromethane	ND	6.5	0.96	1	B5B0729	02/27/2015	02/27/15 13:32	
Ethyl Acetate	ND	65	17	1	B5B0729	02/27/2015	02/27/15 13:32	
Ethyl Ether	ND	65	16	1	B5B0729	02/27/2015	02/27/15 13:32	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-151-0

Lab ID: 1500726-19

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	6.5	1.5	1	B5B0729	02/27/2015	02/27/15 13:32	
Ethylbenzene	ND	6.5	1.4	1	B5B0729	02/27/2015	02/27/15 13:32	
Freon-113	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
Hexachlorobutadiene	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
Isopropylbenzene	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
m,p-Xylene	ND	13	3.2	1	B5B0729	02/27/2015	02/27/15 13:32	
Methylene chloride	ND	6.5	6.5	1	B5B0729	02/27/2015	02/27/15 13:32	
MTBE	ND	6.5	1.2	1	B5B0729	02/27/2015	02/27/15 13:32	
n-Butylbenzene	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
n-Propylbenzene	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
Naphthalene	ND	6.5	4.1	1	B5B0729	02/27/2015	02/27/15 13:32	
o-Xylene	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
sec-Butylbenzene	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
Styrene	ND	6.5	1.7	1	B5B0729	02/27/2015	02/27/15 13:32	
tert-Amyl methyl ether	ND	6.5	1.3	1	B5B0729	02/27/2015	02/27/15 13:32	
tert-Butanol	ND	130	26	1	B5B0729	02/27/2015	02/27/15 13:32	
tert-Butylbenzene	ND	6.5	1.8	1	B5B0729	02/27/2015	02/27/15 13:32	
Tetrachloroethene	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
Toluene	2.7	6.5	1.1	1	B5B0729	02/27/2015	02/27/15 13:32	J
trans-1,2-Dichloroethene	ND	6.5	1.9	1	B5B0729	02/27/2015	02/27/15 13:32	
trans-1,3-Dichloropropene	ND	6.5	1.5	1	B5B0729	02/27/2015	02/27/15 13:32	
Trichloroethene	ND	6.5	1.6	1	B5B0729	02/27/2015	02/27/15 13:32	
Trichlorofluoromethane	ND	6.5	2.3	1	B5B0729	02/27/2015	02/27/15 13:32	
Vinyl acetate	ND	65	14	1	B5B0729	02/27/2015	02/27/15 13:32	
Vinyl chloride	ND	6.5	1.3	1	B5B0729	02/27/2015	02/27/15 13:32	
Surrogate: 1,2-Dichloroethane-d4	*113 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 13:32*	
Surrogate: 4-Bromofluorobenzene	*94.3 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 13:32*	
Surrogate: Dibromofluoromethane	*102 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 13:32*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 13:32*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-151-1.5
Lab ID: 1500726-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.2**	2.0	0.25	1	B5C0019	03/03/2015	03/04/15 13:49	J
Arsenic	**6.6**	1.0	0.19	1	B5C0019	03/03/2015	03/04/15 13:49	
Barium	**90**	1.0	0.14	1	B5C0019	03/03/2015	03/04/15 13:49	
Beryllium	**0.93**	1.0	0.04	1	B5C0019	03/03/2015	03/04/15 13:48	J
Cadmium	**1.2**	1.0	0.11	1	B5C0019	03/03/2015	03/04/15 13:49	
Chromium	**26**	1.0	0.07	1	B5C0019	03/03/2015	03/04/15 13:49	
Cobalt	**6.2**	1.0	0.15	1	B5C0019	03/03/2015	03/04/15 13:49	
Copper	**26**	2.0	0.05	1	B5C0019	03/03/2015	03/04/15 13:49	
Lead	**61**	1.0	0.07	1	B5C0019	03/03/2015	03/04/15 13:49	
Molybdenum	**1.9**	1.0	0.05	1	B5C0019	03/03/2015	03/04/15 13:49	
...kel	27	1.0	0.07	1	B5C0019	03/03/2015	03/04/15 13:49	
...nium	**1.5**	1.0	0.15	1	B5C0019	03/03/2015	03/04/15 13:49	
Silver	ND	1.0	0.06	1	B5C0019	03/03/2015	03/04/15 13:49	
Thallium	ND	1.0	0.20	1	B5C0019	03/03/2015	03/04/15 13:49	
Vanadium	**45**	1.0	0.07	1	B5C0019	03/03/2015	03/04/15 13:49	
Zinc	**73**	1.0	0.11	1	B5C0019	03/03/2015	03/04/15 13:49	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	03/02/2015	02/28/15 00:21	
C4-C8	ND	1.0	0.20	1	B5B0755	03/02/2015	02/28/15 00:21	
Surrogate: 4-Bromofluorobenzene	*99.8 %*	*37 - 153*			B5B0755	03/02/2015	*02/28/15 00:21*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**28**	20	20	10	B5B0751	02/27/2015	03/03/15 00:36	
C23-C32	**240**	20	20	10	B5B0751	02/27/2015	03/03/15 00:36	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5B0751	02/27/2015	*03/03/15 00:36*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
...,1-Trichloroethane	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
1,1,2,2-Tetrachloroethane	ND	4.9	1.9	1	B5B0729	02/27/2015	02/27/15 13:50	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-151-1.5

Lab ID: 1500726-20

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
1,1-Dichloroethane	ND	4.9	0.97	1	B5B0729	02/27/2015	02/27/15 13:50	
1,1-Dichloroethene	ND	4.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:50	
1,1-Dichloropropene	ND	4.9	1.5	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2,3-Trichloropropane	ND	4.9	1.8	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2,3-Trichlorobenzene	ND	4.9	2.7	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2,4-Trichlorobenzene	ND	4.9	2.0	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2,4-Trimethylbenzene	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2-Dibromo-3-chloropropane	ND	9.9	2.1	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2-Dibromoethane	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2-Dichlorobenzene	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2-Dichloroethane	ND	4.9	0.86	1	B5B0729	02/27/2015	02/27/15 13:50	
1,2-Dichloropropane	ND	4.9	3.4	1	B5B0729	02/27/2015	02/27/15 13:50	
1,3,5-Trimethylbenzene	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
1,3-Dichlorobenzene	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
1,3-Dichloropropane	ND	4.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:50	
1,4-Dichlorobenzene	ND	4.9	1.8	1	B5B0729	02/27/2015	02/27/15 13:50	
2,2-Dichloropropane	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
2-Chlorotoluene	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
4-Chlorotoluene	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
4-Isopropyltoluene	**3.3**	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	J
Benzene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Bromobenzene	ND	4.9	1.6	1	B5B0729	02/27/2015	02/27/15 13:50	
Bromochloromethane	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
Bromodichloromethane	ND	4.9	1.5	1	B5B0729	02/27/2015	02/27/15 13:50	
Bromoform	ND	4.9	1.5	1	B5B0729	02/27/2015	02/27/15 13:50	
Bromomethane	ND	4.9	2.6	1	B5B0729	02/27/2015	02/27/15 13:50	
Carbon disulfide	ND	4.9	2.3	1	B5B0729	02/27/2015	02/27/15 13:50	
Carbon tetrachloride	ND	4.9	1.5	1	B5B0729	02/27/2015	02/27/15 13:50	
Chlorobenzene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Chloroethane	ND	4.9	4.9	1	B5B0729	02/27/2015	02/27/15 13:50	
Chloroform	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
Chloromethane	ND	4.9	0.73	1	B5B0729	02/27/2015	02/27/15 13:50	
cis-1,2-Dichloroethene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
cis-1,3-Dichloropropene	ND	4.9	2.3	1	B5B0729	02/27/2015	02/27/15 13:50	
Di-isopropyl ether	ND	4.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:50	
Dibromochloromethane	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Dibromomethane	ND	4.9	1.9	1	B5B0729	02/27/2015	02/27/15 13:50	
Dichlorodifluoromethane	ND	4.9	0.73	1	B5B0729	02/27/2015	02/27/15 13:50	
Ethyl Acetate	ND	49	13	1	B5B0729	02/27/2015	02/27/15 13:50	
Ethyl Ether	ND	49	12	1	B5B0729	02/27/2015	02/27/15 13:50	

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-151-1.5
Lab ID: 1500726-20

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Ethylbenzene	ND	4.9	1.1	1	B5B0729	02/27/2015	02/27/15 13:50	
Freon-113	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
Hexachlorobutadiene	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
Isopropylbenzene	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
m,p-Xylene	ND	9.9	2.5	1	B5B0729	02/27/2015	02/27/15 13:50	
Methylene chloride	ND	4.9	4.9	1	B5B0729	02/27/2015	02/27/15 13:50	
MTBE	ND	4.9	0.89	1	B5B0729	02/27/2015	02/27/15 13:50	
n-Butylbenzene	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
n-Propylbenzene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Naphthalene	ND	4.9	3.1	1	B5B0729	02/27/2015	02/27/15 13:50	
ylene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Butylbenzene	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
Styrene	ND	4.9	1.3	1	B5B0729	02/27/2015	02/27/15 13:50	
tert-Amyl methyl ether	ND	4.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:50	
tert-Butanol	ND	99	20	1	B5B0729	02/27/2015	02/27/15 13:50	
tert-Butylbenzene	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
Tetrachloroethene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Toluene	ND	4.9	0.87	1	B5B0729	02/27/2015	02/27/15 13:50	
trans-1,2-Dichloroethene	ND	4.9	1.4	1	B5B0729	02/27/2015	02/27/15 13:50	
trans-1,3-Dichloropropene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Trichloroethene	ND	4.9	1.2	1	B5B0729	02/27/2015	02/27/15 13:50	
Trichlorofluoromethane	ND	4.9	1.8	1	B5B0729	02/27/2015	02/27/15 13:50	
Vinyl acetate	ND	49	11	1	B5B0729	02/27/2015	02/27/15 13:50	
Vinyl chloride	ND	4.9	1.0	1	B5B0729	02/27/2015	02/27/15 13:50	
Surrogate: 1,2-Dichloroethane-d4	*120 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 13:50*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 13:50*	
Surrogate: Dibromofluoromethane	*108 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 13:50*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 13:50*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-1-022415
Lab ID: 1500726-22

Gasoline Range Organics by EPA 8015B (Modified) — Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 15:00	
C4-C8	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 15:00	
Surrogate: 4-Bromofluorobenzene	*101 %*	*70 - 130*			B5B0704	02/26/2015	*02/26/15 15:00*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:22	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:22	
Surrogate: p-Terphenyl	*54.8 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 16:22*	

Volatile Organic Compounds by EPA 8260B — Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 15:05	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 15:05	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 15:05	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 15:05	
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:05	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:05	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:05	
1,2-Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:05	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:05	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 15:05	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 15:05	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 15:05	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:05	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 15:05	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 15:05	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 15:05	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:05	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-1-022415

Lab ID: 1500726-22

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:05	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 15:05	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 15:05	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 15:05	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 15:05	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 15:05	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 15:05	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 15:05	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 15:05	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:05	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 15:05	
..romethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 15:05	
..1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 15:05	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 15:05	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:05	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 15:05	
Dibromomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:05	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:05	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 15:05	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 15:05	
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 15:05	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:05	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 15:05	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 15:05	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 15:05	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 15:05	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 15:05	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:05	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:05	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:05	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 15:05	
o-Xylene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 15:05	
sec-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 15:05	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 15:05	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:05	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 15:05	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 15:05	
..rachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 15:05	
..ene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 15:05	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:05	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:05	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-1-022415
Lab ID: 1500726-22

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:05	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 15:05	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 15:05	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:05	
Surrogate: 1,2-Dichloroethane-d4	*84.4 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 15:05*	
Surrogate: 4-Bromofluorobenzene	*92.0 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 15:05*	
Surrogate: Dibromofluoromethane	*86.1 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 15:05*	
Surrogate: Toluene-d8	*79.2 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 15:05*	

...tec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID EBA-2-022415
Lab ID: 1500726-23

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 15:20	
C4-C8	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 15:20	
Surrogate: 4-Bromofluorobenzene	*97.7 %*	*70 - 130*			B5B0704	02/26/2015	*02/26/15 15:20*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:38	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:38	
Surrogate: p-Terphenyl	*64.4 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 16:38*	

...tile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 13:01	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 13:01	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 13:01	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 13:01	
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:01	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:01	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:01	
1,2-Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:01	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:01	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 13:01	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 13:01	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 13:01	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:01	
...Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 13:01	
...lorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 13:01	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 13:01	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:01	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-2-022415
Lab ID: 1500726-23

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:01	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 13:01	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 13:01	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 13:01	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 13:01	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 13:01	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 13:01	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 13:01	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 13:01	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:01	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 13:01	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 13:01	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 13:01	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 13:01	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:01	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 13:01	
Dibromomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:01	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:01	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 13:01	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 13:01	
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 13:01	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:01	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 13:01	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 13:01	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 13:01	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 13:01	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 13:01	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:01	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:01	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:01	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 13:01	
o-Xylene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 13:01	
sec-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 13:01	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 13:01	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:01	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 13:01	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 13:01	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 13:01	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 13:01	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:01	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:01	

Certificate of Analysis

..ltec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-2-022415
Lab ID: 1500726-23

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:01	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 13:01	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 13:01	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:01	
Surrogate: 1,2-Dichloroethane-d4	*89.5 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 13:01*	
Surrogate: 4-Bromofluorobenzene	*96.6 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 13:01*	
Surrogate: Dibromofluoromethane	*92.2 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 13:01*	
Surrogate: Toluene-d8	*81.3 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 13:01*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-3-022415

Lab ID: 1500726-24

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:12	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:12	
Barium	**0.0006**	0.0030	**0.0004**	1	B5C0062	03/03/2015	03/04/15 11:12	J
Beryllium	ND	0.0030	**0.0002**	1	B5C0062	03/03/2015	03/04/15 11:11	
Cadmium	ND	0.0030	**0.0001**	1	B5C0062	03/03/2015	03/04/15 11:12	
Chromium	**0.0010**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:12	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:12	
Copper	**0.0027**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:11	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:12	
Molybdenum	**0.0006**	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:12	J
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:12	
Selenium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:12	
Silver	ND	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:11	
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:12	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:11	
Zinc	0.0039	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:12	J

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 15:40	
C4-C8	ND	0.05	0.05	1	B5B0704	02/26/2015	02/26/15 15:40	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*70 - 130*			B5B0704	02/26/2015	*02/26/15 15:40*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:55	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 16:55	
Surrogate: p-Terphenyl	*66.6 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 16:55*	

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 13:26	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 13:26	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 13:26	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 13:26	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-3-022415
Lab ID: 1500726-24

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:26	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:26	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 13:26	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:26	
...Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:26	
...,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:26	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 13:26	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 13:26	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 13:26	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:26	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 13:26	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 13:26	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 13:26	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:26	
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:26	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 13:26	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 13:26	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 13:26	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 13:26	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 13:26	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 13:26	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 13:26	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 13:26	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:26	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 13:26	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 13:26	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 13:26	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 13:26	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:26	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 13:26	
...romomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:26	
...lorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:26	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 13:26	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 13:26	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-3-022415

Lab ID: 1500726-24

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 13:26	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:26	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 13:26	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 13:26	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 13:26	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 13:26	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 13:26	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:26	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 13:26	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 13:26	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 13:26	
o-Xylene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 13:26	
sec-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 13:26	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 13:26	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:26	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 13:26	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 13:26	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 13:26	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 13:26	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:26	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 13:26	
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 13:26	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 13:26	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 13:26	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 13:26	
Surrogate: 1,2-Dichloroethane-d4	*89.1 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 13:26*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 13:26*	
Surrogate: Dibromofluoromethane	*93.4 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 13:26*	
Surrogate: Toluene-d8	*84.6 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 13:26*	

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QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0017 - EPA 3050B_S									
Blank (B5C0017-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.194835	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.117505	2.0			NR				J
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
...ium	ND	1.0			NR				
...r	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.187134	1.0			NR				J
LCS (B5C0017-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	44.7498	2.0	50.0000		89.5	80 - 120			
Arsenic	42.8424	1.0	50.0000		85.7	80 - 120			
Barium	47.6209	1.0	50.0000		95.2	80 - 120			
Beryllium	46.6501	1.0	50.0000		93.3	80 - 120			
Cadmium	45.3871	1.0	50.0000		90.8	80 - 120			
Chromium	48.1955	1.0	50.0000		96.4	80 - 120			
Cobalt	47.4406	1.0	50.0000		94.9	80 - 120			
Copper	45.9879	2.0	50.0000		92.0	80 - 120			
Lead	47.0156	1.0	50.0000		94.0	80 - 120			
Molybdenum	46.8850	1.0	50.0000		93.8	80 - 120			
Nickel	46.0317	1.0	50.0000		92.1	80 - 120			
Selenium	43.9176	1.0	50.0000		87.8	80 - 120			
Silver	45.8678	1.0	50.0000		91.7	80 - 120			
Thallium	45.5174	1.0	50.0000		91.0	80 - 120			
Vanadium	49.7030	1.0	50.0000		99.4	80 - 120			
Zinc	44.3905	1.0	50.0000		88.8	80 - 120			
Duplicate (B5C0017-DUP1)		Source: 1500721-03			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.57590	2.0		2.76584	NR		7.11	20	
Arsenic	1.16239	1.0		1.25094	NR		7.34	20	
Barium	68.5782	1.0		69.2316	NR		0.948	20	
Beryllium	1.19034	1.0		1.28755	NR		7.85	20	
...ium	ND	1.0		ND	NR			20	
...omium	5.52604	1.0		4.92091	NR		11.6	20	
Cobalt	2.64359	1.0		2.72528	NR		3.04	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0017 - EPA 3050B_S (continued)									
Duplicate (B5C0017-DUP1) - Continued		**Source: 1500721-03**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Copper	1.83058	2.0		2.13615	NR		15.4	20	J
Lead	12.7085	1.0		10.2060	NR		21.8	20	R
Molybdenum	ND	1.0		ND	NR			20	
Nickel	3.06809	1.0		2.90003	NR		5.63	20	
Selenium	0.561160	1.0		0.715072	NR		24.1	20	R, J
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	21.6679	1.0		21.2881	NR		1.77	20	
Zinc	36.2505	1.0		38.5159	NR		6.06	20	
Matrix Spike (B5C0017-MS1)		**Source: 1500721-03**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	111.276	2.0	125.000	2.76584	86.8	28 - 106			
Arsenic	114.090	1.0	125.000	1.25094	90.3	57 - 109			
Barium	198.153	1.0	125.000	69.2316	103	18 - 159			
Beryllium	124.877	1.0	125.000	1.28755	98.9	61 - 107			
Cadmium	114.928	1.0	125.000	ND	91.9	53 - 104			
Chromium	127.480	1.0	125.000	4.92091	98.0	53 - 121			
Cobalt	121.330	1.0	125.000	2.72528	94.9	55 - 109			
Copper	128.049	2.0	125.000	2.13615	101	58 - 124			
Lead	132.447	1.0	125.000	10.2060	97.8	35 - 129			
Molybdenum	121.026	1.0	125.000	ND	96.8	57 - 108			
Nickel	119.397	1.0	125.000	2.90003	93.2	44 - 122			
Selenium	116.007	1.0	125.000	0.715072	92.2	54 - 104			
Silver	123.073	1.0	125.000	ND	98.5	60 - 112			
Thallium	105.077	1.0	125.000	ND	84.1	50 - 103			
Vanadium	151.383	1.0	125.000	21.2881	104	54 - 123			
Zinc	155.181	1.0	125.000	38.5159	93.3	29 - 132			
Matrix Spike Dup (B5C0017-MSD1)		**Source: 1500721-03**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	103.872	2.0	125.000	2.76584	80.9	28 - 106	6.88	20	
Arsenic	105.759	1.0	125.000	1.25094	83.6	57 - 109	7.58	20	
Barium	185.528	1.0	125.000	69.2316	93.0	18 - 159	6.58	20	
Beryllium	114.992	1.0	125.000	1.28755	91.0	61 - 107	8.24	20	
Cadmium	105.364	1.0	125.000	ND	84.3	53 - 104	8.68	20	
Chromium	117.291	1.0	125.000	4.92091	89.9	53 - 121	8.33	20	
Cobalt	111.360	1.0	125.000	2.72528	86.9	55 - 109	8.57	20	
Copper	118.650	2.0	125.000	2.13615	93.2	58 - 124	7.62	20	
Lead	123.422	1.0	125.000	10.2060	90.6	35 - 129	7.05	20	
Molybdenum	112.178	1.0	125.000	ND	89.7	57 - 108	7.59	20	
Nickel	109.615	1.0	125.000	2.90003	85.4	44 - 122	8.54	20	
Selenium	107.721	1.0	125.000	0.715072	85.6	54 - 104	7.41	20	
Silver	113.482	1.0	125.000	ND	90.8	60 - 112	8.11	20	
Thallium	97.1164	1.0	125.000	ND	77.7	50 - 103	7.87	20	
Vanadium	139.655	1.0	125.000	21.2881	94.7	54 - 123	8.06	20	
Zinc	144.216	1.0	125.000	38.5159	84.6	29 - 132	7.32	20	
Batch B5C0019 - EPA 3050B_S									

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0019 - EPA 3050B_S (continued)									
Blank (B5C0019-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.188032	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.099152	2.0			NR				J
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
	0.331992	1.0			NR				J
LCS (B5C0019-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	44.5635	2.0	50.0000		89.1	80 - 120			
Arsenic	43.2809	1.0	50.0000		86.6	80 - 120			
Barium	47.5648	1.0	50.0000		95.1	80 - 120			
Beryllium	47.0059	1.0	50.0000		94.0	80 - 120			
Cadmium	45.3186	1.0	50.0000		90.6	80 - 120			
Chromium	47.9343	1.0	50.0000		95.9	80 - 120			
Cobalt	47.3165	1.0	50.0000		94.6	80 - 120			
Copper	45.7502	2.0	50.0000		91.5	80 - 120			
Lead	47.2134	1.0	50.0000		94.4	80 - 120			
Molybdenum	47.8416	1.0	50.0000		95.7	80 - 120			
Nickel	45.9913	1.0	50.0000		92.0	80 - 120			
Selenium	43.7364	1.0	50.0000		87.5	80 - 120			
Silver	45.5364	1.0	50.0000		91.1	80 - 120			
Thallium	45.4316	1.0	50.0000		90.9	80 - 120			
Vanadium	49.3364	1.0	50.0000		98.7	80 - 120			
Zinc	44.4963	1.0	50.0000		89.0	80 - 120			
Duplicate (B5C0019-DUP1)		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	1.29664	2.0		ND	NR			20	J
Arsenic	7.07382	1.0		6.42030	NR		9.69	20	
Barium	96.9094	1.0		95.6246	NR		1.33	20	
Beryllium	0.911369	1.0		0.919692	NR		0.909	20	J
Cadmium	0.996512	1.0		1.42514	NR		35.4	20	R, J
Chromium	24.7235	1.0		23.7517	NR		4.01	20	
Cobalt	6.42888	1.0		7.78246	NR		19.0	20	
Copper	26.8427	2.0		25.6932	NR		4.38	20	
	97.2430	1.0		67.5338	NR		36.1	20	R
Molybdenum	1.43154	1.0		1.64550	NR		13.9	20	
Nickel	19.4567	1.0		23.0316	NR		16.8	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0019 - EPA 3050B_S (continued)									
Duplicate (B5C0019-DUP1) - Continued		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Selenium	1.25200	1.0		0.999164	NR		22.5	20	R
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	43.2925	1.0		44.1624	NR		1.99	20	
Zinc	77.4776	1.0		88.6156	NR		13.4	20	
Matrix Spike (B5C0019-MS1)		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	87.6073	2.0	125.000	ND	70.1	28 - 106			
Arsenic	101.646	1.0	125.000	6.42030	76.2	57 - 109			
Barium	206.904	1.0	125.000	95.6246	89.0	18 - 159			
Beryllium	100.330	1.0	125.000	0.919692	79.5	61 - 107			
Cadmium	92.8208	1.0	125.000	1.42514	73.1	53 - 104			
Chromium	122.158	1.0	125.000	23.7517	78.7	53 - 121			
Cobalt	99.2188	1.0	125.000	7.78246	73.1	55 - 109			
Copper	130.615	2.0	125.000	25.6932	83.9	58 - 124			
Lead	176.041	1.0	125.000	67.5338	86.8	35 - 129			
Molybdenum	100.932	1.0	125.000	1.64550	79.4	57 - 108			
Nickel	111.470	1.0	125.000	23.0316	70.8	44 - 122			
Selenium	97.9920	1.0	125.000	0.999164	77.6	54 - 104			
Silver	104.019	1.0	125.000	ND	83.2	60 - 112			
Thallium	86.5570	1.0	125.000	ND	69.2	50 - 103			
Vanadium	149.312	1.0	125.000	44.1624	84.1	54 - 123			
Zinc	161.692	1.0	125.000	88.6156	58.5	29 - 132			
Matrix Spike Dup (B5C0019-MSD1)		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	93.5754	2.0	125.000	ND	74.9	28 - 106	6.59	20	
Arsenic	105.380	1.0	125.000	6.42030	79.2	57 - 109	3.61	20	
Barium	198.888	1.0	125.000	95.6246	82.6	18 - 159	3.95	20	
Beryllium	106.151	1.0	125.000	0.919692	84.2	61 - 107	5.64	20	
Cadmium	98.5576	1.0	125.000	1.42514	77.7	53 - 104	6.00	20	
Chromium	125.036	1.0	125.000	23.7517	81.0	53 - 121	2.33	20	
Cobalt	104.844	1.0	125.000	7.78246	77.6	55 - 109	5.51	20	
Copper	133.960	2.0	125.000	25.6932	86.6	58 - 124	2.53	20	
Lead	190.727	1.0	125.000	67.5338	98.6	35 - 129	8.01	20	
Molybdenum	104.300	1.0	125.000	1.64550	82.1	57 - 108	3.28	20	
Nickel	115.766	1.0	125.000	23.0316	74.2	44 - 122	3.78	20	
Selenium	102.930	1.0	125.000	0.999164	81.5	54 - 104	4.92	20	
Silver	108.200	1.0	125.000	ND	86.6	60 - 112	3.94	20	
Thallium	91.5931	1.0	125.000	ND	73.3	50 - 103	5.65	20	
Vanadium	150.191	1.0	125.000	44.1624	84.8	54 - 123	0.587	20	
Zinc	160.251	1.0	125.000	88.6156	57.3	29 - 132	0.895	20	
Batch B5C0062 - EPA 3010A_W									
Blank (B5C0062-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	0.010			NR				
Arsenic	ND	0.010			NR				

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Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Blank (B5C0062-BLK1) - Continued					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Barium	ND	0.0030			NR				
Beryllium	ND	0.0030			NR				
Cadmium	ND	0.0030			NR				
Chromium	9.710E-4	0.0030			NR				J
Cobalt	ND	0.0030			NR				
Copper	0.001759	0.0090			NR				J
Lead	ND	0.0050			NR				
Molybdenum	ND	0.0050			NR				
Nickel	0.002058	0.0050			NR				J
Selenium	ND	0.010			NR				
Silver	ND	0.0030			NR				
Thallium	ND	0.015			NR				
Vanadium	ND	0.0030			NR				
Zinc	0.004252	0.025			NR				J
(B5C0062-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
...mony	0.954611	0.010	1.00000		95.5	80 - 120			
Arsenic	0.881485	0.010	1.00000		88.1	80 - 120			
Barium	0.989988	0.0030	1.00000		99.0	80 - 120			
Beryllium	1.01634	0.0030	1.00000		102	80 - 120			
Cadmium	0.962915	0.0030	1.00000		96.3	80 - 120			
Chromium	0.989438	0.0030	1.00000		98.9	80 - 120			
Cobalt	0.989686	0.0030	1.00000		99.0	80 - 120			
Copper	0.973899	0.0090	1.00000		97.4	80 - 120			
Lead	0.990508	0.0050	1.00000		99.1	80 - 120			
Molybdenum	0.967244	0.0050	1.00000		96.7	80 - 120			
Nickel	0.967320	0.0050	1.00000		96.7	80 - 120			
Selenium	0.945843	0.010	1.00000		94.6	80 - 120			
Silver	0.985629	0.0030	1.00000		98.6	80 - 120			
Thallium	0.963374	0.015	1.00000		96.3	80 - 120			
Vanadium	1.02540	0.0030	1.00000		103	80 - 120			
Zinc	0.944978	0.025	1.00000		94.5	80 - 120			
Duplicate (B5C0062-DUP1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	0.010		ND	NR			20	
Arsenic	ND	0.010		ND	NR			20	
Barium	0.000519	0.0030		0.000564	NR		8.15	20	J
Beryllium	ND	0.0030		ND	NR			20	
Cadmium	ND	0.0030		ND	NR			20	
Chromium	0.000928	0.0030		0.000903	NR		2.77	20	J
Cobalt	ND	0.0030		ND	NR			20	
Copper	0.001308	0.0090		0.001309	NR		0.126	20	J
Lead	ND	0.0050		ND	NR			20	
...bdenum	ND	0.0050		0.000486	NR			20	
...l	ND	0.0050		ND	NR			20	
Selenium	ND	0.010		ND	NR			20	
Silver	ND	0.0030		0.000731	NR			20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Duplicate (B5C0062-DUP1) - Continued		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Thallium	ND	0.015		ND	NR			20	
Vanadium	ND	0.0030		ND	NR			20	
Zinc	0.004721	0.025		4.0129E-3	NR		16.2	20	J
Matrix Spike (B5C0062-MS1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.42910	0.010	2.50000	ND	97.2	71 - 129			
Arsenic	2.26662	0.010	2.50000	ND	90.7	80 - 128			
Barium	2.48027	0.0030	2.50000	0.000564	99.2	77 - 124			
Beryllium	2.55852	0.0030	2.50000	ND	102	88 - 116			
Cadmium	2.43512	0.0030	2.50000	ND	97.4	83 - 116			
Chromium	2.49292	0.0030	2.50000	0.000903	99.7	86 - 116			
Cobalt	2.48154	0.0030	2.50000	ND	99.3	83 - 117			
Copper	2.50852	0.0090	2.50000	0.001309	100	87 - 121			
Lead	2.43611	0.0050	2.50000	ND	97.4	85 - 114			
Molybdenum	2.48584	0.0050	2.50000	0.000486	99.4	81 - 117			
Nickel	2.45526	0.0050	2.50000	ND	98.2	76 - 121			
Selenium	2.40789	0.010	2.50000	ND	96.3	77 - 125			
Silver	2.49917	0.0030	2.50000	0.000731	99.9	77 - 129			
Thallium	2.44110	0.015	2.50000	ND	97.6	51 - 140			
Vanadium	2.61522	0.0030	2.50000	ND	105	86 - 120			
Zinc	2.41301	0.025	2.50000	4.0129E-3	96.4	75 - 123			
Matrix Spike Dup (B5C0062-MSD1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.43388	0.010	2.50000	ND	97.4	71 - 129	0.197	20	
Arsenic	2.27262	0.010	2.50000	ND	90.9	80 - 128	0.264	20	
Barium	2.47755	0.0030	2.50000	0.000564	99.1	77 - 124	0.110	20	
Beryllium	2.53160	0.0030	2.50000	ND	101	88 - 116	1.06	20	
Cadmium	2.43214	0.0030	2.50000	ND	97.3	83 - 116	0.123	20	
Chromium	2.49053	0.0030	2.50000	0.000903	99.6	86 - 116	0.0958	20	
Cobalt	2.47858	0.0030	2.50000	ND	99.1	83 - 117	0.120	20	
Copper	2.49966	0.0090	2.50000	0.001309	99.9	87 - 121	0.354	20	
Lead	2.42680	0.0050	2.50000	ND	97.1	85 - 114	0.383	20	
Molybdenum	2.48272	0.0050	2.50000	0.000486	99.3	81 - 117	0.125	20	
Nickel	2.45250	0.0050	2.50000	ND	98.1	76 - 121	0.113	20	
Selenium	2.41119	0.010	2.50000	ND	96.4	77 - 125	0.137	20	
Silver	2.49298	0.0030	2.50000	0.000731	99.7	77 - 129	0.248	20	
Thallium	2.45002	0.015	2.50000	ND	98.0	51 - 140	0.364	20	
Vanadium	2.61133	0.0030	2.50000	ND	104	86 - 120	0.149	20	
Zinc	2.41345	0.025	2.50000	4.0129E-3	96.4	75 - 123	0.0183	20	

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Lead by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0064 - EPA 3010A_W									
Blank (B5C0064-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Lead	ND	0.0050			NR				
LCS (B5C0064-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Lead	0.972902	0.0050	1.00000		97.3	80 - 120			
Duplicate (B5C0064-DUP1)		Source: 1500726-22			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Lead	ND	0.0050		ND	NR			20	
Matrix Spike (B5C0064-MS1)		Source:'1500726-22			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Lead	2.33765	0.0050	2.50000	ND	93.5	85 - 114			
Matrix Spike Dup (B5C0064-MSD1)		Source: 1500726-22			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Lead	2.42569	0.0050	2.50000	ND	97.0	85 - 114	3.70	20	
Batch B5C0092 - EPA 3050 Modified_S									
...k (B5C0092-BLK1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
...d	ND	1.0			NR				
Blank (B5C0092-BLK2)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Lead	ND	1.0			NR				
LCS (B5C0092-BS1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Lead	47.5473	1.0	50.0000		95.1	80 - 120			
Duplicate (B5C0092-DUP1)		Source: 1500726-11			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Lead	6.57150	1.0		7.09036	NR		7.60	20	
Duplicate (B5C0092-DUP2)		Source: 1500726-10			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Lead	11.1088	1.0		10.0916	NR		9.60	20	
Matrix Spike (B5C0092-MS1)		Source: 1500726-11			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Lead	330.693	1.0	252.525	7.09036	128	35 - 129			
Matrix Spike (B5C0092-MS2)		Source: 1500726-10			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Lead	321.481	1.0	250.000	10.0916	125	35 - 129			
Matrix Spike Dup (B5C0092-MSD1)		Source: 1500726-11			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Lead	340.686	1.0	250.000	7.09036	133	35 - 129	2.98	20	M1

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0058 - EPA 245.1/7470_W									
Blank (B5C0058-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20			NR				
LCS (B5C0058-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.6212	0.20	10.0000		106	80 - 120			
Duplicate (B5C0058-DUP1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20		ND	NR			20	
Matrix Spike (B5C0058-MS1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.4453	0.20	10.0000	ND	104	70 - 130			
Matrix Spike Dup (B5C0058-MSD1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.7496	0.20	10.0000	ND	107	70 - 130	2.87	20	
Post Spike (B5C0058-PS1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	5.27241		5.00000	-0.012331	105	85 - 115			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0024 - EPA 7471_S									
Blank (B5C0024-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0024-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.826204	0.10	0.833333		99.1	80 - 120			
Duplicate (B5C0024-DUP1)		Source: 1500721-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10		ND	NR			20	
Matrix Spike (B5C0024-MS1)		Source: 1500721-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.811945	0.10	0.833333	ND	97.4	70 - 130			
Matrix Spike Dup (B5C0024-MSD1)		Source: 1500721-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.815330	0.10	0.847458	ND	96.2	70 - 130	0.416	20	
Post Spike (B5C0024-PS1)		Source: 1500721-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.005518		5.00000E-3	0.000032	110	85 - 115			
.ch B5C0025 - EPA 7471_S									
Blank (B5C0025-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0025-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.790968	0.10	0.833333		94.9	80 - 120			
Duplicate (B5C0025-DUP1)		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.032435	0.10		0.032502	NR		0.208	20	J
Matrix Spike (B5C0025-MS1)		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.865131	0.10	0.833333	0.032502	99.9	70 - 130			
Matrix Spike Dup (B5C0025-MSD1)		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.852052	0.10	0.833333	0.032502	98.3	70 - 130	1.52	20	
Post Spike (B5C0025-PS1)		Source: 1500726-19			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.006113		5.00000E-3	0.000390	114	85 - 115			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0704 - GCVOA_W									
Blank (B5B0704-BLK1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	ND	0.05			NR				
C4-C8	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.1007*		*0.100000*		*101*	*70 - 130*			
LCS (B5B0704-BS1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	0.975000	0.05	1.00000		97.5	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1016*		*0.100000*		*102*	*70 - 130*			
LCS Dup (B5B0704-BSD1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	0.967000	0.05	1.00000		96.7	70 - 130	0.824	20	
Surrogate: 4-Bromofluorobenzene	*0.1037*		*0.100000*		*104*	*70 - 130*			
Duplicate (B5B0704-DUP1)		**Source: 1500727-05**			Prepared: 2/26/2015 Analyzed: 2/26/2015				
Gasoline Range Organics	0.268000	0.05		0.269000	NR		0.372	20	
Surrogate: 4-Bromofluorobenzene	*0.1005*		*0.100000*		*100*	*70 - 130*			
Batch B5B0735 - GCVOA_S									
Blank (B5B0735-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1870*		*0.200000*		*93.5*	*33 - 151*			
LCS (B5B0735-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	4.66300	1.0	5.00000		93.3	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1940*		*0.200000*		*97.0*	*33 - 151*			
Duplicate (B5B0735-DUP1)		**Source: 1500725-15**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.1918*		*0.200000*		*95.9*	*33 - 151*			
Matrix Spike (B5B0735-MS1)		**Source: 1500725-15**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	4.16800	1.0	5.00000	ND	83.4	33 - 119			
Surrogate: 4-Bromofluorobenzene	*0.2033*		*0.200000*		*102*	*33 - 151*			
Matrix Spike Dup (B5B0735-MSD1)		**Source: 1500725-15**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	5.00600	1.0	5.00000	ND	100	33 - 119	18.3	20	
Surrogate: 4-Bromofluorobenzene	*0.2106*		*0.200000*		*105*	*33 - 151*			
Batch B5B0754 - GCVOA_S									
Blank (B5B0754-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1845*		*0.200000*		*92.3*	*37 - 153*			

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Report To : Anne Perez/Kristy Edblad
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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0754 - GCVOA_S (continued)									
LCS (B5B0754-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	4.56300	1.0	5.00000		91.3	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1905*		*0.200000*		*95.2*	*37 - 153*			
Duplicate (B5B0754-DUP1)		**Source: 1500726-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.1916*		*0.200000*		*95.8*	*37 - 153*			
Matrix Spike (B5B0754-MS1)		**Source: 1500726-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	4.58100	1.0	5.00000	ND	91.6	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1993*		*0.200000*		*99.6*	*37 - 153*			
Matrix Spike Dup (B5B0754-MSD1)		**Source: 1500726-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	4.42900	1.0	5.00000	ND	88.6	20 - 130	3.37	20	
Surrogate: 4-Bromofluorobenzene	*0.2003*		*0.200000*		*100*	*37 - 153*			
...ch B5B0755 - GCVOA_S									
Blank (B5B0755-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1858*		*0.200000*		*92.9*	*37 - 153*			
LCS (B5B0755-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	4.60200	1.0	5.00000		92.0	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1937*		*0.200000*		*96.9*	*37 - 153*			
Duplicate (B5B0755-DUP1)		**Source: 1500726-16**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2025*		*0.200000*		*101*	*37 - 153*			
Matrix Spike (B5B0755-MS1)		**Source: 1500726-16**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	4.18200	1.0	5.00000	ND	83.6	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1985*		*0.200000*		*99.2*	*37 - 153*			
Matrix Spike Dup (B5B0755-MSD1)		**Source: 1500726-16**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	5.56800	1.0	5.00000	ND	111	20 - 130	28.4	20	R
Surrogate: 4-Bromofluorobenzene	*0.1993*		*0.200000*		*99.6*	*37 - 153*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0726 - GCSEMI_DRO_LL_S									
Blank (B5B0726-BLK1)					Prepared: 2/26/2015 Analyzed: 2/27/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.033*		*2.66667*		*76.2*	*40 - 112*			
LCS (B5B0726-BS1)					Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	31.5823	1.0	33.3333		94.7	51 - 114			
Surrogate: p-Terphenyl	*1.885*		*2.66667*		*70.7*	*40 - 112*			
Duplicate (B5B0726-DUP1)		Source: 1500725-14			Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	20.8140	1.0		13.6287	NR		41.7	20	R2
Surrogate: p-Terphenyl	*2.483*		*2.66667*		*93.1*	*40 - 112*			
Matrix Spike (B5B0726-MS1)		Source: 1500725-14			Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	40.7587	1.0	33.3333	13.6287	81.4	8 - 121			
Surrogate: p-Terphenyl	*1.929*		*2.66667*		*72.3*	*40 - 112*			
Matrix Spike Dup (B5B0726-MSD1)		Source: 1500725-14			Prepared: 2/26/2015 Analyzed: 2/27/2015				
DRO	46.2220	1.0	33.3333	13.6287	97.8	8 - 121	12.6	20	
Surrogate: p-Terphenyl	*1.662*		*2.66667*		*62.3*	*40 - 112*			
Batch B5B0739 - GCSEMI_DRO_LL_S									
Blank (B5B0739-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.163*		*2.66667*		*81.1*	*26 - 123*			
LCS (B5B0739-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
DRO	29.1810	1.0	33.3333		87.5	47 - 127			
Surrogate: p-Terphenyl	*2.362*		*2.66667*		*88.6*	*26 - 123*			
Duplicate (B5B0739-DUP1)		Source: 1500726-10			Prepared: 2/27/2015 Analyzed: 2/27/2015				
DRO	4.74067	1.0		6.58400	NR		32.6	20	R2
Surrogate: p-Terphenyl	*2.410*		*2.66667*		*90.4*	*26 - 123*			
Matrix Spike (B5B0739-MS1)		Source: 1500726-11			Prepared: 2/27/2015 Analyzed: 2/27/2015				
DRO	22.8950	1.0	33.3333	6.01200	50.6	16 - 123			
Surrogate: p-Terphenyl	*2.018*		*2.66667*		*75.7*	*26 - 123*			
Matrix Spike Dup (B5B0739-MSD1)		Source: 1500726-11			Prepared: 2/27/2015 Analyzed: 2/27/2015				
DRO	29.8497	1.0	33.3333	6.01200	71.5	16 - 123	26.4	20	R2
Surrogate: p-Terphenyl	*2.691*		*2.66667*		*101*	*26 - 123*			
Batch B5B0751 - GCSEMI_DRO_LL_S									

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0751 - GCSEMI_DRO_LL_S (continued)									
Blank (B5B0751-BLK1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.193*		*2.66667*		*44.7*	*26 - 123*			
LCS (B5B0751-BS1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	18.9330	1.0	33.3333		56.8	47 - 127			
Surrogate: p-Terphenyl	*1.208*		*2.66667*		*45.3*	*26 - 123*			
Duplicate (B5B0751-DUP1)		**Source: 1500744-08**			Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	ND	1.0		ND	NR			20	
Surrogate: p-Terphenyl	*1.714*		*2.66667*		*64.3*	*26 - 123*			
Matrix Spike (B5B0751-MS1)		**Source: 1500744-08**			Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	15.4510	1.0	33.3333	ND	46.4	16 - 123			
zate: p-Terphenyl	*1.321*		*2.66667*		*49.5*	*26 - 123*			
Matrix Spike Dup (B5B0751-MSD1)		**Source: 1500744-08**			Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	17.1530	1.0	33.3333	ND	51.5	16 - 123	10.4	20	
Surrogate: p-Terphenyl	*1.686*		*2.66667*		*63.2*	*26 - 123*			
Batch B5B0752 - GCSEMI_DRO_W									
Blank (B5B0752-BLK1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
C9-C22	ND	0.05			NR				
C23-C32	ND	0.05			NR				
Surrogate: p-Terphenyl	*0.04469*		*8.00000E-2*		*55.9*	*20 - 141*			
LCS (B5B0752-BS1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	0.590440	0.05	1.00000		59.0	29 - 135			
Surrogate: p-Terphenyl	*0.04973*		*8.00000E-2*		*62.2*	*20 - 141*			
LCS Dup (B5B0752-BSD1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	0.654910	0.05	1.00000		65.5	29 - 135	10.4	20	
Surrogate: p-Terphenyl	*0.04453*		*8.00000E-2*		*55.7*	*20 - 141*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W									
Blank (B5B0728-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethyl Acetate	ND	10			NR				
Ethyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
Blank (B5B0728-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
...-Butanol	ND	10			NR				
...utylbenzene	ND	0.50			NR				
...rachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*21.41*		*25.0000*		*85.6*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*25.04*		*25.0000*		*100*	*65 - 132*			
Surrogate: Dibromofluoromethane	*22.76*		*25.0000*		*91.0*	*55 - 138*			
Surrogate: Toluene-d8	*21.13*		*25.0000*		*84.5*	*60 - 120*			
LCS (B5B0728-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.8300	0.50	20.0000		104	61 - 136			
Benzene	41.0000	0.50	40.0000		102	72 - 127			
Chlorobenzene	20.9800	0.50	20.0000		105	78 - 125			
MTBE	17.3100	0.50	20.0000		86.6	60 - 132			
Toluene	44.0400	0.50	40.0000		110	59 - 140			
Trichloroethene	22.0600	0.50	20.0000		110	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	*18.99*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.35*		*25.0000*		*97.4*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.83*		*25.0000*		*79.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.47*		*25.0000*		*81.9*	*60 - 120*			
LCS Dup (B5B0728-BSD1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.0700	0.50	20.0000		100	61 - 136	3.72	20	
...ene	41.1200	0.50	40.0000		103	72 - 127	0.292	20	
...orobenzene	20.7400	0.50	20.0000		104	78 - 125	1.15	20	
MTBE	17.2100	0.50	20.0000		86.0	60 - 132	0.579	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
LCS Dup (B5B0728-BSD1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Toluene	42.6000	0.50	40.0000		106	59 - 140	3.32	20	
Trichloroethene	22.4700	0.50	20.0000		112	67 - 130	1.84	20	
Surrogate: 1,2-Dichloroethane-d4	*19.01*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.16*		*25.0000*		*96.6*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.35*		*25.0000*		*77.4*	*55 - 138*			
Surrogate: Toluene-d8	*20.61*		*25.0000*		*82.4*	*60 - 120*			
Duplicate (B5B0728-DUP1)		**Source: 1500725-19**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
Trichloroethene	ND	0.50		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*21.88*		*25.0000*		*87.5*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.37*		*25.0000*		*97.5*	*65 - 132*			
Surrogate: Dibromofluoromethane	*23.32*		*25.0000*		*93.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.74*		*25.0000*		*83.0*	*60 - 120*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0719 - MSVOA_S									
Blank (B5B0719-BLK1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
...ichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
... Ether	ND	50			NR				
...yl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0719 - MSVOA_S (continued)									
Blank (B5B0719-BLK1) - Continued					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*51.43*		*50.0000*		*103*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*48.93*		*50.0000*		*97.9*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.48*		*50.0000*		*99.0*	*26 - 178*			
Surrogate: Toluene-d8	*47.41*		*50.0000*		*94.8*	*31 - 166*			
LCS (B5B0719-BS1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1-Dichloroethene	48.7500	5.0	50.0000		97.5	60 - 130			
Benzene	99.3300	5.0	100.000		99.3	73 - 116			
Chlorobenzene	50.2500	5.0	50.0000		100	82 - 114			
MTBE	54.1900	5.0	50.0000		108	61 - 124			
Toluene	100.770	5.0	100.000		101	75 - 119			
Trichloroethene	52.1200	5.0	50.0000		104	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*43.02*		*50.0000*		*86.0*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.96*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*44.57*		*50.0000*		*89.1*	*26 - 178*			
Surrogate: Toluene-d8	*50.04*		*50.0000*		*100*	*31 - 166*			
LCS Dup (B5B0719-BSD1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1-Dichloroethene	49.6000	5.0	50.0000		99.2	60 - 130	1.73	20	
Benzene	102.150	5.0	100.000		102	73 - 116	2.80	20	
Chlorobenzene	50.4400	5.0	50.0000		101	82 - 114	0.377	20	
MTBE	57.1300	5.0	50.0000		114	61 - 124	5.28	20	
Toluene	102.970	5.0	100.000		103	75 - 119	2.16	20	

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0719 - MSVOA_S (continued)									
LCS Dup (B5B0719-BSD1) - Continued					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Trichloroethene	53.0300	5.0	50.0000		106	73 - 119	1.73	20	
Surrogate: 1,2-Dichloroethane-d4	*45.46*		*50.0000*		*90.9*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.19*		*50.0000*		*106*	*20 - 173*			
Surrogate: Dibromofluoromethane	*46.23*		*50.0000*		*92.5*	*26 - 178*			
Surrogate: Toluene-d8	*52.01*		*50.0000*		*104*	*31 - 166*			
Batch B5B0720 - MSVOA_S									
Blank (B5B0720-BLK1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
...ichloropropene	ND	5.0			NR				
...-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
...oform	ND	5.0			NR				
...omethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0720 - MSVOA_S (continued)									
Blank (B5B0720-BLK1) - Continued					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*46.59*		*50.0000*		*93.2*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*47.88*		*50.0000*		*95.8*	*20 - 173*			
Surrogate: Dibromofluoromethane	*46.57*		*50.0000*		*93.1*	*26 - 178*			
Surrogate: Toluene-d8	*51.21*		*50.0000*		*102*	*31 - 166*			
LCS (B5B0720-BS1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1-Dichloroethene	58.4700	5.0	50.0000		117	60 - 130			
Benzene	94.8700	5.0	100.000		94.9	73 - 116			
Chlorobenzene	48.0600	5.0	50.0000		96.1	82 - 114			
MTBE	51.8400	5.0	50.0000		104	61 - 124			
Toluene	95.0000	5.0	100.000		95.0	75 - 119			
Trichloroethene	49.2500	5.0	50.0000		98.5	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*46.44*		*50.0000*		*92.9*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.51*		*50.0000*		*107*	*20 - 173*			
Surrogate: Dibromofluoromethane	*46.92*		*50.0000*		*93.8*	*26 - 178*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5E0720 - MSVOA_S (continued)									
LCS (B5B0720-BS1) - Continued					Prepared: 2/26/2015 Analyzed: 2/26/2015				
Surrogate: Toluene-d8	*52.38*		*50.0000*		*105*	*31 - 166*			
LCS Dup (B5B0720-BSD1)					Prepared: 2/26/2015 Analyzed: 2/26/2015				
1,1-Dichloroethene	61.7800	5.0	50.0000		124	60 - 130	5.51	20	
Benzene	97.8700	5.0	100.000		97.9	73 - 116	3.11	20	
Chlorobenzene	48.1200	5.0	50.0000		96.2	82 - 114	0.125	20	
MTBE	57.2800	5.0	50.0000		115	61 - 124	9.97	20	
Toluene	96.6100	5.0	100.000		96.6	75 - 119	1.68	20	
Trichloroethene	51.7600	5.0	50.0000		104	73 - 119	4.97	20	
Surrogate: 1,2-Dichloroethane-d4	*48.78*		*50.0000*		*97.6*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.83*		*50.0000*		*108*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.75*		*50.0000*		*99.5*	*26 - 178*			
Surrogate: Toluene-d8	*52.49*		*50.0000*		*105*	*31 - 166*			
Batch B5B0729 - MSVOA_S									
k (B5B0729-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
...mochloromethane	ND	5.0			NR				
...odichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0729 - MSVOA_S (continued)									
Blank (B5B0729-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*51.75*		*50.0000*		*104*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*46.91*		*50.0000*		*93.8*	*20 - 173*			
Surrogate: Dibromofluoromethane	*50.47*		*50.0000*		*101*	*26 - 178*			
Surrogate: Toluene-d8	*48.86*		*50.0000*		*97.7*	*31 - 166*			
LCS (B5B0729-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	63.1800	5.0	50.0000		126	60 - 130			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0729 - MSVOA_S (continued)									
LCS (B5B0729-BS1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Benzene	102.530	5.0	100.000		103	73 - 116			
Chlorobenzene	49.3500	5.0	50.0000		98.7	82 - 114			
MTBE	56.4300	5.0	50.0000		113	61 - 124			
Toluene	99.8100	5.0	100.000		99.8	75 - 119			
Trichloroethene	54.2300	5.0	50.0000		108	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*49.31*		*50.0000*		*98.6*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.09*		*50.0000*		*106*	*20 - 173*			
Surrogate: Dibromofluoromethane	*51.01*		*50.0000*		*102*	*26 - 178*			
Surrogate: Toluene-d8	*50.96*		*50.0000*		*102*	*31 - 166*			
Duplicate (B5B0729-DUP1)		**Source: 1500753-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	ND	5.0		ND	NR			20	
Benzene	ND	5.0		ND	NR			20	
Chlorobenzene	ND	5.0		ND	NR			20	
MTBE	ND	5.0		ND	NR			20	
...ne	ND	5.0		ND	NR			20	
...chloroethene	ND	5.0		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*47.12*		*50.0000*		*94.2*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*48.66*		*50.0000*		*97.3*	*20 - 173*			
Surrogate: Dibromofluoromethane	*48.57*		*50.0000*		*97.1*	*26 - 178*			
Surrogate: Toluene-d8	*50.30*		*50.0000*		*101*	*31 - 166*			
Matrix Spike (B5B0729-MS1)		**Source: 1500753-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	54.7100	5.0	50.0000	ND	109	42 - 130			
Benzene	100.770	5.0	100.000	ND	101	51 - 117			
Chlorobenzene	45.5600	5.0	50.0000	ND	91.1	46 - 123			
MTBE	55.1900	5.0	50.0000	ND	110	46 - 125			
Toluene	97.1100	5.0	100.000	ND	97.1	49 - 124			
Trichloroethene	54.8200	5.0	50.0000	ND	110	38 - 139			
Surrogate: 1,2-Dichloroethane-d4	*49.90*		*50.0000*		*99.8*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.48*		*50.0000*		*103*	*20 - 173*			
Surrogate: Dibromofluoromethane	*50.37*		*50.0000*		*101*	*26 - 178*			
Surrogate: Toluene-d8	*51.78*		*50.0000*		*104*	*31 - 166*			
Matrix Spike Dup (B5B0729-MSD1)		**Source: 1500753-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	48.1500	5.0	50.0000	ND	96.3	42 - 130	12.8	20	
Benzene	95.5300	5.0	100.000	ND	95.5	51 - 117	5.34	20	
Chlorobenzene	45.0100	5.0	50.0000	ND	90.0	46 - 123	1.21	20	
MTBE	52.6800	5.0	50.0000	ND	105	46 - 125	4.65	20	
Toluene	94.7100	5.0	100.000	ND	94.7	49 - 124	2.50	20	
Trichloroethene	50.9200	5.0	50.0000	ND	102	38 - 139	7.38	20	
Surrogate: 1,2-Dichloroethane-d4	*47.86*		*50.0000*		*95.7*	*20 - 189*			
...gate: 4-Bromofluorobenzene	*53.18*		*50.0000*		*106*	*20 - 173*			
...gate: Dibromofluoromethane	*46.81*		*50.0000*		*93.6*	*26 - 178*			
Surrogate: Toluene-d8	*52.50*		*50.0000*		*105*	*31 - 166*			

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Notes and Definitions

S4	Surrogate was diluted out.
R2	RPD value outside acceptance criteria due to possible matrix interference.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
D5	Sample diluted due to failing internal standard in the original run.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

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Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Number of Pages	5
Date Received	02/26/2015
Date Reported	03/06/2015

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76121	02/26/2015	ATL

Project ID: 1500726
Project Name: PO# SC09376

Enclosed please find results of analyses of 1 soil and 1 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
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Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attention: Rachelle Arada

Project ID: 1500726
Date Received 02/26/2015
Date Reported 03/06/2015

Job Number	Order Date	Client
76121	02/26/2015	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 2 samples with the following specification on 02/26/2015.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76121.02	1500726-24	02/24/2015	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
8151A	03/05/2015	2	Normal	ug/L

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76121.01	1500726-13	02/24/2015	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8151A)	03/05/2015	2	Normal	ug/Kg

The samples were analyzed as specified on the enclosed chain of custody. Analytical non-conformances have been noted on the report.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 2

Project ID: 1500726
Project Name: PO# SC09376

AETL Job Number	Submitted	Client
76121	02/26/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215

Our Lab I.D.			Method Blank	76121.01			
Client Sample I.D.				1500726-13			
Date Sampled				02/24/2015			
Date Prepared			03/02/2015	03/02/2015			
Preparation Method			3550B	3550B			
Date Analyzed			03/02/2015	03/02/2015			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	20	20	ND	ND			
Bentazon	10	10	ND	ND			
Chloramben	10	10	ND	ND			
2,4-D	10	10	ND	ND			
Dalapon	20	20	ND	ND			
2,4-DB	10	10	ND	ND			
DCPA diacid	20	20	ND	ND			
Dicamba	10	10	ND	ND			
3,5-Dichlorobenzoic acid	10	10	ND	ND			
Dichloroprop	10	10	ND	ND			
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND			
MCPA	2000	2000	ND	ND			
MCPP	2000	2000	ND	ND			
4-Nitrophenol	10	10	ND	ND			
Pentachlorophenol (PCP)	10	10	ND	ND			
Picloram	10	10	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND			
2,4,5-TP	10	10	ND	ND			
Our Lab I.D.			Method Blank	76121.01			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		64.4	55.5			

American Environmental Testing Laboratory Inc.

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 3

Project ID: 1500726
Project Name: PO# SC09376

AETL Job Number	Submitted	Client
76121	02/26/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315

Our Lab I.D.			Method Blank	76121.02			
Client Sample I.D.				1500726-24			
Date Sampled				02/24/2015			
Date Prepared			03/03/2015	03/03/2015			
Preparation Method			3510C	3510C			
Date Analyzed			03/04/2015	03/04/2015			
Matrix			Aqueous	Aqueous			
Units			ug/L	ug/L			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	1.0	1.0	ND	ND			
Bentazon	0.5	0.5	ND	ND			
Chloramben	0.5	0.5	ND	ND			
2,4-D	0.5	0.5	ND	ND			
Dalapon	1.0	1.0	ND	ND			
2,4-DB	0.5	0.5	ND	ND			
DCPA diacid	1.0	1.0	ND	ND			
Dicamba	0.5	0.5	ND	ND			
3,5-Dichlorobenzoic acid	0.5	0.5	ND	ND			
Dichloroprop	0.5	0.5	ND	ND			
Dinoseb	0.5	0.5	ND	ND			
MCPA	100	100	ND	ND			
MCPP	100	100	ND	ND			
4-Nitrophenol	0.5	0.5	ND	ND			
Pentachlorophenol (PCP)	0.5	0.5	ND	ND			
Picloram	0.5	0.5	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.5	0.5	ND	ND			
2,4,5-TP	0.5	0.5	ND	ND			
Our Lab I.D.			Method Blank	76121.02			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		65.6	61.5			

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 4

Project ID: 1500726
Project Name: PO# SC09376

AETL Job Number	Submitted	Client
76121	02/26/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315; LCS: Clean Water; LCS Prepared: 03/03/2015; LCS Analyzed: 03/04/2015; Units: ug/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	72.0	144	50.0	72.5	145	<1	50-150	<50	
Dalapon	50.0	54.5	109	50.0	36.3	72.6	40.1	50-150	<50	
2,4-DB	50.0	43.1	86.2	50.0	26.9	53.8	46.3	50-150	<50	
Dicamba	50.0	56.5	113	50.0	43.4	86.8	26.2	50-150	<50	
Dinoseb	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<50	
MCPA	5,000	4,280	85.6	5,000	5,850	117	31.0	50-150	<50	
MCPP	5,000	5,900	118	5,000	2,540	50.8	79.6	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	42.8	85.6	50.0	29.9	59.8	35.5	50-150	<50	
2,4,5-TP	50.0	27.0	53.9	50.0	46.4	92.8	53.0	50-150	<50	
Surrogates										
DCAA	100	65.6	65.6	100	57.9	57.9	12.5	50-150	<20	

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 5

Project ID: 1500726
Project Name: PO# SC09376

AETL Job Number	Submitted	Client
76121	02/26/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215; Dup or Spiked Sample: B030215; LCS: Clean Sand; LCS Prepared: 03/02/2015; LCS Analyzed: 03/02/2015; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	29.3	58.6	50.0	26.0	52.0	11.9	50-150	<40	
Dalapon	50.0	57.0	114	50.0	34.4	68.8	49.5	50-150	<40	
2,4-DB	50.0	35.7	71.4	50.0	33.8	67.6	5.5	50-150	<40	
Dicamba	50.0	30.1	60.2	50.0	27.2	54.4	10.1	50-150	<40	
Dichloroprop	50.0	28.3	56.6	50.0	28.7	57.4	1.4	50-150	<40	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	26.7	53.4	50.0	31.0	62.0	14.9	50-150	<40	
MCPA	5,000	5,000	100	5,000	2,550	51.0	64.9	50-150	<40	
MCPP	5,000	3,680	73.6	5,000	3,610	72.2	1.9	50-150	<40	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	29.2	58.4	50.0	33.6	67.2	14.0	50-150	<40	
2,4,5-TP	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<40	
Surrogates										
DCAA	100	76.4	76.4	100	75.4	75.4	1.3	50-150	<40	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500726 76121

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09376- STANDARD TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500726-13 / 1278-149-0		Soil	02/24/15 15:25	76121.01
8151_SUB	03/05/15 17:00	03/10/15 15:25		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500726-24 / EBA-3-022415		Water	02/24/15 16:20	76121.02
8151_SUB	03/05/15 17:00	03/03/15 16:20		
[Chlorinated Herbicides]				
Amber Unpres - 1000mL				

Released By	Date	Received By	Date
	02/26/15 1206		02/26/15 1206
Released By	Date	Received By	Date
	02/26/15 1405		02/26/15 1405

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 1 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A	
1278-101-0	02.24.15	1210	SO	multi	multi	4	X	X	X						
1278-102-0		1156													
1278-103-0		1108													
1278-104-0		1057													
1278-105-0		1048													
1278-106-0		1028													
1278-107-0		1014													
1278-108-0		0958													
1278-109-0		0920													
1278-110-0		1228													
1278-110-1.5	↓	1235	↓	↓	↓	↓	↓	↓	↓						

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts *Shipment Method:* Lab Pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a)	*Relinquished by:*	Steph Annie Roberts	Stantec	02.24.15	
1(b)	*Received by:*	Edward Rodriguez	ATL	2-25-15	1550
2(a)	*Relinquished by:*	Edward Rodriguez	ATL	2-25-15	1810
2(b)	*Received by:*	FED Ex	AT	2/25/15	1810
3(a)	*Relinquished by:*				
3(b)	*Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 2 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

Sample No./ Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides- 8151A
1278-110-3.5	02.24.15	1252	SO	Multi	Multi	4	X	X	X					
1278-149-0		1525				5	X	X			X			X
1278-149-1.5		1533				4								
1278-149-3.5		1552												
1278-150-0		1446												
1278-150-1.5		1452												
1278-150-3		1516												
1278-151-0		1400												
1278-151-1.5		1410												
1278-151-3.5	↓	1431	↓	↓	↓	↓	↓	↓			↓			

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts *Shipment Method:* lab pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a)	*Relinquished by:*	Steph/Annie Roberts	Stantec	02.24.15	
1(b)	*Received by:*	Edward Rodriguez	ATL	2-25-15	1350
2(a)	*Relinquished by:*	Edward Rodriguez	ATL	2-25-15	1810
2(b)	*Received by:*	FEDEX	ATL	2/25/15	1810
3(a)	*Relinquished by:*				
3(b)	*Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 3 of 3

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1266

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

REMARKS/ PRECAUTIONS

TAT
☐ Normal
☐ Rush
☒ Other: 5 days

REPORTING REQUIREMENTS
☐ MB & SURGS
☐ Dup/MS/MSD
☐ Raw Data
☐ CLP Rpt
☒ EDD
☐ Other

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8051A	Asbestos - PLM	Chlorinated Herbicides- 8151A
EBA-1-022415	02.24.15	0940	W	multi	multi		X	X	X					
EBA-2-022415	↓	1320	W	↓	↓		X	X	X					
EBA-3-022415	↓	1620	W	↓	↓	9	X	X			X			X

Possible Hazard Identification
☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts *Shipment Method:* lab pick up *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a)	*Relinquished by:* S Roberts	Steph/Annie Roberts	Stantec	02.24.15	
1(b)	*Received by:*	Edward Rodriguez	ATL	2-25-15	1350
2(a)	*Relinquished by:*	Edward Rodriguez	ATL	2-25-15	1810
2(b)	*Received by:*	[illegible]	ATL	2/25/15	1810
3(a)	*Relinquished by:*				
3(b)	*Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 1 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

Sample No./ Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides- 8151A
1278-101-0	02.24.15	1210	SO	multi	multi	4	X	X	X					
1278-102-0		1156												
1278-103-0		1108												
1278-104-0		1057												
1278-105-0		1048												
1278-106-0		1028												
1278-107-0		1014												
1278-108-0		0958												
1278-109-0		0920												
1278-110-0		1228												
1278-110-1.5	↓	1235	↓	↓	↓	↓	↓	↓	↓					

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts Shipment Method: Lab pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a)	Relinquished by:	StephAnnie Roberts	Stantec	02.24.15	
1(b)	Received by:	Edward Rodriguez	ATL	2-25-15	1550
2(a)	Relinquished by:				
2(b)	Received by:				
3(a)	Relinquished by:				
3(b)	Received by:				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 2 of 3

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1266

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other 5 days

REPORTING REQUIREMENTS: ☐ MS & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A	
1278-110-3.5	02.24.15	1252	SO	Multi	Multi	4	X	X	X						HOLD
1278-149-0		1525				5	X	X			X			X	
1278-149-1.5		1533				4									
1278-149-3.5		1552													HOLD
1278-150-0		1446													
1278-150-1.5		1452													
1278-150-3		1516													
1278-151-0		1400													
1278-151-1.5		1410													
1278-151-3.5	↓	1431	↓	↓	↓	↓	↓	↓			↓				HOLD

Possible Hazard Identification
☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts Shipment Method: lab pickup Airbill Number:

Signature	Print Name	Company	Date	Time
1(a) Relinquished by:	Stephanie Roberts	Stantec	02.24.15	
1(b) Received by:	Edward Rodriguez	ATL	2-25-15	1550
2(a) Relinquished by:				
2(b) Received by:				
3(a) Relinquished by:				
3(b) Received by:				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 3 of 3

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1266

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A	
EBA-1-022415	02.24.15	0940	W	multi	multi		X	X	X						
EBA-2-022415	↓	1320	W	↓			X	X	X						
EBA-3-022415	↓	1620	W	↓	↓	9	X	X			X			X	

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT
- ☐ Normal
- ☐ Rush
- ☒ Other: 5 days

REPORTING REQUIREMENTS
- ☐ MB & SURGS
- ☐ Dup/MS/MSD
- ☐ Raw Data
- ☐ CLP Rpt
- ☒ EDD
- ☐ Other

Possible Hazard Identification
☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts *Shipment Method:* lab pick up *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a)	*Relinquished by:* S Roberts	Stephannie Roberts	Stantec	02.24.15	
1(b)	*Received by:*	Edward Rodriguez	ATL	2-25-15	1550
2(a)	*Relinquished by:*				
2(b)	*Received by:*				
3(a)	*Relinquished by:*				
3(b)	*Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500726

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Report To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone: (805) 230-1266
Fax: (805) 230-1277

Invoice To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone :(805) 230-1266
Fax: (805) 230-1277

Date Due:	03/04/15 17:00 (5 day TAT)	Date Received:	02/25/15 13:50
Received By:	Ron Diwa	Date Logged In:	02/25/15 15:27
Logged In By:	Carmen Aguila	Shipped by:	ATL

Please review the checklist below. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues. If you have any questions or further instructions, please contact your Project Manager at (526) 989-4045.

Sample(s) received on ice?	Yes	☐	No	☑
Sample(s) received on blue ice?	Yes	☑	No	☐
Cooler temperature within acceptance limit?	Yes	☑	No	☐
Shipping container received in good condition?	Not Applicable			
Custody seals present on shipping container?	Yes	☐	No	☑
Custody seals intact on shipping container?	Not Applicable			
Custody seals present on sample bottles?	Yes	☐	No	☑
Custody seals intact on sample bottles?	Not Applicable			
Chain of Custody (COC) present?	Yes	☑	No	☐
Sampler name present in COC?	Yes	☑	No	☐
COC signed when relinquished and received?	Yes	☑	No	☐
COC agrees with sample labels?	Yes	☐	No	☑
Samples in proper container/bottle?	Yes	☑	No	☐
Sample containers intact?	Yes	☑	No	☐
Sufficient sample amount for indicated tests?	Yes	☑	No	☐
All samples received within holding time?	Yes	☑	No	☐
Water for VOC -- Were VOA vials submitted?	Yes	☑	No	☐
Water samples submitted?	Yes	☑	No	☐
VOA vials for VOC meet headspace criteria?	Yes	☑	No	☐
Water samples meet preservation criteria?	Yes	☑	No	☐

cooler#1	Temp: 5.0 °C
cooler#2	Temp: 5.2 °C

Sample Receipt Comments:

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500726

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Water sample for metals- filter and preserve per client's instruction.
All sample containers for EBA-3-022415 indicate time as 1624. One 32oz amber glass for EBA-3-022415 labeled as EBA-1-022415 with time of collection @ 1624
One vial with NaHSO4 for 1278-102-0 labeled as 1278-106-0, taken on the same ziplock bag with the other samples labeled 1278-102-0 @1156.

ADVANCED TECHNOLOGY
LABORATORIES

March 06, 2015

Anne Perez/Kristy Edblad
Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Tel: (805) 230-1266
Fax:(805) 230-1277

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500744
Client Reference : 185832023, 200.0003, Caltrans 07A3322-23

Enclosed are the results for sample(s) received on February 26, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

Certificate of Analysis

.tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1278-129-0	1500744-01	Soil	2/25/15 7:50	2/26/15 14:20
1278-129-1.5	1500744-02	Soil	2/25/15 8:00	2/26/15 14:20
1278-130-0	1500744-04	Soil	2/25/15 8:30	2/26/15 14:20
1278-130-1.5	1500744-05	Soil	2/25/15 8:40	2/26/15 14:20
1278-135-0	1500744-07	Soil	2/25/15 9:05	2/26/15 14:20
1278-135-1.5	1500744-08	Soil	2/25/15 9:15	2/26/15 14:20
EBB-1-022515	1500744-10	Aqueous	2/25/15 10:10	2/26/15 14:20
1278-136-0	1500744-11	Soil	2/25/15 10:40	2/26/15 14:20
1278-136-1.5	1500744-12	Soil	2/25/15 10:50	2/26/15 14:20
1278-136-3.5	1500744-13	Soil	2/25/15 11:00	2/26/15 14:20
1278-137-0	1500744-14	Soil	2/25/15 11:20	2/26/15 14:20
1278-137-1.5	1500744-15	Soil	2/25/15 11:30	2/26/15 14:20
EBB-2-022515	1500744-16	Aqueous	2/25/15 11:45	2/26/15 14:20
1278-138-0	1500744-17	Soil	2/25/15 11:55	2/26/15 14:20
1278-138-1.5	1500744-18	Soil	2/25/15 12:00	2/26/15 14:20
1278-138-3.5	1500744-19	Soil	2/25/15 12:10	2/26/15 14:20
1278-139-0	1500744-20	Soil	2/25/15 12:20	2/26/15 14:20
1278-139-1.5	1500744-21	Soil	2/25/15 12:35	2/26/15 14:20
1278-123-0	1500744-22	Soil	2/25/15 14:00	2/26/15 14:20
1278-122-0	1500744-23	Soil	2/25/15 14:20	2/26/15 14:20
EBB-3-022515	1500744-24	Aqueous	2/25/15 15:00	2/26/15 14:20

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

CASE NARRATIVE

The samples for EPA 8151 (Chlorinated Herbicides) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

EPA 8260 analysis was performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Certificate of Analysis

.itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500744-10	EBB-1-022515	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:09	
1500744-16	EBB-2-022515	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:11	
1500744-24	EBB-3-022515	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:14	

Mercury by AA (Cold Vapor) EPA 7471A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500744-01	1278-129-0	0.02	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:04	J
1500744-02	1278-129-1.5	0.01	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:15	J
1500744-04	1278-130-0	0.04	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:21	J
1500744-05	1278-130-1.5	0.01	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:23	J
1500744-07	1278-135-0	0.02	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:25	J
1500744-08	1278-135-1.5	ND	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:27	
1500744-11	1278-136-0	0.05	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:29	J
1500744-12	1278-136-1.5	0.02	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:31	J
1500744-13	1278-136-3.5	0.02	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:33	J
1500744-14	1278-137-0	0.04	mg/kg	0.10	0.009	1	B5C0026	03/03/2015	03/03/15 18:35	J
1500744-15	1278-137-1.5	0.01	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 18:45	J
1500744-17	1278-138-0	0.03	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 18:55	J
1500744-18	1278-138-1.5	0.02	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 18:57	J
1500744-19	1278-138-3.5	0.03	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 18:59	J
1500744-20	1278-139-0	0.02	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 19:01	J
1500744-21	1278-139-1.5	0.01	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 19:04	J
1500744-22	1278-123-0	0.03	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 19:10	J
1500744-23	1278-122-0	0.03	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 19:12	J

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-129-0
Lab ID: 1500744-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:06	
Arsenic	5.3	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:06	
Barium	49	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:06	
Beryllium	0.62	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:05	J
Cadmium	0.87	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:06	J
Chromium	12	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:06	
Cobalt	5.7	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:06	
Copper	14	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:06	
Lead	110	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:06	
Molybdenum	0.90	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:06	J
Nickel	19	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:06	
Selenium	1.0	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:06	
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:06	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:06	
Vanadium	24	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:06	
Zinc	61	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:06	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 00:36	
C4-C8	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 00:36	
Surrogate: 4-Bromofluorobenzene	*95.8 %*	*37 - 153*			B5B0755	02/25/2015	*02/28/15 00:36*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	1.2	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 23:00	
C23-C32	6.5	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 23:00	
Surrogate: p-Terphenyl	*60.3 %*	*26 - 123*			B5B0751	02/27/2015	*03/02/15 23:00*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
1,1,1-Trichloroethane	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
1,1,2,2-Tetrachloroethane	ND	5.1	2.0	1	B5B0729	02/27/2015	02/27/15 14:09	

Certificate of Analysis

...ltec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-129-0

Lab ID: 1500744-01

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
1,1-Dichloroethane	ND	5.1	1.0	1	B5B0729	02/27/2015	02/27/15 14:09	
1,1-Dichloroethene	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
1,1-Dichloropropene	ND	5.1	1.6	1	B5B0729	02/27/2015	02/27/15 14:09	
1,2,3-Trichloropropane	ND	5.1	1.9	1	B5B0729	02/27/2015	02/27/15 14:09	
1,2,3-Trichlorobenzene	ND	5.1	2.8	1	B5B0729	02/27/2015	02/27/15 14:09	
1,2,4-Trichlorobenzene	ND	5.1	2.1	1	B5B0729	02/27/2015	02/27/15 14:09	
1,2,4-Trimethylbenzene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5B0729	02/27/2015	02/27/15 14:09	
1,2-Dibromoethane	ND	5.1	1.5	1	B5B0729	02/27/2015	02/27/15 14:09	
1,2-Dichlorobenzene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
...Dichloroethane	ND	5.1	0.89	1	B5B0729	02/27/2015	02/27/15 14:09	
...-Dichloropropane	ND	5.1	3.5	1	B5B0729	02/27/2015	02/27/15 14:09	
1,3,5-Trimethylbenzene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
1,3-Dichlorobenzene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
1,3-Dichloropropane	ND	5.1	1.1	1	B5B0729	02/27/2015	02/27/15 14:09	
1,4-Dichlorobenzene	ND	5.1	1.8	1	B5B0729	02/27/2015	02/27/15 14:09	
2,2-Dichloropropane	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
2-Chlorotoluene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
4-Chlorotoluene	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
4-Isopropyltoluene	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
Benzene	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
Bromobenzene	ND	5.1	1.7	1	B5B0729	02/27/2015	02/27/15 14:09	
Bromochloromethane	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
Bromodichloromethane	ND	5.1	1.6	1	B5B0729	02/27/2015	02/27/15 14:09	
Bromoform	ND	5.1	1.5	1	B5B0729	02/27/2015	02/27/15 14:09	
Bromomethane	ND	5.1	2.7	1	B5B0729	02/27/2015	02/27/15 14:09	
Carbon disulfide	ND	5.1	2.4	1	B5B0729	02/27/2015	02/27/15 14:09	
Carbon tetrachloride	ND	5.1	1.5	1	B5B0729	02/27/2015	02/27/15 14:09	
Chlorobenzene	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
Chloroethane	ND	5.1	5.0	1	B5B0729	02/27/2015	02/27/15 14:09	
Chloroform	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
Chloromethane	ND	5.1	0.76	1	B5B0729	02/27/2015	02/27/15 14:09	
cis-1,2-Dichloroethene	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
cis-1,3-Dichloropropene	ND	5.1	2.3	1	B5B0729	02/27/2015	02/27/15 14:09	
Di-isopropyl ether	ND	5.1	1.0	1	B5B0729	02/27/2015	02/27/15 14:09	
Dibromochloromethane	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
...romomethane	ND	5.1	2.0	1	B5B0729	02/27/2015	02/27/15 14:09	
...lorodifluoromethane	ND	5.1	0.75	1	B5B0729	02/27/2015	02/27/15 14:09	
Ethyl Acetate	ND	51	13	1	B5B0729	02/27/2015	02/27/15 14:09	
Ethyl Ether	ND	51	12	1	B5B0729	02/27/2015	02/27/15 14:09	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-129-0
Lab ID: 1500744-01

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
Ethylbenzene	ND	5.1	1.1	1	B5B0729	02/27/2015	02/27/15 14:09	
Freon-113	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
Hexachlorobutadiene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
Isopropylbenzene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
m,p-Xylene	ND	10	2.5	1	B5B0729	02/27/2015	02/27/15 14:09	
Methylene chloride	ND	5.1	5.1	1	B5B0729	02/27/2015	02/27/15 14:09	
MTBE	ND	5.1	0.92	1	B5B0729	02/27/2015	02/27/15 14:09	
n-Butylbenzene	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
n-Propylbenzene	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
Naphthalene	ND	5.1	3.2	1	B5B0729	02/27/2015	02/27/15 14:09	
o-Xylene	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
sec-Butylbenzene	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
Styrene	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
tert-Amyl methyl ether	ND	5.1	1.0	1	B5B0729	02/27/2015	02/27/15 14:09	
tert-Butanol	ND	100	20	1	B5B0729	02/27/2015	02/27/15 14:09	
tert-Butylbenzene	ND	5.1	1.4	1	B5B0729	02/27/2015	02/27/15 14:09	
Tetrachloroethene	ND	5.1	1.3	1	B5B0729	02/27/2015	02/27/15 14:09	
Toluene	ND	5.1	0.90	1	B5B0729	02/27/2015	02/27/15 14:09	
trans-1,2-Dichloroethene	ND	5.1	1.5	1	B5B0729	02/27/2015	02/27/15 14:09	
trans-1,3-Dichloropropene	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
Trichloroethene	ND	5.1	1.2	1	B5B0729	02/27/2015	02/27/15 14:09	
Trichlorofluoromethane	ND	5.1	1.8	1	B5B0729	02/27/2015	02/27/15 14:09	
Vinyl acetate	ND	51	11	1	B5B0729	02/27/2015	02/27/15 14:09	
Vinyl chloride	ND	5.1	1.0	1	B5B0729	02/27/2015	02/27/15 14:09	
Surrogate: 1,2-Dichloroethane-d4	*118 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 14:09*	
Surrogate: 4-Bromofluorobenzene	*98.0 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 14:09*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 14:09*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 14:09*	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-129-1.5
Lab ID: 1500744-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:19	
Arsenic	**5.4**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:19	
Barium	**42**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:19	
Beryllium	**0.59**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:18	J
Cadmium	**0.80**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:19	J
Chromium	**11**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:19	
Cobalt	**5.7**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:19	
Copper	**11**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:19	
Lead	**16**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:19	
Molybdenum	**0.47**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:19	J
Nickel	**16**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:19	
Selenium	**0.98**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:19	J
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:19	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:19	
Vanadium	**21**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:19	
Zinc	**51**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:19	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 14:34	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 14:34	
Surrogate: 4-Bromofluorobenzene	*98.5 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 14:34*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 12:51	
C23-C32	**1.1**	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 12:51	
Surrogate: p-Terphenyl	*53.6 %*	*26 - 123*			B5B0751	02/27/2015	*03/02/15 12:51*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
1-Trichloroethane	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
1,1,2,2-Tetrachloroethane	ND	5.4	2.1	1	B5B0729	02/27/2015	02/27/15 14:28	
1,1,2-Trichloroethane	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-129-1.5

Lab ID: 1500744-02

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.4	1.1	1	B5B0729	02/27/2015	02/27/15 14:28	
1,1-Dichloroethene	ND	5.4	1.2	1	B5B0729	02/27/2015	02/27/15 14:28	
1,1-Dichloropropene	ND	5.4	1.6	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2,3-Trichloropropane	ND	5.4	2.0	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2,3-Trichlorobenzene	ND	5.4	2.9	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2,4-Trichlorobenzene	ND	5.4	2.2	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2,4-Trimethylbenzene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2-Dibromoethane	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2-Dichlorobenzene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2-Dichloroethane	ND	5.4	0.93	1	B5B0729	02/27/2015	02/27/15 14:28	
1,2-Dichloropropane	ND	5.4	3.7	1	B5B0729	02/27/2015	02/27/15 14:28	
1,3,5-Trimethylbenzene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
1,3-Dichlorobenzene	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
1,3-Dichloropropane	ND	5.4	1.2	1	B5B0729	02/27/2015	02/27/15 14:28	
1,4-Dichlorobenzene	ND	5.4	1.9	1	B5B0729	02/27/2015	02/27/15 14:28	
2,2-Dichloropropane	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
2-Chlorotoluene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
4-Chlorotoluene	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
4-Isopropyltoluene	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
Benzene	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
Bromobenzene	ND	5.4	1.8	1	B5B0729	02/27/2015	02/27/15 14:28	
Bromochloromethane	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
Bromodichloromethane	ND	5.4	1.7	1	B5B0729	02/27/2015	02/27/15 14:28	
Bromoform	ND	5.4	1.6	1	B5B0729	02/27/2015	02/27/15 14:28	
Bromomethane	ND	5.4	2.8	1	B5B0729	02/27/2015	02/27/15 14:28	
Carbon disulfide	ND	5.4	2.5	1	B5B0729	02/27/2015	02/27/15 14:28	
Carbon tetrachloride	ND	5.4	1.6	1	B5B0729	02/27/2015	02/27/15 14:28	
Chlorobenzene	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
Chloroethane	ND	5.4	5.3	1	B5B0729	02/27/2015	02/27/15 14:28	
Chloroform	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
Chloromethane	ND	5.4	0.80	1	B5B0729	02/27/2015	02/27/15 14:28	
cis-1,2-Dichloroethene	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
cis-1,3-Dichloropropene	ND	5.4	2.5	1	B5B0729	02/27/2015	02/27/15 14:28	
Di-isopropyl ether	ND	5.4	1.1	1	B5B0729	02/27/2015	02/27/15 14:28	
Dibromochloromethane	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
Dibromomethane	ND	5.4	2.1	1	B5B0729	02/27/2015	02/27/15 14:28	
Dichlorodifluoromethane	ND	5.4	0.79	1	B5B0729	02/27/2015	02/27/15 14:28	
Ethyl Acetate	ND	54	14	1	B5B0729	02/27/2015	02/27/15 14:28	
Ethyl Ether	ND	54	13	1	B5B0729	02/27/2015	02/27/15 14:28	
Ethyl tert-butyl ether	ND	5.4	1.2	1	B5B0729	02/27/2015	02/27/15 14:28	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-129-1.5
Lab ID: 1500744-02

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.4	1.2	1	B5B0729	02/27/2015	02/27/15 14:28	
Freon-113	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
Hexachlorobutadiene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
Isopropylbenzene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
m,p-Xylene	ND	11	2.7	1	B5B0729	02/27/2015	02/27/15 14:28	
Methylene chloride	ND	5.4	5.4	1	B5B0729	02/27/2015	02/27/15 14:28	
MTBE	ND	5.4	0.97	1	B5B0729	02/27/2015	02/27/15 14:28	
n-Butylbenzene	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
n-Propylbenzene	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
Naphthalene	ND	5.4	3.4	1	B5B0729	02/27/2015	02/27/15 14:28	
o-Xylene	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
...Butylbenzene	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
...rene	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
tert-Amyl methyl ether	ND	5.4	1.1	1	B5B0729	02/27/2015	02/27/15 14:28	
tert-Butanol	ND	110	21	1	B5B0729	02/27/2015	02/27/15 14:28	
tert-Butylbenzene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
Tetrachloroethene	ND	5.4	1.4	1	B5B0729	02/27/2015	02/27/15 14:28	
Toluene	ND	5.4	0.95	1	B5B0729	02/27/2015	02/27/15 14:28	
trans-1,2-Dichloroethene	ND	5.4	1.5	1	B5B0729	02/27/2015	02/27/15 14:28	
trans-1,3-Dichloropropene	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
Trichloroethene	ND	5.4	1.3	1	B5B0729	02/27/2015	02/27/15 14:28	
Trichlorofluoromethane	ND	5.4	1.9	1	B5B0729	02/27/2015	02/27/15 14:28	
Vinyl acetate	ND	54	11	1	B5B0729	02/27/2015	02/27/15 14:28	
Vinyl chloride	ND	5.4	1.1	1	B5B0729	02/27/2015	02/27/15 14:28	
Surrogate: 1,2-Dichloroethane-d4	*117 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 14:28*	
Surrogate: 4-Bromofluorobenzene	*95.6 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 14:28*	
Surrogate: Dibromofluoromethane	*104 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 14:28*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 14:28*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-130-0
Lab ID: 1500744-04

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.36**	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:23	J
Arsenic	**5.0**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:23	
Barium	**51**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:22	
Beryllium	**0.54**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:22	J
Cadmium	**1.1**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:23	
Chromium	**12**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:22	
Cobalt	**4.5**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:23	
Copper	**21**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:22	
Lead	**71**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:23	
Molybdenum	**2.6**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:22	
Nickel	**19**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:22	
Selenium	**1.1**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:23	
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:22	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:23	
Vanadium	**23**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:22	
Zinc	**96**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:22	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 00:52	
C4-C8	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 00:52	
Surrogate: 4-Bromofluorobenzene	*90.0 %*	*37 - 153*			B5B0755	02/25/2015	*02/28/15 00:52*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**3.6**	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 23:16	
C23-C32	**34**	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 23:16	
Surrogate: p-Terphenyl	*62.4 %*	*26 - 123*			B5B0751	02/27/2015	*03/02/15 23:16*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
1,1,1-Trichloroethane	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
1,1,2,2-Tetrachloroethane	ND	5.3	2.1	1	B5B0729	02/27/2015	02/27/15 14:46	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-130-0
Lab ID: 1500744-04

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
1,1-Dichloroethane	ND	5.3	1.0	1	B5B0729	02/27/2015	02/27/15 14:46	
1,1-Dichloroethene	ND	5.3	1.2	1	B5B0729	02/27/2015	02/27/15 14:46	
1,1-Dichloropropene	ND	5.3	1.6	1	B5B0729	02/27/2015	02/27/15 14:46	
1,2,3-Trichloropropane	ND	5.3	1.9	1	B5B0729	02/27/2015	02/27/15 14:46	
1,2,3-Trichlorobenzene	ND	5.3	2.9	1	B5B0729	02/27/2015	02/27/15 14:46	
1,2,4-Trichlorobenzene	ND	5.3	2.2	1	B5B0729	02/27/2015	02/27/15 14:46	
1,2,4-Trimethylbenzene	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5B0729	02/27/2015	02/27/15 14:46	
1,2-Dibromoethane	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
1,2-Dichlorobenzene	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
...Dichloroethane	ND	5.3	0.93	1	B5B0729	02/27/2015	02/27/15 14:46	
...Dichloropropane	ND	5.3	3.6	1	B5B0729	02/27/2015	02/27/15 14:46	
1,3,5-Trimethylbenzene	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
1,3-Dichlorobenzene	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
1,3-Dichloropropane	ND	5.3	1.2	1	B5B0729	02/27/2015	02/27/15 14:46	
1,4-Dichlorobenzene	ND	5.3	1.9	1	B5B0729	02/27/2015	02/27/15 14:46	
2,2-Dichloropropane	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
2-Chlorotoluene	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
4-Chlorotoluene	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
4-Isopropyltoluene	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
Benzene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
Bromobenzene	ND	5.3	1.8	1	B5B0729	02/27/2015	02/27/15 14:46	
Bromochloromethane	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
Bromodichloromethane	ND	5.3	1.7	1	B5B0729	02/27/2015	02/27/15 14:46	
Bromoform	ND	5.3	1.6	1	B5B0729	02/27/2015	02/27/15 14:46	
Bromomethane	ND	5.3	2.8	1	B5B0729	02/27/2015	02/27/15 14:46	
Carbon disulfide	ND	5.3	2.5	1	B5B0729	02/27/2015	02/27/15 14:46	
Carbon tetrachloride	ND	5.3	1.6	1	B5B0729	02/27/2015	02/27/15 14:46	
Chlorobenzene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
Chloroethane	ND	5.3	5.3	1	B5B0729	02/27/2015	02/27/15 14:46	
Chloroform	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
Chloromethane	ND	5.3	0.79	1	B5B0729	02/27/2015	02/27/15 14:46	
cis-1,2-Dichloroethene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
cis-1,3-Dichloropropene	ND	5.3	2.4	1	B5B0729	02/27/2015	02/27/15 14:46	
Di-isopropyl ether	ND	5.3	1.1	1	B5B0729	02/27/2015	02/27/15 14:46	
Dibromochloromethane	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
...bromomethane	ND	5.3	2.1	1	B5B0729	02/27/2015	02/27/15 14:46	
...lorodifluoromethane	ND	5.3	0.79	1	B5B0729	02/27/2015	02/27/15 14:46	
Ethyl Acetate	ND	53	14	1	B5B0729	02/27/2015	02/27/15 14:46	
Ethyl Ether	ND	53	13	1	B5B0729	02/27/2015	02/27/15 14:46	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-130-0

Lab ID: 1500744-04

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.3	1.2	1	B5B0729	02/27/2015	02/27/15 14:46	
Ethylbenzene	ND	5.3	1.2	1	B5B0729	02/27/2015	02/27/15 14:46	
Freon-113	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
Hexachlorobutadiene	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
Isopropylbenzene	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
m,p-Xylene	ND	11	2.7	1	B5B0729	02/27/2015	02/27/15 14:46	
Methylene chloride	ND	5.3	5.3	1	B5B0729	02/27/2015	02/27/15 14:46	
MTBE	ND	5.3	0.96	1	B5B0729	02/27/2015	02/27/15 14:46	
n-Butylbenzene	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
n-Propylbenzene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
Naphthalene	ND	5.3	3.4	1	B5B0729	02/27/2015	02/27/15 14:46	
o-Xylene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
sec-Butylbenzene	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
Styrene	ND	5.3	1.4	1	B5B0729	02/27/2015	02/27/15 14:46	
tert-Amyl methyl ether	ND	5.3	1.1	1	B5B0729	02/27/2015	02/27/15 14:46	
tert-Butanol	ND	110	21	1	B5B0729	02/27/2015	02/27/15 14:46	
tert-Butylbenzene	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
Tetrachloroethene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
Toluene	ND	5.3	0.94	1	B5B0729	02/27/2015	02/27/15 14:46	
trans-1,2-Dichloroethene	ND	5.3	1.5	1	B5B0729	02/27/2015	02/27/15 14:46	
trans-1,3-Dichloropropene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
Trichloroethene	ND	5.3	1.3	1	B5B0729	02/27/2015	02/27/15 14:46	
Trichlorofluoromethane	ND	5.3	1.9	1	B5B0729	02/27/2015	02/27/15 14:46	
Vinyl acetate	ND	53	11	1	B5B0729	02/27/2015	02/27/15 14:46	
Vinyl chloride	ND	5.3	1.1	1	B5B0729	02/27/2015	02/27/15 14:46	
Surrogate: 1,2-Dichloroethane-d4	*116 %*	*20 - 189*			B5B0729	02/27/2015	*02/27/15 14:46*	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*20 - 173*			B5B0729	02/27/2015	*02/27/15 14:46*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5B0729	02/27/2015	*02/27/15 14:46*	
Surrogate: Toluene-d8	*106 %*	*31 - 166*			B5B0729	02/27/2015	*02/27/15 14:46*	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-130-1.5
Lab ID: 1500744-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:26	
Arsenic	5.4	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:26	
Barium	42	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:26	
Beryllium	0.62	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:25	J
Cadmium	0.85	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:26	J
Chromium	12	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:26	
Cobalt	5.1	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:26	
Copper	12	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:26	
Lead	24	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:26	
Molybdenum	0.78	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:26	J
...ckel	18	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:26	
...nium	0.97	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:26	J
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:26	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:26	
Vanadium	22	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:26	
Zinc	51	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:26	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 01:08	
C4-C8	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 01:08	
Surrogate: 4-Bromofluorobenzene	*99.4 %*	*37 - 153*			B5B0755	02/25/2015	*02/28/15 01:08*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 22:28	
C23-C32	1.6	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 22:28	
Surrogate: p-Terphenyl	*67.9 %*	*26 - 123*			B5B0751	02/27/2015	*03/02/15 22:28*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
...,1-Trichloroethane	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
1,1,2,2-Tetrachloroethane	ND	5.5	2.1	1	B5B0745	02/27/2015	02/27/15 17:48	
1,1,2-Trichloroethane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-130-1.5

Lab ID: 1500744-05

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 17:48	
1,1-Dichloroethene	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 17:48	
1,1-Dichloropropene	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2,3-Trichloropropane	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2,3-Trichlorobenzene	ND	5.5	3.0	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2,4-Trichlorobenzene	ND	5.5	2.2	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2,4-Trimethylbenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2-Dibromoethane	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2-Dichlorobenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2-Dichloroethane	ND	5.5	0.96	1	B5B0745	02/27/2015	02/27/15 17:48	
1,2-Dichloropropane	ND	5.5	3.7	1	B5B0745	02/27/2015	02/27/15 17:48	
1,3,5-Trimethylbenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 17:48	
1,3-Dichlorobenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 17:48	
1,3-Dichloropropane	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 17:48	
1,4-Dichlorobenzene	ND	5.5	1.9	1	B5B0745	02/27/2015	02/27/15 17:48	
2,2-Dichloropropane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
2-Chlorotoluene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 17:48	
4-Chlorotoluene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
4-Isopropyltoluene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
Benzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
Bromobenzene	ND	5.5	1.8	1	B5B0745	02/27/2015	02/27/15 17:48	
Bromochloromethane	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 17:48	
Bromodichloromethane	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 17:48	
Bromoform	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
Bromomethane	ND	5.5	2.9	1	B5B0745	02/27/2015	02/27/15 17:48	
Carbon disulfide	ND	5.5	2.5	1	B5B0745	02/27/2015	02/27/15 17:48	
Carbon tetrachloride	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
Chlorobenzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
Chloroethane	ND	5.5	5.4	1	B5B0745	02/27/2015	02/27/15 17:48	
Chloroform	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
Chloromethane	ND	5.5	0.81	1	B5B0745	02/27/2015	02/27/15 17:48	
cis-1,2-Dichloroethene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
cis-1,3-Dichloropropene	ND	5.5	2.5	1	B5B0745	02/27/2015	02/27/15 17:48	
Di-isopropyl ether	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 17:48	
Dibromochloromethane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
Dibromomethane	ND	5.5	2.2	1	B5B0745	02/27/2015	02/27/15 17:48	
Dichlorodifluoromethane	ND	5.5	0.81	1	B5B0745	02/27/2015	02/27/15 17:48	
Ethyl Acetate	ND	55	14	1	B5B0745	02/27/2015	02/27/15 17:48	
Ethyl Ether	ND	55	13	1	B5B0745	02/27/2015	02/27/15 17:48	
Ethyl tert-butyl ether	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-130-1.5
Lab ID: 1500744-05

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 17:48	
Freon-113	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
Hexachlorobutadiene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 17:48	
Isopropylbenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
m,p-Xylene	ND	11	2.7	1	B5B0745	02/27/2015	02/27/15 17:48	
Methylene chloride	ND	5.5	5.5	1	B5B0745	02/27/2015	02/27/15 17:48	
MTBE	ND	5.5	0.99	1	B5B0745	02/27/2015	02/27/15 17:48	
n-Butylbenzene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
n-Propylbenzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
Naphthalene	ND	5.5	3.5	1	B5B0745	02/27/2015	02/27/15 17:48	
o-Xylene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
...Butylbenzene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
...ene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
tert-Amyl methyl ether	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 17:48	
tert-Butanol	ND	110	22	1	B5B0745	02/27/2015	02/27/15 17:48	
tert-Butylbenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 17:48	
Tetrachloroethene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 17:48	
Toluene	ND	5.5	0.97	1	B5B0745	02/27/2015	02/27/15 17:48	
trans-1,2-Dichloroethene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 17:48	
trans-1,3-Dichloropropene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
Trichloroethene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 17:48	
Trichlorofluoromethane	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 17:48	
Vinyl acetate	ND	55	12	1	B5B0745	02/27/2015	02/27/15 17:48	
Vinyl chloride	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 17:48	
Surrogate: 1,2-Dichloroethane-d4	*114 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 17:48*	
Surrogate: 4-Bromofluorobenzene	*95.9 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 17:48*	
Surrogate: Dibromofluoromethane	*103 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 17:48*	
Surrogate: Toluene-d8	*99.5 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 17:48*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-135-0
Lab ID: 1500744-07

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.35**	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:29	J
Arsenic	**1.7**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:29	
Barium	**28**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:29	
Beryllium	**0.40**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:28	J
Cadmium	**0.82**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:29	J
Chromium	**6.9**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:29	
Cobalt	**2.6**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:29	
Copper	**7.5**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:29	
Lead	**88**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:29	
Molybdenum	**1.4**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:29	
Nickel	**6.7**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:29	
Selenium	**0.50**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:29	J
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:29	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:29	
Vanadium	**17**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:29	
Zinc	**450**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:29	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 01:24	
C4-C8	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 01:24	
Surrogate: 4-Bromofluorobenzene	*96.2 %*	*37 - 153*			B5B0755	02/25/2015	*02/28/15 01:24*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 22:44	
C23-C32	**4.9**	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 22:44	
Surrogate: p-Terphenyl	*59.0 %*	*26 - 123*			B5B0751	02/27/2015	*03/02/15 22:44*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
1,1,1-Trichloroethane	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
1,1,2,2-Tetrachloroethane	ND	5.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:06	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-135-0
Lab ID: 1500744-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
1,1-Dichloroethane	ND	5.1	1.0	1	B5B0745	02/27/2015	02/27/15 18:06	
1,1-Dichloroethene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
1,1-Dichloropropene	ND	5.1	1.6	1	B5B0745	02/27/2015	02/27/15 18:06	
1,2,3-Trichloropropane	ND	5.1	1.9	1	B5B0745	02/27/2015	02/27/15 18:06	
1,2,3-Trichlorobenzene	ND	5.1	2.8	1	B5B0745	02/27/2015	02/27/15 18:06	
1,2,4-Trichlorobenzene	ND	5.1	2.1	1	B5B0745	02/27/2015	02/27/15 18:06	
1,2,4-Trimethylbenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5B0745	02/27/2015	02/27/15 18:06	
1,2-Dibromoethane	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 18:06	
1,2-Dichlorobenzene	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 18:06	
...Dichloroethane	ND	5.1	0.89	1	B5B0745	02/27/2015	02/27/15 18:06	
...-Dichloropropane	ND	5.1	3.5	1	B5B0745	02/27/2015	02/27/15 18:06	
1,3,5-Trimethylbenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
1,3-Dichlorobenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
1,3-Dichloropropane	ND	5.1	1.1	1	B5B0745	02/27/2015	02/27/15 18:06	
1,4-Dichlorobenzene	ND	5.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:06	
2,2-Dichloropropane	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
2-Chlorotoluene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
4-Chlorotoluene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
4-Isopropyltoluene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
Benzene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
Bromobenzene	ND	5.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:06	
Bromochloromethane	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
Bromodichloromethane	ND	5.1	1.6	1	B5B0745	02/27/2015	02/27/15 18:06	
Bromoform	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 18:06	
Bromomethane	ND	5.1	2.7	1	B5B0745	02/27/2015	02/27/15 18:06	
Carbon disulfide	ND	5.1	2.4	1	B5B0745	02/27/2015	02/27/15 18:06	
Carbon tetrachloride	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 18:06	
Chlorobenzene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
Chloroethane	ND	5.1	5.0	1	B5B0745	02/27/2015	02/27/15 18:06	
Chloroform	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
Chloromethane	ND	5.1	0.76	1	B5B0745	02/27/2015	02/27/15 18:06	
cis-1,2-Dichloroethene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
cis-1,3-Dichloropropene	ND	5.1	2.3	1	B5B0745	02/27/2015	02/27/15 18:06	
Di-isopropyl ether	ND	5.1	1.0	1	B5B0745	02/27/2015	02/27/15 18:06	
Dibromochloromethane	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
...romomethane	ND	5.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:06	
...lorodifluoromethane	ND	5.1	0.75	1	B5B0745	02/27/2015	02/27/15 18:06	
Ethyl Acetate	ND	51	13	1	B5B0745	02/27/2015	02/27/15 18:06	
Ethyl Ether	ND	51	12	1	B5B0745	02/27/2015	02/27/15 18:06	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-135-0
Lab ID: 1500744-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
Ethylbenzene	ND	5.1	1.1	1	B5B0745	02/27/2015	02/27/15 18:06	
Freon-113	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
Hexachlorobutadiene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
Isopropylbenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
m,p-Xylene	ND	10	2.5	1	B5B0745	02/27/2015	02/27/15 18:06	
Methylene chloride	ND	5.1	5.1	1	B5B0745	02/27/2015	02/27/15 18:06	
MTBE	ND	5.1	0.92	1	B5B0745	02/27/2015	02/27/15 18:06	
n-Butylbenzene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
n-Propylbenzene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
Naphthalene	ND	5.1	3.2	1	B5B0745	02/27/2015	02/27/15 18:06	
o-Xylene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
sec-Butylbenzene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
Styrene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
tert-Amyl methyl ether	ND	5.1	1.0	1	B5B0745	02/27/2015	02/27/15 18:06	
tert-Butanol	ND	100	20	1	B5B0745	02/27/2015	02/27/15 18:06	
tert-Butylbenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:06	
Tetrachloroethene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:06	
Toluene	ND	5.1	0.90	1	B5B0745	02/27/2015	02/27/15 18:06	
trans-1,2-Dichloroethene	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 18:06	
trans-1,3-Dichloropropene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
Trichloroethene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:06	
Trichlorofluoromethane	ND	5.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:06	
Vinyl acetate	ND	51	11	1	B5B0745	02/27/2015	02/27/15 18:06	
Vinyl chloride	ND	5.1	1.0	1	B5B0745	02/27/2015	02/27/15 18:06	
Surrogate: 1,2-Dichloroethane-d4	*118 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 18:06*	
Surrogate: 4-Bromofluorobenzene	*93.5 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 18:06*	
Surrogate: Dibromofluoromethane	*108 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 18:06*	
Surrogate: Toluene-d8	*99.3 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 18:06*	

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...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-135-1.5
Lab ID: 1500744-08

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.83**	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:40	J
Arsenic	**0.94**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:40	J
Barium	**23**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:40	
Beryllium	**0.48**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:39	J
Cadmium	**0.36**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:40	J
Chromium	**4.0**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:40	
Cobalt	**1.3**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:40	
Copper	**2.3**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:40	
Lead	**18**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:40	
Molybdenum	**0.83**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:40	J
...ckel	**3.4**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:40	
...nium	**0.62**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:40	J
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:40	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:40	
Vanadium	**11**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:40	
Zinc	**26**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:40	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 01:39	
C4-C8	ND	1.0	0.20	1	B5B0755	02/25/2015	02/28/15 01:39	
Surrogate: 4-Bromofluorobenzene	*99.5 %*	*37 - 153*			B5B0755	02/25/2015	*02/28/15 01:39*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 12:35	
C23-C32	ND	1.0	1.0	1	B5B0751	02/27/2015	03/02/15 12:35	
Surrogate: p-Terphenyl	*52.3 %*	*26 - 123*			B5B0751	02/27/2015	*03/02/15 12:35*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
...,1-Trichloroethane	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
1,1,2,2-Tetrachloroethane	ND	4.9	1.9	1	B5B0745	02/27/2015	02/27/15 18:25	
1,1,2-Trichloroethane	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-135-1.5
Lab ID: 1500744-08

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	4.9	0.96	1	B5B0745	02/27/2015	02/27/15 18:25	
1,1-Dichloroethene	ND	4.9	1.1	1	B5B0745	02/27/2015	02/27/15 18:25	
1,1-Dichloropropene	ND	4.9	1.5	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2,3-Trichloropropane	ND	4.9	1.8	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2,3-Trichlorobenzene	ND	4.9	2.6	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2,4-Trichlorobenzene	ND	4.9	2.0	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2,4-Trimethylbenzene	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2-Dibromo-3-chloropropane	ND	9.8	2.1	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2-Dibromoethane	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2-Dichlorobenzene	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2-Dichloroethane	ND	4.9	0.85	1	B5B0745	02/27/2015	02/27/15 18:25	
1,2-Dichloropropane	ND	4.9	3.3	1	B5B0745	02/27/2015	02/27/15 18:25	
1,3,5-Trimethylbenzene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
1,3-Dichlorobenzene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
1,3-Dichloropropane	ND	4.9	1.1	1	B5B0745	02/27/2015	02/27/15 18:25	
1,4-Dichlorobenzene	ND	4.9	1.7	1	B5B0745	02/27/2015	02/27/15 18:25	
2,2-Dichloropropane	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
2-Chlorotoluene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
4-Chlorotoluene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
4-Isopropyltoluene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
Benzene	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Bromobenzene	ND	4.9	1.6	1	B5B0745	02/27/2015	02/27/15 18:25	
Bromochloromethane	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
Bromodichloromethane	ND	4.9	1.5	1	B5B0745	02/27/2015	02/27/15 18:25	
Bromoform	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
Bromomethane	ND	4.9	2.6	1	B5B0745	02/27/2015	02/27/15 18:25	
Carbon disulfide	ND	4.9	2.3	1	B5B0745	02/27/2015	02/27/15 18:25	
Carbon tetrachloride	ND	4.9	1.5	1	B5B0745	02/27/2015	02/27/15 18:25	
Chlorobenzene	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Chloroethane	ND	4.9	4.8	1	B5B0745	02/27/2015	02/27/15 18:25	
Chloroform	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
Chloromethane	ND	4.9	0.72	1	B5B0745	02/27/2015	02/27/15 18:25	
cis-1,2-Dichloroethene	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
cis-1,3-Dichloropropene	ND	4.9	2.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Di-isopropyl ether	ND	4.9	0.99	1	B5B0745	02/27/2015	02/27/15 18:25	
Dibromochloromethane	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Dibromomethane	ND	4.9	1.9	1	B5B0745	02/27/2015	02/27/15 18:25	
Dichlorodifluoromethane	ND	4.9	0.72	1	B5B0745	02/27/2015	02/27/15 18:25	
Ethyl Acetate	ND	49	13	1	B5B0745	02/27/2015	02/27/15 18:25	
Ethyl Ether	ND	49	12	1	B5B0745	02/27/2015	02/27/15 18:25	
Ethyl tert-butyl ether	ND	4.9	1.1	1	B5B0745	02/27/2015	02/27/15 18:25	

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ıtec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-135-1.5
Lab ID: 1500744-08

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	4.9	1.1	1	B5B0745	02/27/2015	02/27/15 18:25	
Freon-113	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
Hexachlorobutadiene	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
Isopropylbenzene	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
m,p-Xylene	ND	9.8	2.4	1	B5B0745	02/27/2015	02/27/15 18:25	
Methylene chloride	ND	4.9	4.9	1	B5B0745	02/27/2015	02/27/15 18:25	
MTBE	ND	4.9	0.88	1	B5B0745	02/27/2015	02/27/15 18:25	
n-Butylbenzene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
n-Propylbenzene	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Naphthalene	ND	4.9	3.1	1	B5B0745	02/27/2015	02/27/15 18:25	
o-Xylene	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Butylbenzene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
ene	ND	4.9	1.3	1	B5B0745	02/27/2015	02/27/15 18:25	
tert-Amyl methyl ether	ND	4.9	1.0	1	B5B0745	02/27/2015	02/27/15 18:25	
tert-Butanol	ND	98	20	1	B5B0745	02/27/2015	02/27/15 18:25	
tert-Butylbenzene	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
Tetrachloroethene	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Toluene	ND	4.9	0.86	1	B5B0745	02/27/2015	02/27/15 18:25	
trans-1,2-Dichloroethene	ND	4.9	1.4	1	B5B0745	02/27/2015	02/27/15 18:25	
trans-1,3-Dichloropropene	ND	4.9	1.1	1	B5B0745	02/27/2015	02/27/15 18:25	
Trichloroethene	ND	4.9	1.2	1	B5B0745	02/27/2015	02/27/15 18:25	
Trichlorofluoromethane	ND	4.9	1.8	1	B5B0745	02/27/2015	02/27/15 18:25	
Vinyl acetate	ND	49	10	1	B5B0745	02/27/2015	02/27/15 18:25	
Vinyl chloride	ND	4.9	1.0	1	B5B0745	02/27/2015	02/27/15 18:25	
Surrogate: 1,2-Dichloroethane-d4	*119 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 18:25*	
Surrogate: 4-Bromofluorobenzene	*94.1 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 18:25*	
Surrogate: Dibromofluoromethane	*107 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 18:25*	
Surrogate: Toluene-d8	*94.5 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 18:25*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-1-022515

Lab ID: 1500744-10

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:16	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:16	
Barium	**0.0006**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:16	J
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:15	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:16	
Chromium	**0.0011**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:16	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:16	
Copper	**0.0016**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:15	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:16	
Molybdenum	ND	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:16	
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:16	
Selenium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:16	
Silver	ND	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:15	
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:16	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:15	
Zinc	**0.0094**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:16	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 12:48	
C4-C8	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 12:48	
Surrogate: 4-Bromofluorobenzene	*88.7 %*	*70 - 130*			B5B0736	02/27/2015	*02/27/15 12:48*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 17:11	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 17:11	
Surrogate: p-Terphenyl	*65.5 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 17:11*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0001	03/02/2015	03/02/15 10:51	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5C0001	03/02/2015	03/02/15 10:51	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0001	03/02/2015	03/02/15 10:51	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5C0001	03/02/2015	03/02/15 10:51	

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-1-022515

Lab ID: 1500744-10

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5C0001	03/02/2015	03/02/15 10:51	
1,1-Dichloroethene	ND	0.50	0.26	1	B5C0001	03/02/2015	03/02/15 10:51	
1,1-Dichloropropene	ND	0.50	0.21	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2-Dibromoethane	ND	0.50	0.24	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5C0001	03/02/2015	03/02/15 10:51	
1,2-Dichloroethane	ND	0.50	0.27	1	B5C0001	03/02/2015	03/02/15 10:51	
...Dichloropropane	ND	0.50	0.27	1	B5C0001	03/02/2015	03/02/15 10:51	
...3-Trimethylbenzene	ND	0.50	0.26	1	B5C0001	03/02/2015	03/02/15 10:51	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5C0001	03/02/2015	03/02/15 10:51	
1,3-Dichloropropane	ND	0.50	0.34	1	B5C0001	03/02/2015	03/02/15 10:51	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5C0001	03/02/2015	03/02/15 10:51	
2,2-Dichloropropane	ND	0.50	0.23	1	B5C0001	03/02/2015	03/02/15 10:51	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5C0001	03/02/2015	03/02/15 10:51	
2-Chlorotoluene	ND	0.50	0.28	1	B5C0001	03/02/2015	03/02/15 10:51	
4-Chlorotoluene	ND	0.50	0.30	1	B5C0001	03/02/2015	03/02/15 10:51	
4-Isopropyltoluene	ND	0.50	0.22	1	B5C0001	03/02/2015	03/02/15 10:51	
Benzene	ND	0.50	0.22	1	B5C0001	03/02/2015	03/02/15 10:51	
Bromobenzene	ND	0.50	0.32	1	B5C0001	03/02/2015	03/02/15 10:51	
Bromochloromethane	ND	0.50	0.40	1	B5C0001	03/02/2015	03/02/15 10:51	
Bromodichloromethane	ND	0.50	0.20	1	B5C0001	03/02/2015	03/02/15 10:51	
Bromoform	ND	0.50	0.34	1	B5C0001	03/02/2015	03/02/15 10:51	
Bromomethane	ND	0.50	0.49	1	B5C0001	03/02/2015	03/02/15 10:51	
Carbon disulfide	ND	1.0	1.0	1	B5C0001	03/02/2015	03/02/15 10:51	
Carbon tetrachloride	ND	0.50	0.18	1	B5C0001	03/02/2015	03/02/15 10:51	
Chlorobenzene	ND	0.50	0.33	1	B5C0001	03/02/2015	03/02/15 10:51	
Chloroethane	ND	0.50	0.23	1	B5C0001	03/02/2015	03/02/15 10:51	
Chloroform	ND	0.50	0.32	1	B5C0001	03/02/2015	03/02/15 10:51	
Chloromethane	ND	0.50	0.30	1	B5C0001	03/02/2015	03/02/15 10:51	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5C0001	03/02/2015	03/02/15 10:51	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5C0001	03/02/2015	03/02/15 10:51	
Di-isopropyl ether	ND	0.50	0.31	1	B5C0001	03/02/2015	03/02/15 10:51	
Dibromochloromethane	ND	0.50	0.44	1	B5C0001	03/02/2015	03/02/15 10:51	
...romomethane	ND	0.50	0.27	1	B5C0001	03/02/2015	03/02/15 10:51	
...lorodifluoromethane	ND	0.50	0.23	1	B5C0001	03/02/2015	03/02/15 10:51	
Ethyl Acetate	ND	10	4.0	1	B5C0001	03/02/2015	03/02/15 10:51	
Ethyl Ether	ND	10	2.9	1	B5C0001	03/02/2015	03/02/15 10:51	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-1-022515

Lab ID: 1500744-10

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5C0001	03/02/2015	03/02/15 10:51	
Ethylbenzene	ND	0.50	0.31	1	B5C0001	03/02/2015	03/02/15 10:51	
Freon-113	ND	0.50	0.35	1	B5C0001	03/02/2015	03/02/15 10:51	
Hexachlorobutadiene	ND	0.50	0.47	1	B5C0001	03/02/2015	03/02/15 10:51	
Isopropylbenzene	ND	0.50	0.25	1	B5C0001	03/02/2015	03/02/15 10:51	
m,p-Xylene	ND	1.0	0.46	1	B5C0001	03/02/2015	03/02/15 10:51	
Methylene chloride	ND	1.0	1.0	1	B5C0001	03/02/2015	03/02/15 10:51	
MTBE	ND	0.50	0.23	1	B5C0001	03/02/2015	03/02/15 10:51	
n-Butylbenzene	ND	0.50	0.27	1	B5C0001	03/02/2015	03/02/15 10:51	
n-Propylbenzene	ND	0.50	0.26	1	B5C0001	03/02/2015	03/02/15 10:51	
Naphthalene	ND	0.50	0.40	1	B5C0001	03/02/2015	03/02/15 10:51	
o-Xylene	ND	0.50	0.29	1	B5C0001	03/02/2015	03/02/15 10:51	
sec-Butylbenzene	ND	0.50	0.36	1	B5C0001	03/02/2015	03/02/15 10:51	
Styrene	ND	0.50	0.29	1	B5C0001	03/02/2015	03/02/15 10:51	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5C0001	03/02/2015	03/02/15 10:51	
tert-Butanol	ND	10	7.6	1	B5C0001	03/02/2015	03/02/15 10:51	
tert-Butylbenzene	ND	0.50	0.32	1	B5C0001	03/02/2015	03/02/15 10:51	
Tetrachloroethene	ND	0.50	0.28	1	B5C0001	03/02/2015	03/02/15 10:51	
Toluene	ND	0.50	0.21	1	B5C0001	03/02/2015	03/02/15 10:51	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5C0001	03/02/2015	03/02/15 10:51	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5C0001	03/02/2015	03/02/15 10:51	
Trichloroethene	ND	0.50	0.31	1	B5C0001	03/02/2015	03/02/15 10:51	
Trichlorofluoromethane	ND	0.50	0.28	1	B5C0001	03/02/2015	03/02/15 10:51	
Vinyl acetate	ND	10	2.6	1	B5C0001	03/02/2015	03/02/15 10:51	
Vinyl chloride	ND	0.50	0.23	1	B5C0001	03/02/2015	03/02/15 10:51	
Surrogate: 1,2-Dichloroethane-d4	*88.9 %*	*49 - 148*			B5C0001	03/02/2015	*03/02/15 10:51*	
Surrogate: 4-Bromofluorobenzene	*95.0 %*	*65 - 132*			B5C0001	03/02/2015	*03/02/15 10:51*	
Surrogate: Dibromofluoromethane	*92.7 %*	*55 - 138*			B5C0001	03/02/2015	*03/02/15 10:51*	
Surrogate: Toluene-d8	*81.5 %*	*60 - 120*			B5C0001	03/02/2015	*03/02/15 10:51*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-0
Lab ID: 1500744-11

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.75**	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:43	J
Arsenic	**3.7**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:43	
Barium	**57**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:43	
Beryllium	**0.63**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:42	J
Cadmium	**1.1**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:43	
Chromium	**16**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:43	
Cobalt	**4.4**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:43	
Copper	**23**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:43	
Lead	**280**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:43	
Molybdenum	**2.2**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:43	
Nickel	**14**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:43	
...nium	**0.98**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:43	J
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:43	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:43	
Vanadium	**30**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:43	
Zinc	**92**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:43	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 14:50	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 14:50	
Surrogate: 4-Bromofluorobenzene	*94.9 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 14:50*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**6.1**	5.0	5.0	5	B5C0069	03/03/2015	03/04/15 12:12	
C23-C32	**58**	5.0	5.0	5	B5C0069	03/03/2015	03/04/15 12:12	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0069	03/03/2015	*03/04/15 12:12*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	7.1	1.9	1	B5B0745	02/27/2015	02/27/15 18:44	
...-Trichloroethane	ND	7.1	1.9	1	B5B0745	02/27/2015	02/27/15 18:44	
1,1,2,2-Tetrachloroethane	ND	7.1	2.7	1	B5B0745	02/27/2015	02/27/15 18:44	

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Client Sample ID 1278-136-0
Lab ID: 1500744-11

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
1,1-Dichloroethane	ND	7.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:44	
1,1-Dichloroethene	ND	7.1	1.6	1	B5B0745	02/27/2015	02/27/15 18:44	
1,1-Dichloropropene	ND	7.1	2.2	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2,3-Trichloropropane	ND	7.1	2.6	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2,3-Trichlorobenzene	ND	7.1	3.8	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2,4-Trichlorobenzene	ND	7.1	2.9	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2,4-Trimethylbenzene	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2-Dibromo-3-chloropropane	ND	14	3.0	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2-Dibromoethane	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2-Dichlorobenzene	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2-Dichloroethane	ND	7.1	1.2	1	B5B0745	02/27/2015	02/27/15 18:44	
1,2-Dichloropropane	ND	7.1	4.8	1	B5B0745	02/27/2015	02/27/15 18:44	
1,3,5-Trimethylbenzene	ND	7.1	1.9	1	B5B0745	02/27/2015	02/27/15 18:44	
1,3-Dichlorobenzene	ND	7.1	1.9	1	B5B0745	02/27/2015	02/27/15 18:44	
1,3-Dichloropropane	ND	7.1	1.6	1	B5B0745	02/27/2015	02/27/15 18:44	
1,4-Dichlorobenzene	ND	7.1	2.5	1	B5B0745	02/27/2015	02/27/15 18:44	
2,2-Dichloropropane	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
2-Chlorotoluene	ND	7.1	1.9	1	B5B0745	02/27/2015	02/27/15 18:44	
4-Chlorotoluene	ND	7.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:44	
4-Isopropyltoluene	ND	7.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:44	
Benzene	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
Bromobenzene	ND	7.1	2.3	1	B5B0745	02/27/2015	02/27/15 18:44	
Bromochloromethane	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
Bromodichloromethane	ND	7.1	2.2	1	B5B0745	02/27/2015	02/27/15 18:44	
Bromoform	ND	7.1	2.1	1	B5B0745	02/27/2015	02/27/15 18:44	
Bromomethane	ND	7.1	3.7	1	B5B0745	02/27/2015	02/27/15 18:44	
Carbon disulfide	ND	7.1	3.3	1	B5B0745	02/27/2015	02/27/15 18:44	
Carbon tetrachloride	ND	7.1	2.1	1	B5B0745	02/27/2015	02/27/15 18:44	
Chlorobenzene	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
Chloroethane	ND	7.1	7.0	1	B5B0745	02/27/2015	02/27/15 18:44	
Chloroform	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
Chloromethane	ND	7.1	1.1	1	B5B0745	02/27/2015	02/27/15 18:44	
cis-1,2-Dichloroethene	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
cis-1,3-Dichloropropene	ND	7.1	3.2	1	B5B0745	02/27/2015	02/27/15 18:44	
Di-isopropyl ether	ND	7.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:44	
Dibromochloromethane	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
Dibromomethane	ND	7.1	2.8	1	B5B0745	02/27/2015	02/27/15 18:44	
Dichlorodifluoromethane	ND	7.1	1.0	1	B5B0745	02/27/2015	02/27/15 18:44	
Ethyl Acetate	ND	71	19	1	B5B0745	02/27/2015	02/27/15 18:44	
Ethyl Ether	ND	71	17	1	B5B0745	02/27/2015	02/27/15 18:44	

Certificate of Analysis

ıtec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-0

Lab ID: 1500744-11

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	7.1	1.6	1	B5B0745	02/27/2015	02/27/15 18:44	
Ethylbenzene	ND	7.1	1.6	1	B5B0745	02/27/2015	02/27/15 18:44	
Freon-113	ND	7.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:44	
Hexachlorobutadiene	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
Isopropylbenzene	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
m,p-Xylene	ND	14	3.5	1	B5B0745	02/27/2015	02/27/15 18:44	
Methylene chloride	ND	7.1	7.1	1	B5B0745	02/27/2015	02/27/15 18:44	
MTBE	ND	7.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:44	
n-Butylbenzene	ND	7.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:44	
n-Propylbenzene	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
Naphthalene	ND	7.1	4.5	1	B5B0745	02/27/2015	02/27/15 18:44	
ylene	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
-Butylbenzene	ND	7.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:44	
Styrene	ND	7.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:44	
tert-Amyl methyl ether	ND	7.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:44	
tert-Butanol	ND	140	28	1	B5B0745	02/27/2015	02/27/15 18:44	
tert-Butylbenzene	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
Tetrachloroethene	ND	7.1	1.8	1	B5B0745	02/27/2015	02/27/15 18:44	
Toluene	ND	7.1	1.3	1	B5B0745	02/27/2015	02/27/15 18:44	
trans-1,2-Dichloroethene	ND	7.1	2.0	1	B5B0745	02/27/2015	02/27/15 18:44	
trans-1,3-Dichloropropene	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
Trichloroethene	ND	7.1	1.7	1	B5B0745	02/27/2015	02/27/15 18:44	
Trichlorofluoromethane	ND	7.1	2.5	1	B5B0745	02/27/2015	02/27/15 18:44	
Vinyl acetate	ND	71	15	1	B5B0745	02/27/2015	02/27/15 18:44	
Vinyl chloride	ND	7.1	1.4	1	B5B0745	02/27/2015	02/27/15 18:44	
Surrogate: 1,2-Dichloroethane-d4	*122 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 18:44*	
Surrogate: 4-Bromofluorobenzene	*95.0 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 18:44*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 18:44*	
Surrogate: Toluene-d8	*102 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 18:44*	

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-1.5
Lab ID: 1500744-12

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.29**	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:47	J
Arsenic	**2.2**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:47	
Barium	**32**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:47	
Beryllium	**0.38**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:46	J
Cadmium	**0.61**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:47	J
Chromium	**6.7**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:47	
Cobalt	**3.2**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:47	
Copper	**7.1**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:47	
Lead	**71**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:47	
Molybdenum	**1.9**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:47	
Nickel	**7.4**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:47	
Selenium	**0.80**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:47	J
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:47	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:47	
Vanadium	**18**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:47	
Zinc	**31**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:47	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:06	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:06	
Surrogate: 4-Bromofluorobenzene	*98.6 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 15:06*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 17:51	
C23-C32	**8.8**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 17:51	
Surrogate: p-Terphenyl	*62.4 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 17:51*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
1,1,1-Trichloroethane	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
1,1,2,2-Tetrachloroethane	ND	5.3	2.0	1	B5B0745	02/27/2015	02/27/15 19:02	

Certificate of Analysis

ıtec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-1.5

Lab ID: 1500744-12

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
1,1-Dichloroethane	ND	5.3	1.0	1	B5B0745	02/27/2015	02/27/15 19:02	
1,1-Dichloroethene	ND	5.3	1.2	1	B5B0745	02/27/2015	02/27/15 19:02	
1,1-Dichloropropene	ND	5.3	1.6	1	B5B0745	02/27/2015	02/27/15 19:02	
1,2,3-Trichloropropane	ND	5.3	1.9	1	B5B0745	02/27/2015	02/27/15 19:02	
1,2,3-Trichlorobenzene	ND	5.3	2.9	1	B5B0745	02/27/2015	02/27/15 19:02	
1,2,4-Trichlorobenzene	ND	5.3	2.2	1	B5B0745	02/27/2015	02/27/15 19:02	
1,2,4-Trimethylbenzene	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
1,2-Dibromo-3-chloropropane	ND	11	2.2	1	B5B0745	02/27/2015	02/27/15 19:02	
1,2-Dibromoethane	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
1,2-Dichlorobenzene	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
Dichloroethane	ND	5.3	0.92	1	B5B0745	02/27/2015	02/27/15 19:02	
Dichloropropane	ND	5.3	3.6	1	B5B0745	02/27/2015	02/27/15 19:02	
1,3,5-Trimethylbenzene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
1,3-Dichlorobenzene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
1,3-Dichloropropane	ND	5.3	1.2	1	B5B0745	02/27/2015	02/27/15 19:02	
1,4-Dichlorobenzene	ND	5.3	1.9	1	B5B0745	02/27/2015	02/27/15 19:02	
2,2-Dichloropropane	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
2-Chlorotoluene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
4-Chlorotoluene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
4-Isopropyltoluene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
Benzene	ND	5.3	1.2	1	B5B0745	02/27/2015	02/27/15 19:02	
Bromobenzene	ND	5.3	1.7	1	B5B0745	02/27/2015	02/27/15 19:02	
Bromochloromethane	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
Bromodichloromethane	ND	5.3	1.6	1	B5B0745	02/27/2015	02/27/15 19:02	
Bromoform	ND	5.3	1.6	1	B5B0745	02/27/2015	02/27/15 19:02	
Bromomethane	ND	5.3	2.8	1	B5B0745	02/27/2015	02/27/15 19:02	
Carbon disulfide	ND	5.3	2.4	1	B5B0745	02/27/2015	02/27/15 19:02	
Carbon tetrachloride	ND	5.3	1.6	1	B5B0745	02/27/2015	02/27/15 19:02	
Chlorobenzene	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
Chloroethane	ND	5.3	5.2	1	B5B0745	02/27/2015	02/27/15 19:02	
Chloroform	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
Chloromethane	ND	5.3	0.78	1	B5B0745	02/27/2015	02/27/15 19:02	
cis-1,2-Dichloroethene	ND	5.3	1.2	1	B5B0745	02/27/2015	02/27/15 19:02	
cis-1,3-Dichloropropene	ND	5.3	2.4	1	B5B0745	02/27/2015	02/27/15 19:02	
Di-isopropyl ether	ND	5.3	1.1	1	B5B0745	02/27/2015	02/27/15 19:02	
Dibromochloromethane	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
bromomethane	ND	5.3	2.1	1	B5B0745	02/27/2015	02/27/15 19:02	
ilorodifluoromethane	ND	5.3	0.78	1	B5B0745	02/27/2015	02/27/15 19:02	
Ethyl Acetate	ND	53	14	1	B5B0745	02/27/2015	02/27/15 19:02	
Ethyl Ether	ND	53	13	1	B5B0745	02/27/2015	02/27/15 19:02	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-1.5

Lab ID: 1500744-12

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.3	1.2	1	B5B0745	02/27/2015	02/27/15 19:02	
Ethylbenzene	ND	5.3	1.2	1	B5B0745	02/27/2015	02/27/15 19:02	
Freon-113	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
Hexachlorobutadiene	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
Isopropylbenzene	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
m,p-Xylene	ND	11	2.6	1	B5B0745	02/27/2015	02/27/15 19:02	
Methylene chloride	ND	5.3	5.3	1	B5B0745	02/27/2015	02/27/15 19:02	
MTBE	ND	5.3	0.95	1	B5B0745	02/27/2015	02/27/15 19:02	
n-Butylbenzene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
n-Propylbenzene	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
Naphthalene	ND	5.3	3.4	1	B5B0745	02/27/2015	02/27/15 19:02	
o-Xylene	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
sec-Butylbenzene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
Styrene	ND	5.3	1.4	1	B5B0745	02/27/2015	02/27/15 19:02	
tert-Amyl methyl ether	ND	5.3	1.1	1	B5B0745	02/27/2015	02/27/15 19:02	
tert-Butanol	ND	110	21	1	B5B0745	02/27/2015	02/27/15 19:02	
tert-Butylbenzene	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
Tetrachloroethene	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
Toluene	ND	5.3	0.93	1	B5B0745	02/27/2015	02/27/15 19:02	
trans-1,2-Dichloroethene	ND	5.3	1.5	1	B5B0745	02/27/2015	02/27/15 19:02	
trans-1,3-Dichloropropene	ND	5.3	1.2	1	B5B0745	02/27/2015	02/27/15 19:02	
Trichloroethene	ND	5.3	1.3	1	B5B0745	02/27/2015	02/27/15 19:02	
Trichlorofluoromethane	ND	5.3	1.9	1	B5B0745	02/27/2015	02/27/15 19:02	
Vinyl acetate	ND	53	11	1	B5B0745	02/27/2015	02/27/15 19:02	
Vinyl chloride	ND	5.3	1.1	1	B5B0745	02/27/2015	02/27/15 19:02	
Surrogate: 1,2-Dichloroethane-d4	*115 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 19:02*	
Surrogate: 4-Bromofluorobenzene	*92.9 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 19:02*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 19:02*	
Surrogate: Toluene-d8	*99.4 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 19:02*	

Certificate of Analysis

...ltec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-3.5

Lab ID: 1500744-13

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:50	
Arsenic	**2.1**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:50	
Barium	**31**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:50	
Beryllium	**0.32**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:49	J
Cadmium	**0.50**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:50	J
Chromium	**6.1**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:50	
Cobalt	**2.3**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:50	
Copper	**4.5**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:50	
Lead	**19**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:50	
Molybdenum	**1.1**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:50	
...ckel	**5.2**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:50	
...nium	**0.67**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:50	J
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:50	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:50	
Vanadium	**16**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:50	
Zinc	**20**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:50	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:22	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:22	
Surrogate: 4-Bromofluorobenzene	*108 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 15:22*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 17:18	
C23-C32	4.4	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 17:18	
Surrogate: p-Terphenyl	*66.0 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 17:18*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
...,1-Trichloroethane	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
1,1,2,2-Tetrachloroethane	ND	5.1	2.0	1	B5B0745	02/27/2015	02/27/15 19:21	
1,1,2-Trichloroethane	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-3.5
Lab ID: 1500744-13

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.1	1.0	1	B5B0745	02/27/2015	02/27/15 19:21	
1,1-Dichloroethene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	
1,1-Dichloropropene	ND	5.1	1.6	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2,3-Trichloropropane	ND	5.1	1.9	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2,3-Trichlorobenzene	ND	5.1	2.8	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2,4-Trichlorobenzene	ND	5.1	2.1	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2,4-Trimethylbenzene	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2-Dibromoethane	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2-Dichlorobenzene	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2-Dichloroethane	ND	5.1	0.90	1	B5B0745	02/27/2015	02/27/15 19:21	
1,2-Dichloropropane	ND	5.1	3.5	1	B5B0745	02/27/2015	02/27/15 19:21	
1,3,5-Trimethylbenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 19:21	
1,3-Dichlorobenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 19:21	
1,3-Dichloropropane	ND	5.1	1.1	1	B5B0745	02/27/2015	02/27/15 19:21	
1,4-Dichlorobenzene	ND	5.1	1.8	1	B5B0745	02/27/2015	02/27/15 19:21	
2,2-Dichloropropane	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
2-Chlorotoluene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 19:21	
4-Chlorotoluene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
4-Isopropyltoluene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
Benzene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	
Bromobenzene	ND	5.1	1.7	1	B5B0745	02/27/2015	02/27/15 19:21	
Bromochloromethane	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 19:21	
Bromodichloromethane	ND	5.1	1.6	1	B5B0745	02/27/2015	02/27/15 19:21	
Bromoform	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
Bromomethane	ND	5.1	2.7	1	B5B0745	02/27/2015	02/27/15 19:21	
Carbon disulfide	ND	5.1	2.4	1	B5B0745	02/27/2015	02/27/15 19:21	
Carbon tetrachloride	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
Chlorobenzene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	
Chloroethane	ND	5.1	5.1	1	B5B0745	02/27/2015	02/27/15 19:21	
Chloroform	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
Chloromethane	ND	5.1	0.76	1	B5B0745	02/27/2015	02/27/15 19:21	
cis-1,2-Dichloroethene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	
cis-1,3-Dichloropropene	ND	5.1	2.4	1	B5B0745	02/27/2015	02/27/15 19:21	
Di-isopropyl ether	ND	5.1	1.0	1	B5B0745	02/27/2015	02/27/15 19:21	
Dibromochloromethane	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
Dibromomethane	ND	5.1	2.0	1	B5B0745	02/27/2015	02/27/15 19:21	
Dichlorodifluoromethane	ND	5.1	0.76	1	B5B0745	02/27/2015	02/27/15 19:21	
Ethyl Acetate	ND	51	14	1	B5B0745	02/27/2015	02/27/15 19:21	
Ethyl Ether	ND	51	12	1	B5B0745	02/27/2015	02/27/15 19:21	
Ethyl tert-butyl ether	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-136-3.5
Lab ID: 1500744-13

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	
Freon-113	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
Hexachlorobutadiene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 19:21	
Isopropylbenzene	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
m,p-Xylene	ND	10	2.6	1	B5B0745	02/27/2015	02/27/15 19:21	
Methylene chloride	ND	5.1	5.1	1	B5B0745	02/27/2015	02/27/15 19:21	
MTBE	ND	5.1	0.93	1	B5B0745	02/27/2015	02/27/15 19:21	
n-Butylbenzene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
n-Propylbenzene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
Naphthalene	ND	5.1	3.3	1	B5B0745	02/27/2015	02/27/15 19:21	
o-Xylene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
Butylbenzene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
ene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
tert-Amyl methyl ether	ND	5.1	1.1	1	B5B0745	02/27/2015	02/27/15 19:21	
tert-Butanol	ND	100	21	1	B5B0745	02/27/2015	02/27/15 19:21	
tert-Butylbenzene	ND	5.1	1.4	1	B5B0745	02/27/2015	02/27/15 19:21	
Tetrachloroethene	ND	5.1	1.3	1	B5B0745	02/27/2015	02/27/15 19:21	
Toluene	ND	5.1	0.91	1	B5B0745	02/27/2015	02/27/15 19:21	
trans-1,2-Dichloroethene	ND	5.1	1.5	1	B5B0745	02/27/2015	02/27/15 19:21	
trans-1,3-Dichloropropene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	
Trichloroethene	ND	5.1	1.2	1	B5B0745	02/27/2015	02/27/15 19:21	
Trichlorofluoromethane	ND	5.1	1.8	1	B5B0745	02/27/2015	02/27/15 19:21	
Vinyl acetate	ND	51	11	1	B5B0745	02/27/2015	02/27/15 19:21	
Vinyl chloride	ND	5.1	1.1	1	B5B0745	02/27/2015	02/27/15 19:21	
Surrogate: 1,2-Dichloroethane-d4	*122 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 19:21*	
Surrogate: 4-Bromofluorobenzene	*93.3 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 19:21*	
Surrogate: Dibromofluoromethane	*110 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 19:21*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 19:21*	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-137-0
Lab ID: 1500744-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0020	03/03/2015	03/04/15 16:54	
Arsenic	**5.0**	1.0	0.19	1	B5C0020	03/03/2015	03/04/15 16:54	
Barium	**55**	1.0	0.14	1	B5C0020	03/03/2015	03/04/15 16:53	
Beryllium	**0.59**	1.0	0.04	1	B5C0020	03/03/2015	03/04/15 16:53	J
Cadmium	**1.0**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:54	J
Chromium	**14**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:53	
Cobalt	**6.2**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:54	
Copper	**20**	2.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:53	
Lead	**140**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:53	
Molybdenum	**1.4**	1.0	0.05	1	B5C0020	03/03/2015	03/04/15 16:53	
Nickel	**17**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:53	
Selenium	**1.0**	1.0	0.15	1	B5C0020	03/03/2015	03/04/15 16:54	
Silver	ND	1.0	0.06	1	B5C0020	03/03/2015	03/04/15 16:53	
Thallium	ND	1.0	0.20	1	B5C0020	03/03/2015	03/04/15 16:54	
Vanadium	**28**	1.0	0.07	1	B5C0020	03/03/2015	03/04/15 16:53	
Zinc	**82**	1.0	0.11	1	B5C0020	03/03/2015	03/04/15 16:53	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:37	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:37	
Surrogate: 4-Bromofluorobenzene	*93.7 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 15:37*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**7.7**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 20:43	
C23-C32	**48**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 20:43	
Surrogate: p-Terphenyl	*80.9 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 20:43*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 19:40	
1,1,1-Trichloroethane	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 19:40	
1,1,2,2-Tetrachloroethane	ND	5.5	2.2	1	B5B0745	02/27/2015	02/27/15 19:40	

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Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-137-0
Lab ID: 1500744-14

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
1,1-Dichloroethane	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 19:40	
1,1-Dichloroethene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
1,1-Dichloropropene	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 19:40	
1,2,3-Trichloropropane	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 19:40	
1,2,3-Trichlorobenzene	ND	5.5	3.0	1	B5B0745	02/27/2015	02/27/15 19:40	
1,2,4-Trichlorobenzene	ND	5.5	2.3	1	B5B0745	02/27/2015	02/27/15 19:40	
1,2,4-Trimethylbenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5B0745	02/27/2015	02/27/15 19:40	
1,2-Dibromoethane	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
1,2-Dichlorobenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
...Dichloroethane	ND	5.5	0.97	1	B5B0745	02/27/2015	02/27/15 19:40	
...-Dichloropropane	ND	5.5	3.8	1	B5B0745	02/27/2015	02/27/15 19:40	
1,3,5-Trimethylbenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 19:40	
1,3-Dichlorobenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 19:40	
1,3-Dichloropropane	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 19:40	
1,4-Dichlorobenzene	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 19:40	
2,2-Dichloropropane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
2-Chlorotoluene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 19:40	
4-Chlorotoluene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
4-Isopropyltoluene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
Benzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
Bromobenzene	ND	5.5	1.8	1	B5B0745	02/27/2015	02/27/15 19:40	
Bromochloromethane	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
Bromodichloromethane	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 19:40	
Bromoform	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
Bromomethane	ND	5.5	2.9	1	B5B0745	02/27/2015	02/27/15 19:40	
Carbon disulfide	ND	5.5	2.6	1	B5B0745	02/27/2015	02/27/15 19:40	
Carbon tetrachloride	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 19:40	
Chlorobenzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
Chloroethane	ND	5.5	5.5	1	B5B0745	02/27/2015	02/27/15 19:40	
Chloroform	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
Chloromethane	ND	5.5	0.82	1	B5B0745	02/27/2015	02/27/15 19:40	
cis-1,2-Dichloroethene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
cis-1,3-Dichloropropene	ND	5.5	2.5	1	B5B0745	02/27/2015	02/27/15 19:40	
Di-isopropyl ether	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 19:40	
Dibromochloromethane	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
...romomethane	ND	5.5	2.2	1	B5B0745	02/27/2015	02/27/15 19:40	
...lorodifluoromethane	ND	5.5	0.82	1	B5B0745	02/27/2015	02/27/15 19:40	
Ethyl Acetate	ND	55	15	1	B5B0745	02/27/2015	02/27/15 19:40	
Ethyl Ether	ND	55	13	1	B5B0745	02/27/2015	02/27/15 19:40	

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-137-0
Lab ID: 1500744-14

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
Ethylbenzene	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 19:40	
Freon-113	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
Hexachlorobutadiene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 19:40	
Isopropylbenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
m,p-Xylene	ND	11	2.8	1	B5B0745	02/27/2015	02/27/15 19:40	
Methylene chloride	ND	5.5	5.5	1	B5B0745	02/27/2015	02/27/15 19:40	
MTBE	ND	5.5	1.0	1	B5B0745	02/27/2015	02/27/15 19:40	
n-Butylbenzene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
n-Propylbenzene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
Naphthalene	ND	5.5	3.5	1	B5B0745	02/27/2015	02/27/15 19:40	
o-Xylene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
sec-Butylbenzene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
Styrene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
tert-Amyl methyl ether	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 19:40	
tert-Butanol	ND	110	22	1	B5B0745	02/27/2015	02/27/15 19:40	
tert-Butylbenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
Tetrachloroethene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 19:40	
Toluene	ND	5.5	0.98	1	B5B0745	02/27/2015	02/27/15 19:40	
trans-1,2-Dichloroethene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 19:40	
trans-1,3-Dichloropropene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
Trichloroethene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 19:40	
Trichlorofluoromethane	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 19:40	
Vinyl acetate	ND	55	12	1	B5B0745	02/27/2015	02/27/15 19:40	
Vinyl chloride	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 19:40	
Surrogate: 1,2-Dichloroethane-d4	*125 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 19:40*	
Surrogate: 4-Bromofluorobenzene	*95.7 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 19:40*	
Surrogate: Dibromofluoromethane	*118 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 19:40*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 19:40*	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-137-1.5
Lab ID: 1500744-15

Title 22 Metals by ICP-AES EPA 6010B — Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:05	
Arsenic	5.2	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:05	
Barium	39	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:04	
Beryllium	0.60	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:03	J
Cadmium	0.86	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:05	J
Chromium	12	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:04	
Cobalt	5.5	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:05	
Copper	12	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:04	
Lead	17	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:05	
Molybdenum	1.4	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:04	
Nickel	19	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:04	
..nium	1.0	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:05	J
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:04	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:05	
Vanadium	24	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:04	
Zinc	49	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:04	

Gasoline Range Organics by EPA 8015B (Modified) — Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:53	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 15:53	
Surrogate: 4-Bromofluorobenzene	*97.0 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 15:53*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 17:34	
C23-C32	2.8	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 17:34	
Surrogate: p-Terphenyl	*67.4 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 17:34*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
..1-Trichloroethane	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5B0745	02/27/2015	02/27/15 19:58	
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-137-1.5
Lab ID: 1500744-15

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	4.4	0.86	1	B5B0745	02/27/2015	02/27/15 19:58	
1,1-Dichloroethene	ND	4.4	0.99	1	B5B0745	02/27/2015	02/27/15 19:58	
1,1-Dichloropropene	ND	4.4	1.3	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2-Dibromo-3-chloropropane	ND	8.8	1.9	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2-Dibromoethane	ND	4.4	1.3	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2-Dichloroethane	ND	4.4	0.77	1	B5B0745	02/27/2015	02/27/15 19:58	
1,2-Dichloropropane	ND	4.4	3.0	1	B5B0745	02/27/2015	02/27/15 19:58	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
1,3-Dichloropropane	ND	4.4	0.97	1	B5B0745	02/27/2015	02/27/15 19:58	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5B0745	02/27/2015	02/27/15 19:58	
2,2-Dichloropropane	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
2-Chlorotoluene	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
4-Chlorotoluene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
4-Isopropyltoluene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
Benzene	ND	4.4	1.0	1	B5B0745	02/27/2015	02/27/15 19:58	
Bromobenzene	ND	4.4	1.4	1	B5B0745	02/27/2015	02/27/15 19:58	
Bromochloromethane	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
Bromodichloromethane	ND	4.4	1.4	1	B5B0745	02/27/2015	02/27/15 19:58	
Bromoform	ND	4.4	1.3	1	B5B0745	02/27/2015	02/27/15 19:58	
Bromomethane	ND	4.4	2.3	1	B5B0745	02/27/2015	02/27/15 19:58	
Carbon disulfide	**2.1**	4.4	2.0	1	B5B0745	02/27/2015	02/27/15 19:58	J
Carbon tetrachloride	ND	4.4	1.3	1	B5B0745	02/27/2015	02/27/15 19:58	
Chlorobenzene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
Chloroethane	ND	4.4	4.3	1	B5B0745	02/27/2015	02/27/15 19:58	
Chloroform	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
Chloromethane	ND	4.4	0.65	1	B5B0745	02/27/2015	02/27/15 19:58	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5B0745	02/27/2015	02/27/15 19:58	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5B0745	02/27/2015	02/27/15 19:58	
Di-isopropyl ether	ND	4.4	0.89	1	B5B0745	02/27/2015	02/27/15 19:58	
Dibromochloromethane	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
Dibromomethane	ND	4.4	1.7	1	B5B0745	02/27/2015	02/27/15 19:58	
Dichlorodifluoromethane	ND	4.4	0.65	1	B5B0745	02/27/2015	02/27/15 19:58	
Ethyl Acetate	ND	44	12	1	B5B0745	02/27/2015	02/27/15 19:58	
Ethyl Ether	ND	44	11	1	B5B0745	02/27/2015	02/27/15 19:58	
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5B0745	02/27/2015	02/27/15 19:58	

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..utec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-137-1.5

Lab ID: 1500744-15

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	4.4	0.98	1	B5B0745	02/27/2015	02/27/15 19:58	
Freon-113	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
Hexachlorobutadiene	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
Isopropylbenzene	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
m,p-Xylene	ND	8.8	2.2	1	B5B0745	02/27/2015	02/27/15 19:58	
Methylene chloride	ND	4.4	4.4	1	B5B0745	02/27/2015	02/27/15 19:58	
MTBE	ND	4.4	0.79	1	B5B0745	02/27/2015	02/27/15 19:58	
n-Butylbenzene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
n-Propylbenzene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
Naphthalene	ND	4.4	2.8	1	B5B0745	02/27/2015	02/27/15 19:58	
o-Xylene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
..Butylbenzene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
..ene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
tert-Amyl methyl ether	ND	4.4	0.90	1	B5B0745	02/27/2015	02/27/15 19:58	
tert-Butanol	ND	88	18	1	B5B0745	02/27/2015	02/27/15 19:58	
tert-Butylbenzene	ND	4.4	1.2	1	B5B0745	02/27/2015	02/27/15 19:58	
Tetrachloroethene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
Toluene	ND	4.4	0.78	1	B5B0745	02/27/2015	02/27/15 19:58	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5B0745	02/27/2015	02/27/15 19:58	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5B0745	02/27/2015	02/27/15 19:58	
Trichloroethene	ND	4.4	1.1	1	B5B0745	02/27/2015	02/27/15 19:58	
Trichlorofluoromethane	ND	4.4	1.6	1	B5B0745	02/27/2015	02/27/15 19:58	
Vinyl acetate	ND	44	9.4	1	B5B0745	02/27/2015	02/27/15 19:58	
Vinyl chloride	ND	4.4	0.90	1	B5B0745	02/27/2015	02/27/15 19:58	
Surrogate: 1,2-Dichloroethane-d4	*131 %*		*20 - 189*		B5B0745	02/27/2015	*02/27/15 19:58*	
Surrogate: 4-Bromofluorobenzene	*94.0 %*		*20 - 173*		B5B0745	02/27/2015	*02/27/15 19:58*	
Surrogate: Dibromofluoromethane	*112 %*		*26 - 178*		B5B0745	02/27/2015	*02/27/15 19:58*	
Surrogate: Toluene-d8	*102 %*		*31 - 166*		B5B0745	02/27/2015	*02/27/15 19:58*	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-2-022515
Lab ID: 1500744-16

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:27	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:27	
Barium	**0.0005**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:27	J
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:26	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:27	
Chromium	**0.0014**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:27	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:27	
Copper	**0.0016**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:26	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:27	
Molybdenum	ND	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:27	
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:27	
Selenium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:27	
Silver	ND	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:26	
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:27	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:26	
Zinc	**0.0040**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:27	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 13:07	
C4-C8	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 13:07	
Surrogate: 4-Bromofluorobenzene	*90.0 %*	*70 - 130*			B5B0736	02/27/2015	*02/27/15 13:07*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 17:27	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 17:27	
Surrogate: p-Terphenyl	*47.6 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 17:27*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 14:15	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 14:15	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 14:15	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 14:15	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID EBB-2-022515
Lab ID: 1500744-16

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:15	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:15	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 14:15	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:15	
Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:15	
5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:15	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 14:15	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 14:15	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 14:15	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:15	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 14:15	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 14:15	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 14:15	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:15	
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:15	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 14:15	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 14:15	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 14:15	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 14:15	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 14:15	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 14:15	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 14:15	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 14:15	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:15	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 14:15	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 14:15	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 14:15	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 14:15	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:15	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 14:15	
Dibromomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:15	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:15	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 14:15	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 14:15	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-2-022515

Lab ID: 1500744-16

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 14:15	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:15	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 14:15	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 14:15	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 14:15	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 14:15	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 14:15	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:15	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:15	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:15	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 14:15	
o-Xylene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 14:15	
sec-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 14:15	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 14:15	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:15	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 14:15	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 14:15	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 14:15	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 14:15	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:15	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:15	
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:15	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 14:15	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 14:15	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:15	
Surrogate: 1,2-Dichloroethane-d4	*96.3 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 14:15*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 14:15*	
Surrogate: Dibromofluoromethane	*96.0 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 14:15*	
Surrogate: Toluene-d8	*86.4 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 14:15*	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-138-0
Lab ID: 1500744-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:25	
Arsenic	**4.9**	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:25	
Barium	**52**	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:24	
Beryllium	**0.57**	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:24	J
Cadmium	1.1	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:25	
Chromium	**13**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:24	
Cobalt	**5.3**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:25	
Copper	**19**	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:24	
Lead	**52**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:25	
Molybdenum	**1.5**	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:24	
Nickel	**17**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:24	
...ium	**1.1**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:25	
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:24	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:25	
Vanadium	**27**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:24	
Zinc	**72**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:24	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:09	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:09	
Surrogate: 4-Bromofluorobenzene	*94.5 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 16:09*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**2.6**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 19:54	
C23-C32	**22**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 19:54	
Surrogate: p-Terphenyl	*62.2 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 19:54*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
...-Trichloroethane	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
1,1,2,2-Tetrachloroethane	ND	5.5	2.1	1	B5B0745	02/27/2015	02/27/15 20:17	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-138-0
Lab ID: 1500744-17

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
1,1-Dichloroethane	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 20:17	
1,1-Dichloroethene	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 20:17	
1,1-Dichloropropene	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2,3-Trichloropropane	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2,3-Trichlorobenzene	ND	5.5	3.0	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2,4-Trichlorobenzene	ND	5.5	2.2	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2,4-Trimethylbenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2-Dibromoethane	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2-Dichlorobenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2-Dichloroethane	ND	5.5	0.96	1	B5B0745	02/27/2015	02/27/15 20:17	
1,2-Dichloropropane	ND	5.5	3.7	1	B5B0745	02/27/2015	02/27/15 20:17	
1,3,5-Trimethylbenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 20:17	
1,3-Dichlorobenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 20:17	
1,3-Dichloropropane	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 20:17	
1,4-Dichlorobenzene	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 20:17	
2,2-Dichloropropane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
2-Chlorotoluene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 20:17	
4-Chlorotoluene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
4-Isopropyltoluene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
Benzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
Bromobenzene	ND	5.5	1.8	1	B5B0745	02/27/2015	02/27/15 20:17	
Bromochloromethane	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 20:17	
Bromodichloromethane	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 20:17	
Bromoform	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 20:17	
Bromomethane	ND	5.5	2.9	1	B5B0745	02/27/2015	02/27/15 20:17	
Carbon disulfide	ND	5.5	2.5	1	B5B0745	02/27/2015	02/27/15 20:17	
Carbon tetrachloride	ND	5.5	1.7	1	B5B0745	02/27/2015	02/27/15 20:17	
Chlorobenzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
Chloroethane	ND	5.5	5.4	1	B5B0745	02/27/2015	02/27/15 20:17	
Chloroform	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 20:17	
Chloromethane	ND	5.5	0.82	1	B5B0745	02/27/2015	02/27/15 20:17	
cis-1,2-Dichloroethene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
cis-1;3-Dichloropropene	ND	5.5	2.5	1	B5B0745	02/27/2015	02/27/15 20:17	
Di-isopropyl ether	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 20:17	
Dibromochloromethane	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
Dibromomethane	ND	5.5	2.2	1	B5B0745	02/27/2015	02/27/15 20:17	
Dichlorodifluoromethane	ND	5.5	0.81	1	B5B0745	02/27/2015	02/27/15 20:17	
Ethyl Acetate	ND	55	15	1	B5B0745	02/27/2015	02/27/15 20:17	
Ethyl Ether	ND	55	13	1	B5B0745	02/27/2015	02/27/15 20:17	

Certificate of Analysis

...tec	Project Number: 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To: Anne Perez/Kristy Edblad
Thousand Oaks, CA 91361	Reported: 03/06/2015

Client Sample ID 1278-138-0
Lab ID: 1500744-17

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	FQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
Ethylbenzene	ND	5.5	1.2	1	B5B0745	02/27/2015	02/27/15 20:17	
Freon-113	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
Hexachlorobutadiene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 20:17	
Isopropylbenzene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 20:17	
m,p-Xylene	ND	11	2.7	1	B5B0745	02/27/2015	02/27/15 20:17	
Methylene chloride	ND	5.5	5.5	1	B5B0745	02/27/2015	02/27/15 20:17	
MTBE	ND	5.5	0.99	1	B5B0745	02/27/2015	02/27/15 20:17	
n-Butylbenzene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
n-Propylbenzene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
Naphthalene	ND	5.5	3.5	1	B5B0745	02/27/2015	02/27/15 20:17	
...ylene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
...Butylbenzene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
Styrene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
tert-Amyl methyl ether	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 20:17	
tert-Butanol	ND	110	22	1	B5B0745	02/27/2015	02/27/15 20:17	
tert-Butylbenzene	ND	5.5	1.5	1	B5B0745	02/27/2015	02/27/15 20:17	
Tetrachloroethene	ND	5.5	1.4	1	B5B0745	02/27/2015	02/27/15 20:17	
Toluene	ND	5.5	0.97	1	B5B0745	02/27/2015	02/27/15 20:17	
trans-1,2-Dichloroethene	ND	5.5	1.6	1	B5B0745	02/27/2015	02/27/15 20:17	
trans-1,3-Dichloropropene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
Trichloroethene	ND	5.5	1.3	1	B5B0745	02/27/2015	02/27/15 20:17	
Trichlorofluoromethane	ND	5.5	2.0	1	B5B0745	02/27/2015	02/27/15 20:17	
Vinyl acetate	ND	55	12	1	B5B0745	02/27/2015	02/27/15 20:17	
Vinyl chloride	ND	5.5	1.1	1	B5B0745	02/27/2015	02/27/15 20:17	
Surrogate: 1,2-Dichloroethane-d4	*124 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 20:17*	
Surrogate: 4-Bromofluorobenzene	*96.9 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 20:17*	
Surrogate: Dibromofluoromethane	*113 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 20:17*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 20:17*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-138-1.5
Lab ID: 1500744-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:28	
Arsenic	**4.7**	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:28	
Barium	**45**	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:28	
Beryllium	**0.58**	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:27	J
Cadmium	**0.93**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:28	J
Chromium	**13**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:28	
Cobalt	**5.6**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:28	
Copper	**12**	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:28	
Lead	**32**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:28	
Molybdenum	**1.3**	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:28	
Nickel	**17**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:28	
Selenium	**0.80**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:28	J
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:28	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:28	
Vanadium	**25**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:28	
Zinc	**53**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:28	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 18:52	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 18:52	
Surrogate: 4-Bromofluorobenzene	*112 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 18:52*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	1.3	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 18:07	
C23-C32	**18**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 18:07	
Surrogate: p-Terphenyl	*66.3 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 18:07*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
1,1,1-Trichloroethane	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
1,1,2,2-Tetrachloroethane	ND	5.8	2.2	1	B5B0745	02/27/2015	02/27/15 20:36	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-138-1.5
Lab ID: 1500744-18

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
1,1-Dichloroethane	ND	5.8	1.1	1	B5B0745	02/27/2015	02/27/15 20:36	
1,1-Dichloroethene	ND	5.8	1.3	1	B5B0745	02/27/2015	02/27/15 20:36	
1,1-Dichloropropene	ND	5.8	1.8	1	B5B0745	02/27/2015	02/27/15 20:36	
1,2,3-Trichloropropane	ND	5.8	2.1	1	B5B0745	02/27/2015	02/27/15 20:36	
1,2,3-Trichlorobenzene	ND	5.8	3.1	1	B5B0745	02/27/2015	02/27/15 20:36	
1,2,4-Trichlorobenzene	ND	5.8	2.4	1	B5B0745	02/27/2015	02/27/15 20:36	
1,2,4-Trimethylbenzene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
1,2-Dibromo-3-chloropropane	ND	12	2.5	1	B5B0745	02/27/2015	02/27/15 20:36	
1,2-Dibromoethane	ND	5.8	1.7	1	B5B0745	02/27/2015	02/27/15 20:36	
1,2-Dichlorobenzene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
...Dichloroethane	ND	5.8	1.0	1	B5B0745	02/27/2015	02/27/15 20:36	
...-Dichloropropane	ND	5.8	3.9	1	B5B0745	02/27/2015	02/27/15 20:36	
1,3,5-Trimethylbenzene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
1,3-Dichlorobenzene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
1,3-Dichloropropane	ND	5.8	1.3	1	B5B0745	02/27/2015	02/27/15 20:36	
1,4-Dichlorobenzene	ND	5.8	2.1	1	B5B0745	02/27/2015	02/27/15 20:36	
2,2-Dichloropropane	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
2-Chlorotoluene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
4-Chlorotoluene	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
4-Isopropyltoluene	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
Benzene	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
Bromobenzene	ND	5.8	1.9	1	B5B0745	02/27/2015	02/27/15 20:36	
Bromochloromethane	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
Bromodichloromethane	ND	5.8	1.8	1	B5B0745	02/27/2015	02/27/15 20:36	
Bromoform	ND	5.8	1.7	1	B5B0745	02/27/2015	02/27/15 20:36	
Bromomethane	ND	5.8	3.0	1	B5B0745	02/27/2015	02/27/15 20:36	
Carbon disulfide	ND	5.8	2.7	1	B5B0745	02/27/2015	02/27/15 20:36	
Carbon tetrachloride	ND	5.8	1.7	1	B5B0745	02/27/2015	02/27/15 20:36	
Chlorobenzene	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
Chloroethane	ND	5.8	5.7	1	B5B0745	02/27/2015	02/27/15 20:36	
Chloroform	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
Chloromethane	ND	5.8	0.86	1	B5B0745	02/27/2015	02/27/15 20:36	
cis-1,2-Dichloroethene	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
cis-1,3-Dichloropropene	ND	5.8	2.7	1	B5B0745	02/27/2015	02/27/15 20:36	
Di-isopropyl ether	ND	5.8	1.2	1	B5B0745	02/27/2015	02/27/15 20:36	
Dibromochloromethane	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
...romomethane	ND	5.8	2.3	1	B5B0745	02/27/2015	02/27/15 20:36	
...lorodifluoromethane	ND	5.8	0.86	1	B5B0745	02/27/2015	02/27/15 20:36	
Ethyl Acetate	ND	58	15	1	B5B0745	02/27/2015	02/27/15 20:36	
Ethyl Ether	ND	58	14	1	B5B0745	02/27/2015	02/27/15 20:36	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-138-1.5
Lab ID: 1500744-18

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.8	1.3	1	B5B0745	02/27/2015	02/27/15 20:36	
Ethylbenzene	ND	5.8	1.3	1	B5B0745	02/27/2015	02/27/15 20:36	
Freon-113	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
Hexachlorobutadiene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
Isopropylbenzene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
m,p-Xylene	ND	12	2.9	1	B5B0745	02/27/2015	02/27/15 20:36	
Methylene chloride	ND	5.8	5.8	1	B5B0745	02/27/2015	02/27/15 20:36	
MTBE	ND	5.8	1.0	1	B5B0745	02/27/2015	02/27/15 20:36	
n-Butylbenzene	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
n-Propylbenzene	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
Naphthalene	ND	5.8	3.7	1	B5B0745	02/27/2015	02/27/15 20:36	
o-Xylene	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
sec-Butylbenzene	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
Styrene	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
tert-Amyl methyl ether	ND	5.8	1.2	1	B5B0745	02/27/2015	02/27/15 20:36	
tert-Butanol	ND	120	23	1	B5B0745	02/27/2015	02/27/15 20:36	
tert-Butylbenzene	ND	5.8	1.6	1	B5B0745	02/27/2015	02/27/15 20:36	
Tetrachloroethene	ND	5.8	1.5	1	B5B0745	02/27/2015	02/27/15 20:36	
Toluene	ND	5.8	1.0	1	B5B0745	02/27/2015	02/27/15 20:36	
trans-1,2-Dichloroethene	ND	5.8	1.7	1	B5B0745	02/27/2015	02/27/15 20:36	
trans-1,3-Dichloropropene	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
Trichloroethene	ND	5.8	1.4	1	B5B0745	02/27/2015	02/27/15 20:36	
Trichlorofluoromethane	ND	5.8	2.1	1	B5B0745	02/27/2015	02/27/15 20:36	
Vinyl acetate	ND	58	12	1	B5B0745	02/27/2015	02/27/15 20:36	
Vinyl chloride	ND	5.8	1.2	1	B5B0745	02/27/2015	02/27/15 20:36	
Surrogate: 1,2-Dichloroethane-d4	*122 %*	*20 - 189*			B5B0745	02/27/2015	*02/27/15 20:36*	
Surrogate: 4-Bromofluorobenzene	*97.7 %*	*20 - 173*			B5B0745	02/27/2015	*02/27/15 20:36*	
Surrogate: Dibromofluoromethane	*109 %*	*26 - 178*			B5B0745	02/27/2015	*02/27/15 20:36*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5B0745	02/27/2015	*02/27/15 20:36*	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-138-3.5
Lab ID: 1500744-19

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:32	
Arsenic	4.9	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:32	
Barium	45	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:31	
Beryllium	0.58	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:31	J
Cadmium	0.98	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:32	J
Chromium	15	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:31	
Cobalt	7.0	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:32	
Copper	13	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:31	
Lead	35	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:32	
Molybdenum	1.2	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:31	
Nickel	17	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:31	
nium	0.88	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:32	J
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:31	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:32	
Vanadium	25	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:31	
Zinc	71	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:31	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:25	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:25	
Surrogate: 4-Bromofluorobenzene	*97.4 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 16:25*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	2.2	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 20:10	
C23-C32	23	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 20:10	
Surrogate: p-Terphenyl	*63.7 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 20:10*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
,2-Tetrachloroethane	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
,1-Trichloroethane	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
1,1,2,2-Tetrachloroethane	ND	4.0	1.6	1	B5C0002	03/02/2015	03/02/15 17:19	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-138-3.5
Lab ID: 1500744-19

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.0	0.97	1	B5C0002	03/02/2015	03/02/15 17:19	
1,1-Dichloroethane	ND	4.0	0.78	1	B5C0002	03/02/2015	03/02/15 17:19	
1,1-Dichloroethene	ND	4.0	0.90	1	B5C0002	03/02/2015	03/02/15 17:19	
1,1-Dichloropropene	ND	4.0	1.2	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2,3-Trichloropropane	ND	4.0	1.5	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2,3-Trichlorobenzene	ND	4.0	2.2	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2,4-Trichlorobenzene	ND	4.0	1.6	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2,4-Trimethylbenzene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2-Dibromo-3-chloropropane	ND	8.0	1.7	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2-Dibromoethane	ND	4.0	1.2	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2-Dichlorobenzene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2-Dichloroethane	ND	4.0	0.70	1	B5C0002	03/02/2015	03/02/15 17:19	
1,2-Dichloropropane	ND	4.0	2.7	1	B5C0002	03/02/2015	03/02/15 17:19	
1,3,5-Trimethylbenzene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
1,3-Dichlorobenzene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
1,3-Dichloropropane	ND	4.0	0.88	1	B5C0002	03/02/2015	03/02/15 17:19	
1,4-Dichlorobenzene	ND	4.0	1.4	1	B5C0002	03/02/2015	03/02/15 17:19	
2,2-Dichloropropane	ND	4.0	0.97	1	B5C0002	03/02/2015	03/02/15 17:19	
2-Chlorotoluene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
4-Chlorotoluene	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
4-Isopropyltoluene	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
Benzene	ND	4.0	0.94	1	B5C0002	03/02/2015	03/02/15 17:19	
Bromobenzene	ND	4.0	1.3	1	B5C0002	03/02/2015	03/02/15 17:19	
Bromochloromethane	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
Bromodichloromethane	ND	4.0	1.2	1	B5C0002	03/02/2015	03/02/15 17:19	
Bromoform	ND	4.0	1.2	1	B5C0002	03/02/2015	03/02/15 17:19	
Bromomethane	ND	4.0	2.1	1	B5C0002	03/02/2015	03/02/15 17:19	
Carbon disulfide	ND	4.0	1.8	1	B5C0002	03/02/2015	03/02/15 17:19	
Carbon tetrachloride	ND	4.0	1.2	1	B5C0002	03/02/2015	03/02/15 17:19	
Chlorobenzene	ND	4.0	0.96	1	B5C0002	03/02/2015	03/02/15 17:19	
Chloroethane	ND	4.0	4.0	1	B5C0002	03/02/2015	03/02/15 17:19	
Chloroform	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
Chloromethane	ND	4.0	0.59	1	B5C0002	03/02/2015	03/02/15 17:19	
cis-1,2-Dichloroethene	ND	4.0	0.94	1	B5C0002	03/02/2015	03/02/15 17:19	
cis-1,3-Dichloropropene	ND	4.0	1.8	1	B5C0002	03/02/2015	03/02/15 17:19	
Di-isopropyl ether	ND	4.0	0.81	1	B5C0002	03/02/2015	03/02/15 17:19	
Dibromochloromethane	ND	4.0	0.98	1	B5C0002	03/02/2015	03/02/15 17:19	
Dibromomethane	ND	4.0	1.6	1	B5C0002	03/02/2015	03/02/15 17:19	
Dichlorodifluoromethane	ND	4.0	0.59	1	B5C0002	03/02/2015	03/02/15 17:19	
Ethyl Acetate	ND	40	11	1	B5C0002	03/02/2015	03/02/15 17:19	
Ethyl Ether	ND	40	9.6	1	B5C0002	03/02/2015	03/02/15 17:19	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-138-3.5

Lab ID: 1500744-19

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.0	0.93	1	B5C0002	03/02/2015	03/02/15 17:19	
Ethylbenzene	ND	4.0	0.89	1	B5C0002	03/02/2015	03/02/15 17:19	
Freon-113	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
Hexachlorobutadiene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
Isopropylbenzene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
m,p-Xylene	ND	8.0	2.0	1	B5C0002	03/02/2015	03/02/15 17:19	
Methylene chloride	ND	4.0	4.0	1	B5C0002	03/02/2015	03/02/15 17:19	
MTBE	ND	4.0	0.72	1	B5C0002	03/02/2015	03/02/15 17:19	
n-Butylbenzene	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
n-Propylbenzene	ND	4.0	0.98	1	B5C0002	03/02/2015	03/02/15 17:19	
Naphthalene	ND	4.0	2.5	1	B5C0002	03/02/2015	03/02/15 17:19	
...ylene	ND	4.0	0.98	1	B5C0002	03/02/2015	03/02/15 17:19	
...Butylbenzene	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
Styrene	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
tert-Amyl methyl ether	ND	4.0	0.82	1	B5C0002	03/02/2015	03/02/15 17:19	
tert-Butanol	ND	80	16	1	B5C0002	03/02/2015	03/02/15 17:19	
tert-Butylbenzene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
Tetrachloroethene	ND	4.0	1.0	1	B5C0002	03/02/2015	03/02/15 17:19	
Toluene	ND	4.0	0.71	1	B5C0002	03/02/2015	03/02/15 17:19	
trans-1,2-Dichloroethene	ND	4.0	1.1	1	B5C0002	03/02/2015	03/02/15 17:19	
trans-1,3-Dichloropropene	ND	4.0	0.94	1	B5C0002	03/02/2015	03/02/15 17:19	
Trichloroethene	ND	4.0	0.97	1	B5C0002	03/02/2015	03/02/15 17:19	
Trichlorofluoromethane	ND	4.0	1.4	1	B5C0002	03/02/2015	03/02/15 17:19	
Vinyl acetate	ND	40	8.5	1	B5C0002	03/02/2015	03/02/15 17:19	
Vinyl chloride	ND	4.0	0.82	1	B5C0002	03/02/2015	03/02/15 17:19	
Surrogate: 1,2-Dichloroethane-d4	*121 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 17:19*	
Surrogate: 4-Bromofluorobenzene	*91.0 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 17:19*	
Surrogate: Dibromofluoromethane	*113 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 17:19*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 17:19*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-139-0

Lab ID: 1500744-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:35	
Arsenic	**4.5**	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:35	
Barium	**49**	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:35	
Beryllium	**0.61**	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:34	J
Cadmium	1.2	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:35	
Chromium	**13**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:35	
Cobalt	**5.2**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:35	
Copper	**21**	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:35	
Lead	**140**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:35	
Molybdenum	**1.7**	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:35	
Nickel	**16**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:35	
Selenium	**1.3**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:35	
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:35	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:35	
Vanadium	**25**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:35	
Zinc	**88**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:35	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:41	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:41	
Surrogate: 4-Bromofluorobenzene	*96.3 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 16:41*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**8.6**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 20:59	
C23-C32	**46**	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 20:59	
Surrogate: p-Terphenyl	*71.4 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 20:59*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
1,1,1-Trichloroethane	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
1,1,2,2-Tetrachloroethane	ND	5.8	2.2	1	B5C0002	03/02/2015	03/02/15 17:38	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-139-0
Lab ID: 1500744-20

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
1,1-Dichloroethane	ND	5.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:38	
1,1-Dichloroethene	ND	5.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:38	
1,1-Dichloropropene	ND	5.8	1.8	1	B5C0002	03/02/2015	03/02/15 17:38	
1,2,3-Trichloropropane	ND	5.8	2.1	1	B5C0002	03/02/2015	03/02/15 17:38	
1,2,3-Trichlorobenzene	ND	5.8	3.1	1	B5C0002	03/02/2015	03/02/15 17:38	
1,2,4-Trichlorobenzene	ND	5.8	2.4	1	B5C0002	03/02/2015	03/02/15 17:38	
1,2,4-Trimethylbenzene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
1,2-Dibromo-3-chloropropane	ND	12	2.5	1	B5C0002	03/02/2015	03/02/15 17:38	
1,2-Dibromoethane	ND	5.8	1.7	1	B5C0002	03/02/2015	03/02/15 17:38	
1,2-Dichlorobenzene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
...Dichloroethane	ND	5.8	1.0	1	B5C0002	03/02/2015	03/02/15 17:38	
...-Dichloropropane	ND	5.8	3.9	1	B5C0002	03/02/2015	03/02/15 17:38	
1,3,5-Trimethylbenzene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
1,3-Dichlorobenzene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
1,3-Dichloropropane	ND	5.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:38	
1,4-Dichlorobenzene	ND	5.8	2.0	1	B5C0002	03/02/2015	03/02/15 17:38	
2,2-Dichloropropane	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
2-Chlorotoluene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
4-Chlorotoluene	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
4-Isopropyltoluene	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
Benzene	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
Bromobenzene	ND	5.8	1.9	1	B5C0002	03/02/2015	03/02/15 17:38	
Bromochloromethane	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
Bromodichloromethane	ND	5.8	1.8	1	B5C0002	03/02/2015	03/02/15 17:38	
Bromoform	ND	5.8	1.7	1	B5C0002	03/02/2015	03/02/15 17:38	
Bromomethane	ND	5.8	3.0	1	B5C0002	03/02/2015	03/02/15 17:38	
Carbon disulfide	ND	5.8	2.7	1	B5C0002	03/02/2015	03/02/15 17:38	
Carbon tetrachloride	ND	5.8	1.7	1	B5C0002	03/02/2015	03/02/15 17:38	
Chlorobenzene	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
Chloroethane	ND	5.8	5.7	1	B5C0002	03/02/2015	03/02/15 17:38	
Chloroform	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
Chloromethane	ND	5.8	0.85	1	B5C0002	03/02/2015	03/02/15 17:38	
cis-1,2-Dichloroethene	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
cis-1,3-Dichloropropene	ND	5.8	2.6	1	B5C0002	03/02/2015	03/02/15 17:38	
Di-isopropyl ether	ND	5.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:38	
Dibromochloromethane	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
...romomethane	ND	5.8	2.3	1	B5C0002	03/02/2015	03/02/15 17:38	
...lorodifluoromethane	ND	5.8	0.85	1	B5C0002	03/02/2015	03/02/15 17:38	
Ethyl Acetate	ND	58	15	1	B5C0002	03/02/2015	03/02/15 17:38	
Ethyl Ether	ND	58	14	1	B5C0002	03/02/2015	03/02/15 17:38	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-139-0

Lab ID: 1500744-20

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:38	
Ethylbenzene	ND	5.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:38	
Freon-113	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
Hexachlorobutadiene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
Isopropylbenzene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
m,p-Xylene	ND	12	2.9	1	B5C0002	03/02/2015	03/02/15 17:38	
Methylene chloride	ND	5.8	5.8	1	B5C0002	03/02/2015	03/02/15 17:38	
MTBE	ND	5.8	1.0	1	B5C0002	03/02/2015	03/02/15 17:38	
n-Butylbenzene	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
n-Propylbenzene	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
Naphthalene	ND	5.8	3.7	1	B5C0002	03/02/2015	03/02/15 17:38	
o-Xylene	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
sec-Butylbenzene	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
Styrene	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
tert-Amyl methyl ether	ND	5.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:38	
tert-Butanol	ND	120	23	1	B5C0002	03/02/2015	03/02/15 17:38	
tert-Butylbenzene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
Tetrachloroethene	ND	5.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:38	
Toluene	ND	5.8	1.0	1	B5C0002	03/02/2015	03/02/15 17:38	
trans-1,2-Dichloroethene	ND	5.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:38	
trans-1,3-Dichloropropene	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
Trichloroethene	ND	5.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:38	
Trichlorofluoromethane	ND	5.8	2.1	1	B5C0002	03/02/2015	03/02/15 17:38	
Vinyl acetate	ND	58	12	1	B5C0002	03/02/2015	03/02/15 17:38	
Vinyl chloride	ND	5.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:38	
Surrogate: 1,2-Dichloroethane-d4	*119 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 17:38*	
Surrogate: 4-Bromofluorobenzene	*93.3 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 17:38*	
Surrogate: Dibromofluoromethane	*116 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 17:38*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 17:38*	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-139-1.5
Lab ID: 1500744-21

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:39	
Arsenic	4.8	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:39	
Barium	42	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:38	
Beryllium	0.65	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:38	J
Cadmium	0.92	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:39	J
Chromium	12	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:38	
Cobalt	5.5	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:39	
Copper	13	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:38	
Lead	59	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:39	
Molybdenum	0.70	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:38	J
Nickel	15	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:38	
nium	0.86	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:39	J
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:38	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:39	
Vanadium	22	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:38	
Zinc	57	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:38	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:57	
C4-C8	ND	1.0	0.20	1	B5C0005	02/25/2015	03/02/15 16:57	
Surrogate: 4-Bromofluorobenzene	*95.6 %*	*37 - 153*			B5C0005	02/25/2015	*03/02/15 16:57*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	1.8	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 18:23	
C23-C32	10	1.0	1.0	1	B5C0069	03/03/2015	03/03/15 18:23	
Surrogate: p-Terphenyl	*64.9 %*	*26 - 123*			B5C0069	03/03/2015	*03/03/15 18:23*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
,2-Tetrachloroethane	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
-Trichloroethane	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
1,1,2,2-Tetrachloroethane	ND	4.8	1.9	1	B5C0002	03/02/2015	03/02/15 17:56	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-139-1.5
Lab ID: 1500744-21

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
1,1-Dichloroethane	ND	4.8	0.95	1	B5C0002	03/02/2015	03/02/15 17:56	
1,1-Dichloroethene	ND	4.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:56	
1,1-Dichloropropene	ND	4.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2,3-Trichloropropane	ND	4.8	1.8	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2,3-Trichlorobenzene	ND	4.8	2.6	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2,4-Trichlorobenzene	ND	4.8	2.0	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2,4-Trimethylbenzene	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2-Dibromo-3-chloropropane	ND	9.7	2.1	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2-Dibromoethane	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2-Dichlorobenzene	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2-Dichloroethane	ND	4.8	0.84	1	B5C0002	03/02/2015	03/02/15 17:56	
1,2-Dichloropropane	ND	4.8	3.3	1	B5C0002	03/02/2015	03/02/15 17:56	
1,3,5-Trimethylbenzene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
1,3-Dichlorobenzene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
1,3-Dichloropropane	ND	4.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:56	
1,4-Dichlorobenzene	ND	4.8	1.7	1	B5C0002	03/02/2015	03/02/15 17:56	
2,2-Dichloropropane	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
2-Chlorotoluene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
4-Chlorotoluene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
4-Isopropyltoluene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
Benzene	ND	4.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:56	
Bromobenzene	ND	4.8	1.6	1	B5C0002	03/02/2015	03/02/15 17:56	
Bromochloromethane	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
Bromodichloromethane	ND	4.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:56	
Bromoform	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
Bromomethane	ND	4.8	2.5	1	B5C0002	03/02/2015	03/02/15 17:56	
Carbon disulfide	4.5	4.8	2.2	1	B5C0002	03/02/2015	03/02/15 17:56	J
Carbon tetrachloride	ND	4.8	1.5	1	B5C0002	03/02/2015	03/02/15 17:56	
Chlorobenzene	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Chloroethane	ND	4.8	4.8	1	B5C0002	03/02/2015	03/02/15 17:56	
Chloroform	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
Chloromethane	ND	4.8	0.72	1	B5C0002	03/02/2015	03/02/15 17:56	
cis-1,2-Dichloroethene	ND	4.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:56	
cis-1,3-Dichloropropene	ND	4.8	2.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Di-isopropyl ether	ND	4.8	0.98	1	B5C0002	03/02/2015	03/02/15 17:56	
Dibromochloromethane	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Dibromomethane	ND	4.8	1.9	1	B5C0002	03/02/2015	03/02/15 17:56	
Dichlorodifluoromethane	ND	4.8	0.71	1	B5C0002	03/02/2015	03/02/15 17:56	
Ethyl Acetate	ND	48	13	1	B5C0002	03/02/2015	03/02/15 17:56	
Ethyl Ether	ND	48	12	1	B5C0002	03/02/2015	03/02/15 17:56	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-139-1.5
Lab ID: 1500744-21

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:56	
Ethylbenzene	ND	4.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:56	
Freon-113	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Hexachlorobutadiene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
Isopropylbenzene	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
m,p-Xylene	ND	9.7	2.4	1	B5C0002	03/02/2015	03/02/15 17:56	
Methylene chloride	ND	4.8	4.8	1	B5C0002	03/02/2015	03/02/15 17:56	
MTBE	ND	4.8	0.87	1	B5C0002	03/02/2015	03/02/15 17:56	
n-Butylbenzene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
n-Propylbenzene	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Naphthalene	ND	4.8	3.1	1	B5C0002	03/02/2015	03/02/15 17:56	
...lene	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
...-Butylbenzene	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Styrene	ND	4.8	1.3	1	B5C0002	03/02/2015	03/02/15 17:56	
tert-Amyl methyl ether	ND	4.8	0.99	1	B5C0002	03/02/2015	03/02/15 17:56	
tert-Butanol	ND	97	19	1	B5C0002	03/02/2015	03/02/15 17:56	
tert-Butylbenzene	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
Tetrachloroethene	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Toluene	ND	4.8	0.85	1	B5C0002	03/02/2015	03/02/15 17:56	
trans-1,2-Dichloroethene	ND	4.8	1.4	1	B5C0002	03/02/2015	03/02/15 17:56	
trans-1,3-Dichloropropene	ND	4.8	1.1	1	B5C0002	03/02/2015	03/02/15 17:56	
Trichloroethene	ND	4.8	1.2	1	B5C0002	03/02/2015	03/02/15 17:56	
Trichlorofluoromethane	ND	4.8	1.7	1	B5C0002	03/02/2015	03/02/15 17:56	
Vinyl acetate	ND	48	10	1	B5C0002	03/02/2015	03/02/15 17:56	
Vinyl chloride	ND	4.8	0.99	1	B5C0002	03/02/2015	03/02/15 17:56	
Surrogate: 1,2-Dichloroethane-d4	*121 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 17:56*	
Surrogate: 4-Bromofluorobenzene	*90.8 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 17:56*	
Surrogate: Dibromofluoromethane	*116 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 17:56*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 17:56*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-123-0
Lab ID: 1500744-22

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.6**	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:42	J
Arsenic	**5.4**	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:42	
Barium	**82**	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:42	
Beryllium	**0.96**	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:41	J
Cadmium	**0.63**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:42	J
Chromium	**14**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:42	
Cobalt	**4.2**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:42	
Copper	**17**	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:42	
Lead	**26**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:42	
Molybdenum	**0.65**	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:42	J
Nickel	**13**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:42	
Selenium	**0.95**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:42	J
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:42	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:42	
Vanadium	**35**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:42	
Zinc	**47**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:42	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:08	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:08	
Surrogate: 4-Bromofluorobenzene	*103 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 19:08*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	100	20	20	10	B5C0070	03/03/2015	03/03/15 23:07	
C23-C32	**1000**	20	20	10	B5C0070	03/03/2015	03/03/15 23:07	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 23:07*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
1,1,1-Trichloroethane	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
1,1,2,2-Tetrachloroethane	ND	5.4	2.1	1	B5C0002	03/02/2015	03/02/15 18:15	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-123-0
Lab ID: 1500744-22

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
1,1-Dichloroethane	ND	5.4	1.0	1	B5C0002	03/02/2015	03/02/15 18:15	
1,1-Dichloroethene	ND	5.4	1.2	1	B5C0002	03/02/2015	03/02/15 18:15	
1,1-Dichloropropene	ND	5.4	1.6	1	B5C0002	03/02/2015	03/02/15 18:15	
1,2,3-Trichloropropane	ND	5.4	1.9	1	B5C0002	03/02/2015	03/02/15 18:15	
1,2,3-Trichlorobenzene	ND	5.4	2.9	1	B5C0002	03/02/2015	03/02/15 18:15	
1,2,4-Trichlorobenzene	ND	5.4	2.2	1	B5C0002	03/02/2015	03/02/15 18:15	
1,2,4-Trimethylbenzene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5C0002	03/02/2015	03/02/15 18:15	
1,2-Dibromoethane	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
1,2-Dichlorobenzene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
,2-Dichloroethane	ND	5.4	0.93	1	B5C0002	03/02/2015	03/02/15 18:15	
,3-Dichloropropane	ND	5.4	3.6	1	B5C0002	03/02/2015	03/02/15 18:15	
1,3,5-Trimethylbenzene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
1,3-Dichlorobenzene	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
1,3-Dichloropropane	ND	5.4	1.2	1	B5C0002	03/02/2015	03/02/15 18:15	
1,4-Dichlorobenzene	ND	5.4	1.9	1	B5C0002	03/02/2015	03/02/15 18:15	
2,2-Dichloropropane	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
2-Chlorotoluene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
4-Chlorotoluene	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
4-Isopropyltoluene	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
Benzene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
Bromobenzene	ND	5.4	1.8	1	B5C0002	03/02/2015	03/02/15 18:15	
Bromochloromethane	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
Bromodichloromethane	ND	5.4	1.7	1	B5C0002	03/02/2015	03/02/15 18:15	
Bromoform	ND	5.4	1.6	1	B5C0002	03/02/2015	03/02/15 18:15	
Bromomethane	ND	5.4	2.8	1	B5C0002	03/02/2015	03/02/15 18:15	
Carbon disulfide	ND	5.4	2.5	1	B5C0002	03/02/2015	03/02/15 18:15	
Carbon tetrachloride	ND	5.4	1.6	1	B5C0002	03/02/2015	03/02/15 18:15	
Chlorobenzene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
Chloroethane	ND	5.4	5.3	1	B5C0002	03/02/2015	03/02/15 18:15	
Chloroform	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
Chloromethane	ND	5.4	0.79	1	B5C0002	03/02/2015	03/02/15 18:15	
cis-1,2-Dichloroethene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
cis-1,3-Dichloropropene	ND	5.4	2.5	1	B5C0002	03/02/2015	03/02/15 18:15	
Di-isopropyl ether	ND	5.4	1.1	1	B5C0002	03/02/2015	03/02/15 18:15	
Dibromochloromethane	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
romomethane	ND	5.4	2.1	1	B5C0002	03/02/2015	03/02/15 18:15	
alorodifluoromethane	ND	5.4	0.79	1	B5C0002	03/02/2015	03/02/15 18:15	
Ethyl Acetate	ND	54	14	1	B5C0002	03/02/2015	03/02/15 18:15	
Ethyl Ether	ND	54	13	1	B5C0002	03/02/2015	03/02/15 18:15	

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-123-0
Lab ID: 1500744-22

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.4	1.2	1	B5C0002	03/02/2015	03/02/15 18:15	
Ethylbenzene	ND	5.4	1.2	1	B5C0002	03/02/2015	03/02/15 18:15	
Freon-113	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
Hexachlorobutadiene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
Isopropylbenzene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
m,p-Xylene	ND	11	2.7	1	B5C0002	03/02/2015	03/02/15 18:15	
Methylene chloride	ND	5.4	5.4	1	B5C0002	03/02/2015	03/02/15 18:15	
MTBE	ND	5.4	0.97	1	B5C0002	03/02/2015	03/02/15 18:15	
n-Butylbenzene	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
n-Propylbenzene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
Naphthalene	ND	5.4	3.4	1	B5C0002	03/02/2015	03/02/15 18:15	
o-Xylene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
sec-Butylbenzene	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
Styrene	ND	5.4	1.4	1	B5C0002	03/02/2015	03/02/15 18:15	
tert-Amyl methyl ether	ND	5.4	1.1	1	B5C0002	03/02/2015	03/02/15 18:15	
tert-Butanol	ND	110	21	1	B5C0002	03/02/2015	03/02/15 18:15	
tert-Butylbenzene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
Tetrachloroethene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
Toluene	ND	5.4	0.95	1	B5C0002	03/02/2015	03/02/15 18:15	
trans-1,2-Dichloroethene	ND	5.4	1.5	1	B5C0002	03/02/2015	03/02/15 18:15	
trans-1,3-Dichloropropene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
Trichloroethene	ND	5.4	1.3	1	B5C0002	03/02/2015	03/02/15 18:15	
Trichlorofluoromethane	ND	5.4	1.9	1	B5C0002	03/02/2015	03/02/15 18:15	
Vinyl acetate	ND	54	11	1	B5C0002	03/02/2015	03/02/15 18:15	
Vinyl chloride	ND	5.4	1.1	1	B5C0002	03/02/2015	03/02/15 18:15	
Surrogate: 1,2-Dichloroethane-d4	*122 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 18:15*	
Surrogate: 4-Bromofluorobenzene	*90.7 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 18:15*	
Surrogate: Dibromofluoromethane	*115 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 18:15*	
Surrogate: Toluene-d8	*107 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 18:15*	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-122-0
Lab ID: 1500744-23

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.5**	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:46	J
Arsenic	**7.7**	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:46	
Barium	**100**	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:45	
Beryllium	**1.1**	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:44	
Cadmium	**0.86**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:46	J
Chromium	**30**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:45	
Cobalt	**6.5**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:46	
Copper	**25**	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:45	
Lead	**35**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:46	
Molybdenum	**1.0**	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:45	
Nickel	**23**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:45	
nium	**0.99**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:46	J
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:45	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:46	
Vanadium	**48**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:45	
Zinc	**74**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:45	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:24	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:24	
Surrogate: 4-Bromofluorobenzene	*112 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 19:24*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**50**	20	20	10	B5C0070	03/03/2015	03/03/15 22:51	
C23-C32	**570**	20	20	10	B5C0070	03/03/2015	03/03/15 22:51	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 22:51*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
1-Trichloroethane	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
1,1,2,2-Tetrachloroethane	ND	5.7	2.2	1	B5C0002	03/02/2015	03/02/15 18:34	

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Client Sample ID 1278-122-0
Lab ID: 1500744-23

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
1,1-Dichloroethane	ND	5.7	1.1	1	B5C0002	03/02/2015	03/02/15 18:34	
1,1-Dichloroethene	ND	5.7	1.3	1	B5C0002	03/02/2015	03/02/15 18:34	
1,1-Dichloropropene	ND	5.7	1.8	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2,3-Trichloropropane	ND	5.7	2.1	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2,3-Trichlorobenzene	ND	5.7	3.1	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2,4-Trichlorobenzene	ND	5.7	2.3	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2,4-Trimethylbenzene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2-Dibromoethane	ND	5.7	1.7	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2-Dichlorobenzene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2-Dichloroethane	ND	5.7	1.0	1	B5C0002	03/02/2015	03/02/15 18:34	
1,2-Dichloropropane	ND	5.7	3.9	1	B5C0002	03/02/2015	03/02/15 18:34	
1,3,5-Trimethylbenzene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
1,3-Dichlorobenzene	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
1,3-Dichloropropane	ND	5.7	1.3	1	B5C0002	03/02/2015	03/02/15 18:34	
1,4-Dichlorobenzene	ND	5.7	2.0	1	B5C0002	03/02/2015	03/02/15 18:34	
2,2-Dichloropropane	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
2-Chlorotoluene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
4-Chlorotoluene	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
4-Isopropyltoluene	**1.5**	5.7	**1.5**	1	B5C0002	03/02/2015	03/02/15 18:34	J
Benzene	**1.9**	5.7	**1.4**	1	B5C0002	03/02/2015	03/02/15 18:34	J
Bromobenzene	ND	5.7	**1.9**	1	B5C0002	03/02/2015	03/02/15 18:34	
Bromochloromethane	ND	5.7	**1.6**	1	B5C0002	03/02/2015	03/02/15 18:34	
Bromodichloromethane	ND	5.7	**1.8**	1	B5C0002	03/02/2015	03/02/15 18:34	
Bromoform	ND	5.7	**1.7**	1	B5C0002	03/02/2015	03/02/15 18:34	
Bromomethane	ND	5.7	3.0	1	B5C0002	03/02/2015	03/02/15 18:34	
Carbon disulfide	ND	5.7	2.7	1	B5C0002	03/02/2015	03/02/15 18:34	
Carbon tetrachloride	ND	5.7	1.7	1	B5C0002	03/02/2015	03/02/15 18:34	
Chlorobenzene	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
Chloroethane	ND	5.7	5.7	1	B5C0002	03/02/2015	03/02/15 18:34	
Chloroform	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
Chloromethane	ND	5.7	0.85	1	B5C0002	03/02/2015	03/02/15 18:34	
cis-1,2-Dichloroethene	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
cis-1,3-Dichloropropene	ND	5.7	2.6	1	B5C0002	03/02/2015	03/02/15 18:34	
Di-isopropyl ether	ND	5.7	1.2	1	B5C0002	03/02/2015	03/02/15 18:34	
Dibromochloromethane	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
Dibromomethane	ND	5.7	2.3	1	B5C0002	03/02/2015	03/02/15 18:34	
Dichlorodifluoromethane	ND	5.7	0.85	1	B5C0002	03/02/2015	03/02/15 18:34	
Ethyl Acetate	ND	57	15	1	B5C0002	03/02/2015	03/02/15 18:34	
Ethyl Ether	ND	57	14	1	B5C0002	03/02/2015	03/02/15 18:34	

Certificate of Analysis

...tec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-122-0
Lab ID: 1500744-23

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.7	1.3	1	B5C0002	03/02/2015	03/02/15 18:34	
Ethylbenzene	ND	5.7	1.3	1	B5C0002	03/02/2015	03/02/15 18:34	
Freon-113	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
Hexachlorobutadiene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
Isopropylbenzene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
m,p-Xylene	ND	11	2.9	1	B5C0002	03/02/2015	03/02/15 18:34	
Methylene chloride	ND	5.7	5.7	1	B5C0002	03/02/2015	03/02/15 18:34	
MTBE	ND	5.7	1.0	1	B5C0002	03/02/2015	03/02/15 18:34	
n-Butylbenzene	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
n-Propylbenzene	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
Naphthalene	ND	5.7	3.6	1	B5C0002	03/02/2015	03/02/15 18:34	
...ylene	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
...Butylbenzene	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
Styrene	ND	5.7	1.5	1	B5C0002	03/02/2015	03/02/15 18:34	
tert-Amyl methyl ether	ND	5.7	1.2	1	B5C0002	03/02/2015	03/02/15 18:34	
tert-Butanol	ND	110	23	1	B5C0002	03/02/2015	03/02/15 18:34	
tert-Butylbenzene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
Tetrachloroethene	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
Toluene	ND	5.7	1.0	1	B5C0002	03/02/2015	03/02/15 18:34	
trans-1,2-Dichloroethene	ND	5.7	1.6	1	B5C0002	03/02/2015	03/02/15 18:34	
trans-1,3-Dichloropropene	ND	5.7	1.3	1	B5C0002	03/02/2015	03/02/15 18:34	
Trichloroethene	ND	5.7	1.4	1	B5C0002	03/02/2015	03/02/15 18:34	
Trichlorofluoromethane	ND	5.7	2.1	1	B5C0002	03/02/2015	03/02/15 18:34	
Vinyl acetate	ND	57	12	1	B5C0002	03/02/2015	03/02/15 18:34	
Vinyl chloride	ND	5.7	1.2	1	B5C0002	03/02/2015	03/02/15 18:34	
Surrogate: 1,2-Dichloroethane-d4	*129 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 18:34*	
Surrogate: 4-Bromofluorobenzene	*90.6 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 18:34*	
Surrogate: Dibromofluoromethane	*115 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 18:34*	
Surrogate: Toluene-d8	*99.1 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 18:34*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-3-022515
Lab ID: 1500744-24

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:30	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:30	
Barium	**0.0005**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:30	J
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:29	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:30	
Chromium	**0.0010**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:30	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:30	
Copper	**0.0014**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:30	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:30	
Molybdenum	ND	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:30	
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:30	
Selenium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:30	
Silver	ND	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:30	
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:30	
Vanadium	**0.0014**	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:30	J
Zinc	**0.0042**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:30	J

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 13:47	
C4-C8	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 13:47	
Surrogate: 4-Bromofluorobenzene	*91.3 %*	*70 - 130*			B5B0736	02/27/2015	*02/27/15 13:47*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 17:43	
C23-C32	ND	0.05	0.05	1	B5B0752	02/27/2015	03/02/15 17:43	
Surrogate: p-Terphenyl	*59.9 %*	*20 - 141*			B5B0752	02/27/2015	*03/02/15 17:43*	

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 14:43	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 14:43	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 14:43	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 14:43	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-3-022515
Lab ID: 1500744-24

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:43	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:43	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 14:43	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:43	
Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:43	
,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:43	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 14:43	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 14:43	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 14:43	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:43	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 14:43	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 14:43	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 14:43	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:43	
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:43	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 14:43	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 14:43	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 14:43	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 14:43	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 14:43	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 14:43	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 14:43	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 14:43	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:43	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 14:43	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 14:43	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 14:43	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 14:43	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:43	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 14:43	
romomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:43	
lorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:43	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 14:43	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 14:43	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBB-3-022515

Lab ID: 1500744-24

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 14:43	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:43	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 14:43	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 14:43	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 14:43	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 14:43	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 14:43	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:43	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 14:43	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 14:43	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 14:43	
o-Xylene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 14:43	
sec-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 14:43	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 14:43	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:43	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 14:43	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 14:43	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 14:43	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 14:43	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:43	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 14:43	
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 14:43	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 14:43	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 14:43	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 14:43	
Surrogate: 1,2-Dichloroethane-d4	*87.2 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 14:43*	
Surrogate: 4-Bromofluorobenzene	*96.4 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 14:43*	
Surrogate: Dibromofluoromethane	*92.8 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 14:43*	
Surrogate: Toluene-d8	*81.8 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 14:43*	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0020 - EPA 3050B_S									
Blank (B5C0020-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.187740	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	ND	2.0			NR				
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
ium	ND	1.0			NR				
r	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.115214	1.0			NR				J
LCS (B5C0020-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	45.8824	2.0	50.0000		91.8	80 - 120			
Arsenic	45.3974	1.0	50.0000		90.8	80 - 120			
Barium	49.1019	1.0	50.0000		98.2	80 - 120			
Beryllium	49.5185	1.0	50.0000		99.0	80 - 120			
Cadmium	47.2630	1.0	50.0000		94.5	80 - 120			
Chromium	49.4361	1.0	50.0000		98.9	80 - 120			
Cobalt	48.9302	1.0	50.0000		97.9	80 - 120			
Copper	46.9413	2.0	50.0000		93.9	80 - 120			
Lead	48.4964	1.0	50.0000		97.0	80 - 120			
Molybdenum	48.5965	1.0	50.0000		97.2	80 - 120			
Nickel	47.4623	1.0	50.0000		94.9	80 - 120			
Selenium	45.3692	1.0	50.0000		90.7	80 - 120			
Silver	46.8895	1.0	50.0000		93.8	80 - 120			
Thallium	47.2563	1.0	50.0000		94.5	80 - 120			
Vanadium	50.9426	1.0	50.0000		102	80 - 120			
Zinc	46.4673	1.0	50.0000		92.9	80 - 120			
Duplicate (B5C0020-DUP1)		Source: 1500744-01			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0		ND	NR			20	
Arsenic	5.45789	1.0		5.28695	NR		3.18	20	
Barium	50.7432	1.0		48.6446	NR		4.22	20	
Beryllium	0.633040	1.0		0.617220	NR		2.53	20	J
ium	0.892240	1.0		0.867818	NR		2.78	20	J
omium	12.3777	1.0		12.0774	NR		2.46	20	
Cobalt	5.71318	1.0		5.65020	NR		1.11	20	

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0020 - EPA 3050B_S (continued)									
Duplicate (B5C0020-DUP1) - Continued		**Source: 1500744-01**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Copper	12.6330	2.0		13.7004	NR		8.11	20	
Lead	94.5652	1.0		109.230	NR		14.4	20	
Molybdenum	0.614992	1.0		0.899436	NR		37.6	20	R, J
Nickel	18.6235	1.0		18.6695	NR		0.247	20	
Selenium	0.834300	1.0		1.00011	NR		18.1	20	J
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	24.4054	1.0		23.7270	NR		2.82	20	
Zinc	56.9640	1.0		60.6829	NR		6.32	20	
Matrix Spike (B5C0020-MS1)		**Source: 1500744-01**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	82.4963	2.0	125.000	ND	66.0	28 - 106			
Arsenic	97.3626	1.0	125.000	5.28695	73.7	57 - 109			
Barium	139.780	1.0	125.000	48.6446	72.9	18 - 159			
Beryllium	95.6252	1.0	125.000	0.617220	76.0	61 - 107			
Cadmium	92.1452	1.0	125.000	0.867818	73.0	53 - 104			
Chromium	107.219	1.0	125.000	12.0774	76.1	53 - 121			
Cobalt	98.4354	1.0	125.000	5.65020	74.2	55 - 109			
Copper	111.169	2.0	125.000	13.7004	78.0	58 - 124			
Lead	196.553	1.0	125.000	109.230	69.9	35 - 129			
Molybdenum	95.0004	1.0	125.000	0.899436	75.3	57 - 108			
Nickel	109.532	1.0	125.000	18.6695	72.7	44 - 122			
Selenium	92.7924	1.0	125.000	1.00011	73.4	54 - 104			
Silver	95.8068	1.0	125.000	ND	76.6	60 - 112			
Thallium	87.8866	1.0	125.000	ND	70.3	50 - 103			
Vanadium	122.696	1.0	125.000	23.7270	79.2	54 - 123			
Zinc	147.969	1.0	125.000	60.6829	69.8	29 - 132			
Matrix Spike Dup (B5C0020-MSD1)		**Source: 1500744-01**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	83.0506	2.0	125.000	ND	66.4	28 - 106	0.670	20	
Arsenic	98.0236	1.0	125.000	5.28695	74.2	57 - 109	0.677	20	
Barium	143.136	1.0	125.000	48.6446	75.6	18 - 159	2.37	20	
Beryllium	95.9019	1.0	125.000	0.617220	76.2	61 - 107	0.289	20	
Cadmium	91.5429	1.0	125.000	0.867818	72.5	53 - 104	0.656	20	
Chromium	107.632	1.0	125.000	12.0774	76.4	53 - 121	0.384	20	
Cobalt	98.4142	1.0	125.000	5.65020	74.2	55 - 109	0.0215	20	
Copper	113.004	2.0	125.000	13.7004	79.4	58 - 124	1.64	20	
Lead	190.514	1.0	125.000	109.230	65.0	35 - 129	3.12	20	
Molybdenum	94.6476	1.0	125.000	0.899436	75.0	57 - 108	0.372	20	
Nickel	108.949	1.0	125.000	18.6695	72.2	44 - 122	0.533	20	
Selenium	93.3880	1.0	125.000	1.00011	73.9	54 - 104	0.640	20	
Silver	95.4644	1.0	125.000	ND	76.4	60 - 112	0.358	20	
Thallium	87.5638	1.0	125.000	ND	70.1	50 - 103	0.368	20	
Vanadium	123.593	1.0	125.000	23.7270	79.9	54 - 123	0.729	20	
Zinc	151.024	1.0	125.000	60.6829	72.3	29 - 132	2.04	20	
Batch B5C0021 - EPA 3050B_S									

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0021 - EPA 3050B_S (continued)									
Blank (B5C0021-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.192913	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.087571	2.0			NR				J
Lead	0.157638	1.0			NR				J
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
	0.727018	1.0			NR				J
LCS (B5C0021-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	46.6636	2.0	50.0000		93.3	80 - 120			
Arsenic	46.2994	1.0	50.0000		92.6	80 - 120			
Barium	48.8312	1.0	50.0000		97.7	80 - 120			
Beryllium	48.1228	1.0	50.0000		96.2	80 - 120			
Cadmium	47.3004	1.0	50.0000		94.6	80 - 120			
Chromium	49.3229	1.0	50.0000		98.6	80 - 120			
Cobalt	48.8464	1.0	50.0000		97.7	80 - 120			
Copper	46.7753	2.0	50.0000		93.6	80 - 120			
Lead	48.8470	1.0	50.0000		97.7	80 - 120			
Molybdenum	48.8542	1.0	50.0000		97.7	80 - 120			
Nickel	47.3135	1.0	50.0000		94.6	80 - 120			
Selenium	45.7776	1.0	50.0000		91.6	80 - 120			
Silver	46.6702	1.0	50.0000		93.3	80 - 120			
Thallium	47.9869	1.0	50.0000		96.0	80 - 120			
Vanadium	51.0118	1.0	50.0000		102	80 - 120			
Zinc	46.7496	1.0	50.0000		93.5	80 - 120			
Duplicate (B5C0021-DUP1)		**Source: 1500744-15**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0		ND	NR			20	
Arsenic	4.77083	1.0		5.18918	NR		8.40	20	
Barium	37.7935	1.0		38.8990	NR		2.88	20	
Beryllium	0.596068	1.0		0.602958	NR		1.15	20	J
Cadmium	0.748310	1.0		0.860002	NR		13.9	20	J
Chromium	11.0154	1.0		11.6837	NR		5.89	20	
Cobalt	7.62912	1.0		5.53445	NR		31.8	20	R
...per	10.4651	2.0		12.2462	NR		15.7	20	
	23.9702	1.0		17.0744	NR		33.6	20	R
Molybdenum	0.665652	1.0		1.44098	NR		73.6	20	R, J
Nickel	16.4441	1.0		19.1137	NR		15.0	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0021 - EPA 3050B_S (continued)									
Duplicate (B5C0021-DUP1) - Continued		**Source: 1500744-15**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Selenium	0.882764	1.0		0.998697	NR		12.3	20	J
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	21.3179	1.0		23.6820	NR		10.5	20	
Zinc	41.2901	1.0		49.4178	NR		17.9	20	
Matrix Spike (B5C0021-MS1)		**Source: 1500744-15**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	84.5595	2.0	124.378	ND	68.0	28 - 106			
Arsenic	98.2414	1.0	124.378	5.18918	74.8	57 - 109			
Barium	131.270	1.0	124.378	38.8990	74.3	18 - 159			
Beryllium	97.8930	1.0	124.378	0.602958	78.2	61 - 107			
Cadmium	93.2059	1.0	124.378	0.860002	74.2	53 - 104			
Chromium	110.924	1.0	124.378	11.6837	79.8	53 - 121			
Cobalt	99.6943	1.0	124.378	5.53445	75.7	55 - 109			
Copper	109.786	2.0	124.378	12.2462	78.4	58 - 124			
Lead	107.534	1.0	124.378	17.0744	72.7	35 - 129			
Molybdenum	96.2276	1.0	124.378	1.44098	76.2	57 - 108			
Nickel	109.091	1.0	124.378	19.1137	72.3	44 - 122			
Selenium	93.8068	1.0	124.378	0.998697	74.6	54 - 104			
Silver	97.1059	1.0	124.378	ND	78.1	60 - 112			
Thallium	90.1528	1.0	124.378	ND	72.5	50 - 103			
Vanadium	121.821	1.0	124.378	23.6820	78.9	54 - 123			
Zinc	134.379	1.0	124.378	49.4178	68.3	29 - 132			
Matrix Spike Dup (B5C0021-MSD1)		**Source: 1500744-15**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	82.8835	2.0	125.628	ND	66.0	28 - 106	2.00	20	
Arsenic	96.7211	1.0	125.628	5.18918	72.9	57 - 109	1.56	20	
Barium	128.676	1.0	125.628	38.8990	71.5	18 - 159	2.00	20	
Beryllium	96.7767	1.0	125.628	0.602958	76.6	61 - 107	1.15	20	
Cadmium	92.9196	1.0	125.628	0.860002	73.3	53 - 104	0.308	20	
Chromium	105.879	1.0	125.628	11.6837	75.0	53 - 121	4.65	20	
Cobalt	99.5439	1.0	125.628	5.53445	74.8	55 - 109	0.151	20	
Copper	110.618	2.0	125.628	12.2462	78.3	58 - 124	0.754	20	
Lead	108.094	1.0	125.628	17.0744	72.5	35 - 129	0.519	20	
Molybdenum	95.6506	1.0	125.628	1.44098	75.0	57 - 108	0.601	20	
Nickel	109.222	1.0	125.628	19.1137	71.7	44 - 122	0.120	20	
Selenium	92.5415	1.0	125.628	0.998697	72.9	54 - 104	1.36	20	
Silver	96.7727	1.0	125.628	ND	77.0	60 - 112	0.344	20	
Thallium	88.8729	1.0	125.628	ND	70.7	50 - 103	1.43	20	
Vanadium	121.385	1.0	125.628	23.6820	77.8	54 - 123	0.359	20	
Zinc	142.803	1.0	125.628	49.4178	74.3	29 - 132	6.08	20	
Batch B5C0062 - EPA 3010A_W									
Blank (B5C0062-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	0.010			NR				
Arsenic	ND	0.010			NR				

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Blank (B5C0062-BLK1) - Continued					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Barium	ND	0.0030			NR				
Beryllium	ND	0.0030			NR				
Cadmium	ND	0.0030			NR				
Chromium	9.710E-4	0.0030			NR				J
Cobalt	ND	0.0030			NR				
Copper	0.001759	0.0090			NR				J
Lead	ND	0.0050			NR				
Molybdenum	ND	0.0050			NR				
Nickel	0.002058	0.0050			NR				J
Selenium	ND	0.010			NR				
Silver	ND	0.0030			NR				
Thallium	ND	0.015			NR				
Vanadium	ND	0.0030			NR				
Zinc	0.004252	0.025			NR				J
(B5C0062-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
mony	0.954611	0.010	1.00000		95.5	80 - 120			
Arsenic	0.881485	0.010	1.00000		88.1	80 - 120			
Barium	0.989988	0.0030	1.00000		99.0	80 - 120			
Beryllium	1.01634	0.0030	1.00000		102	80 - 120			
Cadmium	0.962915	0.0030	1.00000		96.3	80 - 120			
Chromium	0.989438	0.0030	1.00000		98.9	80 - 120			
Cobalt	0.989686	0.0030	1.00000		99.0	80 - 120			
Copper	0.973899	0.0090	1.00000		97.4	80 - 120			
Lead	0.990508	0.0050	1.00000		99.1	80 - 120			
Molybdenum	0.967244	0.0050	1.00000		96.7	80 - 120			
Nickel	0.967320	0.0050	1.00000		96.7	80 - 120			
Selenium	0.945843	0.010	1.00000		94.6	80 - 120			
Silver	0.985629	0.0030	1.00000		98.6	80 - 120			
Thallium	0.963374	0.015	1.00000		96.3	80 - 120			
Vanadium	1.02540	0.0030	1.00000		103	80 - 120			
Zinc	0.944978	0.025	1.00000		94.5	80 - 120			
Duplicate (B5C0062-DUP1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	0.010		ND	NR			20	
Arsenic	ND	0.010		ND	NR			20	
Barium	0.000519	0.0030		0.000564	NR		8.15	20	J
Beryllium	ND	0.0030		ND	NR			20	
Cadmium	ND	0.0030		ND	NR			20	
Chromium	0.000928	0.0030		0.000903	NR		2.77	20	J
Cobalt	ND	0.0030		ND	NR			20	
Copper	0.001308	0.0090		0.001309	NR		0.126	20	J
Lead	ND	0.0050		ND	NR			20	
bdenum	ND	0.0050		0.000486	NR			20	
el	ND	0.0050		ND	NR			20	
Selenium	ND	0.010		ND	NR			20	
Silver	ND	0.0030		0.000731	NR			20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Duplicate (B5C0062-DUP1) - Continued		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Thallium	ND	0.015		ND	NR			20	
Vanadium	ND	0.0030		ND	NR			20	
Zinc	0.004721	0.025		4.0129E-3	NR		16.2	20	J
Matrix Spike (B5C0062-MS1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.42910	0.010	2.50000	ND	97.2	71 - 129			
Arsenic	2.26662	0.010	2.50000	ND	90.7	80 - 128			
Barium	2.48027	0.0030	2.50000	0.000564	99.2	77 - 124			
Beryllium	2.55852	0.0030	2.50000	ND	102	88 - 116			
Cadmium	2.43512	0.0030	2.50000	ND	97.4	83 - 116			
Chromium	2.49292	0.0030	2.50000	0.000903	99.7	86 - 116			
Cobalt	2.48154	0.0030	2.50000	ND	99.3	83 - 117			
Copper	2.50852	0.0090	2.50000	0.001309	100	87 - 121			
Lead	2.43611	0.0050	2.50000	ND	97.4	85 - 114			
Molybdenum	2.48584	0.0050	2.50000	0.000486	99.4	81 - 117			
Nickel	2.45526	0.0050	2.50000	ND	98.2	76 - 121			
Selenium	2.40789	0.010	2.50000	ND	96.3	77 - 125			
Silver	2.49917	0.0030	2.50000	0.000731	99.9	77 - 129			
Thallium	2.44110	0.015	2.50000	ND	97.6	51 - 140			
Vanadium	2.61522	0.0030	2.50000	ND	105	86 - 120			
Zinc	2.41301	0.025	2.50000	4.0129E-3	96.4	75 - 123			
Matrix Spike Dup (B5C0062-MSD1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.43388	0.010	2.50000	ND	97.4	71 - 129	0.197	20	
Arsenic	2.27262	0.010	2.50000	ND	90.9	80 - 128	0.264	20	
Barium	2.47755	0.0030	2.50000	0.000564	99.1	77 - 124	0.110	20	
Beryllium	2.53160	0.0030	2.50000	ND	101	88 - 116	1.06	20	
Cadmium	2.43214	0.0030	2.50000	ND	97.3	83 - 116	0.123	20	
Chromium	2.49053	0.0030	2.50000	0.000903	99.6	86 - 116	0.0958	20	
Cobalt	2.47858	0.0030	2.50000	ND	99.1	83 - 117	0.120	20	
Copper	2.49966	0.0090	2.50000	0.001309	99.9	87 - 121	0.354	20	
Lead	2.42680	0.0050	2.50000	ND	97.1	85 - 114	0.383	20	
Molybdenum	2.48272	0.0050	2.50000	0.000486	99.3	81 - 117	0.125	20	
Nickel	2.45250	0.0050	2.50000	ND	98.1	76 - 121	0.113	20	
Selenium	2.41119	0.010	2.50000	ND	96.4	77 - 125	0.137	20	
Silver	2.49298	0.0030	2.50000	0.000731	99.7	77 - 129	0.248	20	
Thallium	2.45002	0.015	2.50000	ND	98.0	51 - 140	0.364	20	
Vanadium	2.61133	0.0030	2.50000	ND	104	86 - 120	0.149	20	
Zinc	2.41345	0.025	2.50000	4.0129E-3	96.4	75 - 123	0.0183	20	

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0058 - EPA 245.1/7470_W									
Blank (B5C0058-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20			NR				
LCS (B5C0058-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.6212	0.20	10.0000		106	80 - 120			
Duplicate (B5C0058-DUP1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20		ND	NR			20	
Matrix Spike (B5C0058-MS1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.4453	0.20	10.0000	ND	104	70 - 130			
Matrix Spike Dup (B5C0058-MSD1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.7496	0.20	10.0000	ND	107	70 - 130	2.87	20	
Post Spike (B5C0058-PS1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
...ury	5.27241		5.00000	-0.012331	105	85 - 115			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0026 - EPA 7471_S									
Blank (B5C0026-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0026-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.827689	0.10	0.833333		99.3	80 - 120			
Duplicate (B5C0026-DUP1)		Source: 1500744-01			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.021376	0.10		0.021631	NR		1.19	20	J
Matrix Spike (B5C0026-MS1)		Source: 1500744-01			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.884383	0.10	0.833333	0.021631	104	70 - 130			
Matrix Spike Dup (B5C0026-MSD1)		Source: 1500744-01			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.880721	0.10	0.833333	0.021631	103	70 - 130	0.415	20	
Post Spike (B5C0026-PS1)		Source: 1500744-01			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.006146		5.00000E-3	2.596E-4	118	85 - 115			M1
Batch B5C0027 - EPA 7471_S									
Blank (B5C0027-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0027-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.845796	0.10	0.833333		101	80 - 120			
Duplicate (B5C0027-DUP1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.009586	0.10		0.011135	NR		15.0	20	J
Matrix Spike (B5C0027-MS1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.885656	0.10	0.833333	0.011135	105	70 - 130			
Matrix Spike Dup (B5C0027-MSD1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.887108	0.10	0.833333	0.011135	105	70 - 130	0.164	20	
Post Spike (B5C0027-PS1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.005918		5.00000E-3	0.000134	116	85 - 115			M1

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0736 - GCVOA_W									
Blank (B5B0736-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	0.05			NR				
C4-C8	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09375*		*0.100000*		*93.8*	*70 - 130*			
LCS (B5B0736-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	1.02800	0.05	1.00000		103	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.09068*		*0.100000*		*90.7*	*70 - 130*			
LCS Dup (B5B0736-BSD1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	0.988000	0.05	1.00000		98.8	70 - 130	3.97	20	
Surrogate: 4-Bromofluorobenzene	*0.09850*		*0.100000*		*98.5*	*70 - 130*			
Duplicate (B5B0736-DUP1)		**Source: 1500744-16**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	0.05		ND	NR			20	
...gate: 4-Bromofluorobenzene	*0.09113*		*0.100000*		*91.1*	*70 - 130*			
Batch B5B0755 - GCVOA_S									
Blank (B5B0755-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1858*		*0.200000*		*92.9*	*37 - 153*			
LCS (B5B0755-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	4.60200	1.0	5.00000		92.0	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1937*		*0.200000*		*96.9*	*37 - 153*			
Duplicate (B5B0755-DUP1)		**Source: 1500726-16**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2025*		*0.200000*		*101*	*37 - 153*			
Matrix Spike (B5B0755-MS1)		**Source: 1500726-16**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	4.18200	1.0	5.00000	ND	83.6	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1985*		*0.200000*		*99.2*	*37 - 153*			
Matrix Spike Dup (B5B0755-MSD1)		**Source: 1500726-16**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	5.56800	1.0	5.00000	ND	111	20 - 130	28.4	20	R
Surrogate: 4-Bromofluorobenzene	*0.1993*		*0.200000*		*99.6*	*37 - 153*			
Batch B5C0005 - GCVOA_S									
Blank (B5C0005-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
...ine Range Organics	ND	1.0			NR				
C...C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1870*		*0.200000*		*93.5*	*37 - 153*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0005 - GCVOA_S (continued)									
LCS (B5C0005-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	4.62000	1.0	5.00000		92.4	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1938*		*0.200000*		*96.9*	*37 - 153*			
Duplicate (B5C0005-DUP1)		**Source: 1500744-02**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.1957*		*0.200000*		*97.9*	*37 - 153*			
Matrix Spike (B5C0005-MS1)		**Source: 1500744-02**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	4.69000	1.0	5.00000	ND	93.8	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2052*		*0.200000*		*103*	*37 - 153*			
Matrix Spike Dup (B5C0005-MSD1)		**Source: 1500744-02**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
Gasoline Range Organics	4.59900	1.0	5.00000	ND	92.0	20 - 130	1.96	20	
Surrogate: 4-Bromofluorobenzene	*0.2013*		*0.200000*		*101*	*37 - 153*			
Batch B5C0074 - GCVOA_S									
Blank (B5C0074-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.2148*		*0.200000*		*107*	*37 - 153*			
LCS (B5C0074-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	4.53400	1.0	5.00000		90.7	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2043*		*0.200000*		*102*	*37 - 153*			
Duplicate (B5C0074-DUP1)		**Source: 1500747-04**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2055*		*0.200000*		*103*	*37 - 153*			
Matrix Spike (B5C0074-MS1)		**Source: 1500747-04**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	4.39800	1.0	5.00000	ND	88.0	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2189*		*0.200000*		*109*	*37 - 153*			
Matrix Spike Dup (B5C0074-MSD1)		**Source: 1500747-04**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	4.09500	1.0	5.00000	ND	81.9	20 - 130	7.14	20	
Surrogate: 4-Bromofluorobenzene	*0.2115*		*0.200000*		*106*	*37 - 153*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0751 - GCSEMI_DRO_LL_S									
Blank (B5B0751-BLK1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.193*		*2.66667*		*44.7*	*26 - 123*			
LCS (B5B0751-BS1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	18.9330	1.0	33.3333		56.8	47 - 127			
Surrogate: p-Terphenyl	*1.208*		*2.66667*		*45.3*	*26 - 123*			
Duplicate (B5B0751-DUP1)		**Source: 1500744-08**			Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	ND	1.0		ND	NR			20	
Surrogate: p-Terphenyl	*1.714*		*2.66667*		*64.3*	*26 - 123*			
Matrix Spike (B5B0751-MS1)		**Source: 1500744-08**			Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	15.4510	1.0	33.3333	ND	46.4	16 - 123			
...gate: p-Terphenyl	*1.321*		*2.66667*		*49.5*	*26 - 123*			
Matrix Spike Dup (B5B0751-MSD1)		**Source: 1500744-08**			Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	17.1530	1.0	33.3333	ND	51.5	16 - 123	10.4	20	
Surrogate: p-Terphenyl	*1.686*		*2.66667*		*63.2*	*26 - 123*			
Batch B5B0752 - GCSEMI_DRO_W									
Blank (B5B0752-BLK1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
C9-C22	ND	0.05			NR				
C23-C32	ND	0.05			NR				
Surrogate: p-Terphenyl	*0.04469*		*8.00000E-2*		*55.9*	*20 - 141*			
LCS (B5B0752-BS1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	0.590440	0.05	1.00000		59.0	29 - 135			
Surrogate: p-Terphenyl	*0.04973*		*8.00000E-2*		*62.2*	*20 - 141*			
LCS Dup (B5B0752-BSD1)					Prepared: 2/27/2015 Analyzed: 3/2/2015				
DRO	0.654910	0.05	1.00000		65.5	29 - 135	10.4	20	
Surrogate: p-Terphenyl	*0.04453*		*8.00000E-2*		*55.7*	*20 - 141*			
Batch B5C0069 - GCSEMI_DRO_LL_S									
Blank (B5C0069-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.321*		*2.66667*		*49.5*	*26 - 123*			
...(B5C0069-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
...O	19.8700	1.0	33.3333		59.6	47 - 127			
Surrogate: p-Terphenyl	*1.765*		*2.66667*		*66.2*	*26 - 123*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0069 - GCSEMI_DRO_LL_S (continued)									
Duplicate (B5C0069-DUP1)		**Source: 1500744-13**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	3.19300	1.0		2.66267	NR		18.1	20	
Surrogate: p-Terphenyl	*1.908*		*2.66667*		*71.5*	*26 - 123*			
Matrix Spike (B5C0069-MS1)		**Source: 1500744-13**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	18.6563	1.0	33.3333	2.66267	48.0	16 - 123			
Surrogate: p-Terphenyl	*3.304*		*5.33333*		*61.9*	*26 - 123*			
Matrix Spike Dup (B5C0069-MSD1)		**Source: 1500744-13**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	20.3933	1.0	33.3333	2.66267	53.2	16 - 123	8.90	20	
Surrogate: p-Terphenyl	*3.709*		*5.33333*		*69.5*	*26 - 123*			
Batch B5C0070 - GCSEMI_DRO_LL_S									
Blank (B5C0070-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.305*		*2.66667*		*48.9*	*26 - 123*			
LCS (B5C0070-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	20.4183	1.0	33.3333		61.3	47 - 127			
Surrogate: p-Terphenyl	*1.435*		*2.66667*		*53.8*	*26 - 123*			
Duplicate (B5C0070-DUP1)		**Source: 1500747-05**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	2.02133	1.0		1.89300	NR		6.56	20	
Surrogate: p-Terphenyl	*2.047*		*2.66667*		*76.8*	*26 - 123*			
Matrix Spike (B5C0070-MS1)		**Source: 1500747-05**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	20.6610	1.0	33.3333	1.89300	56.3	16 - 123			
Surrogate: p-Terphenyl	*3.711*		*5.33333*		*69.6*	*26 - 123*			
Matrix Spike Dup (B5C0070-MSD1)		**Source: 1500747-05**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	19.4533	1.0	33.3333	1.89300	52.7	16 - 123	6.02	20	
Surrogate: p-Terphenyl	*4.017*		*5.33333*		*75.3*	*26 - 123*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W									
Blank (B5B0728-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
...Dichloroethane	ND	0.50			NR				
...Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
...chlorodifluoromethane	ND	0.50			NR				
...l Acetate	ND	10			NR				
...nyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
Blank (B5B0728-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*21.41*		*25.0000*		*85.6*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*25.04*		*25.0000*		*100*	*65 - 132*			
Surrogate: Dibromofluoromethane	*22.76*		*25.0000*		*91.0*	*55 - 138*			
Surrogate: Toluene-d8	*21.13*		*25.0000*		*84.5*	*60 - 120*			
LCS (B5B0728-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.8300	0.50	20.0000		104	61 - 136			
Benzene	41.0000	0.50	40.0000		102	72 - 127			
Chlorobenzene	20.9800	0.50	20.0000		105	78 - 125			
MTBE	17.3100	0.50	20.0000		86.6	60 - 132			
Toluene	44.0400	0.50	40.0000		110	59 - 140			
Trichloroethene	22.0600	0.50	20.0000		110	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	*18.99*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.35*		*25.0000*		*97.4*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.83*		*25.0000*		*79.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.47*		*25.0000*		*81.9*	*60 - 120*			
LCS Dup (B5B0728-BSD1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.0700	0.50	20.0000		100	61 - 136	3.72	20	
Benzene	41.1200	0.50	40.0000		103	72 - 127	0.292	20	
Chlorobenzene	20.7400	0.50	20.0000		104	78 - 125	1.15	20	
MTBE	17.2100	0.50	20.0000		86.0	60 - 132	0.579	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
LCS Dup (B5B0728-BSD1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Toluene	42.6000	0.50	40.0000		106	59 - 140	3.32	20	
Trichloroethene	22.4700	0.50	20.0000		112	67 - 130	1.84	20	
Surrogate: 1,2-Dichloroethane-d4	*19.01*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.16*		*25.0000*		*96.6*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.35*		*25.0000*		*77.4*	*55 - 138*			
Surrogate: Toluene-d8	*20.61*		*25.0000*		*82.4*	*60 - 120*			
Duplicate (B5B0728-DUP1)		**Source: 1500725-19**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
Trichloroethene	ND	0.50		ND	NR			20	
gate: 1,2-Dichloroethane-d4	*21.88*		*25.0000*		*87.5*	*49 - 148*			
gate: 4-Bromofluorobenzene	*24.37*		*25.0000*		*97.5*	*65 - 132*			
Surrogate: Dibromofluoromethane	*23.32*		*25.0000*		*93.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.74*		*25.0000*		*83.0*	*60 - 120*			
Batch B5C0001 - MSVOA_LL_W									
Blank (B5C0001-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
loroethyl vinyl ether	ND	0.50			NR				
orotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0001 - MSVOA_LL_W (continued)									
Blank (B5C0001-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethyl Acetate	ND	10			NR				
Ethyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*22.57*		*25.0000*		*90.3*	*49 - 148*			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0001 - MSVOA_LL_W (continued)									
Blank (B5C0001-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Surrogate: 4-Bromofluorobenzene	*24.97*		*25.0000*		*99.9*	*65 - 132*			
Surrogate: Dibromofluoromethane	*23.70*		*25.0000*		*94.8*	*55 - 138*			
Surrogate: Toluene-d8	*21.11*		*25.0000*		*84.4*	*60 - 120*			
LCS (B5C0001-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1-Dichloroethene	20.2600	0.50	20.0000		101	61 - 136			
Benzene	38.6600	0.50	40.0000		96.6	72 - 127			
Chlorobenzene	19.9000	0.50	20.0000		99.5	78 - 125			
MTBE	14.9700	0.50	20.0000		74.8	60 - 132			
Toluene	41.0200	0.50	40.0000		103	59 - 140			
Trichloroethene	20.5200	0.50	20.0000		103	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	*18.41*		*25.0000*		*73.6*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*22.94*		*25.0000*		*91.8*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.74*		*25.0000*		*79.0*	*55 - 138*			
Surrogate: Toluene-d8	*20.01*		*25.0000*		*80.0*	*60 - 120*			
Dup (B5C0001-BSD1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1-Dichloroethene	21.0600	0.50	20.0000		105	61 - 136	3.87	20	
Benzene	41.1400	0.50	40.0000		103	72 - 127	6.22	20	
Chlorobenzene	21.4200	0.50	20.0000		107	78 - 125	7.36	20	
MTBE	16.7100	0.50	20.0000		83.6	60 - 132	11.0	20	
Toluene	44.1500	0.50	40.0000		110	59 - 140	7.35	20	
Trichloroethene	22.1000	0.50	20.0000		110	67 - 130	7.41	20	
Surrogate: 1,2-Dichloroethane-d4	*18.70*		*25.0000*		*74.8*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*23.62*		*25.0000*		*94.5*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.46*		*25.0000*		*77.8*	*55 - 138*			
Surrogate: Toluene-d8	*20.63*		*25.0000*		*82.5*	*60 - 120*			
Duplicate (B5C0001-DUP1)		**Source: 1500774-62**			Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1-Dichloroethene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
Trichloroethene	ND	0.50		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*23.00*		*25.0000*		*92.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*22.93*		*25.0000*		*91.7*	*65 - 132*			
Surrogate: Dibromofluoromethane	*23.66*		*25.0000*		*94.6*	*55 - 138*			
Surrogate: Toluene-d8	*20.14*		*25.0000*		*80.6*	*60 - 120*			

Certificate of Analysis

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0729 - MSVOA_S									
Blank (B5B0729-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0729 - MSVOA_S (continued)									
Blank (B5B0729-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
...chloroethene	ND	5.0			NR				
...ene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*51.75*		*50.0000*		*104*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*46.91*		*50.0000*		*93.8*	*20 - 173*			
Surrogate: Dibromofluoromethane	*50.47*		*50.0000*		*101*	*26 - 178*			
Surrogate: Toluene-d8	*48.86*		*50.0000*		*97.7*	*31 - 166*			
LCS (B5B0729-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	63.1800	5.0	50.0000		126	60 - 130			
Benzene	102.530	5.0	100.000		103	73 - 116			
Chlorobenzene	49.3500	5.0	50.0000		98.7	82 - 114			
MTBE	56.4300	5.0	50.0000		113	61 - 124			
Toluene	99.8100	5.0	100.000		99.8	75 - 119			
Trichloroethene	54.2300	5.0	50.0000		108	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*49.31*		*50.0000*		*98.6*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.09*		*50.0000*		*106*	*20 - 173*			
Surrogate: Dibromofluoromethane	*51.01*		*50.0000*		*102*	*26 - 178*			
Surrogate: Toluene-d8	*50.96*		*50.0000*		*102*	*31 - 166*			
Duplicate (B5B0729-DUP1)		**Source: 1500753-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	ND	5.0		ND	NR			20	
Benzene	ND	5.0		ND	NR			20	
...obenzene	ND	5.0		ND	NR			20	
...BE	ND	5.0		ND	NR			20	
Toluene	ND	5.0		ND	NR			20	

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0729 - MSVOA_S (continued)									
Duplicate (B5B0729-DUP1) - Continued		**Source: 1500753-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Trichloroethene	ND	5.0		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*47.12*		*50.0000*		*94.2*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*48.66*		*50.0000*		*97.3*	*20 - 173*			
Surrogate: Dibromofluoromethane	*48.57*		*50.0000*		*97.1*	*26 - 178*			
Surrogate: Toluene-d8	*50.30*		*50.0000*		*101*	*31 - 166*			
Matrix Spike (B5B0729-MS1)		**Source: 1500753-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	54.7100	5.0	50.0000	ND	109	42 - 130			
Benzene	100.770	5.0	100.000	ND	101	51 - 117			
Chlorobenzene	45.5600	5.0	50.0000	ND	91.1	46 - 123			
MTBE	55.1900	5.0	50.0000	ND	110	46 - 125			
Toluene	97.1100	5.0	100.000	ND	97.1	49 - 124			
Trichloroethene	54.8200	5.0	50.0000	ND	110	38 - 139			
Surrogate: 1,2-Dichloroethane-d4	*49.90*		*50.0000*		*99.8*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.48*		*50.0000*		*103*	*20 - 173*			
Surrogate: Dibromofluoromethane	*50.37*		*50.0000*		*101*	*26 - 178*			
Surrogate: Toluene-d8	*51.78*		*50.0000*		*104*	*31 - 166*			
Matrix Spike Dup (B5B0729-MSD1)		**Source: 1500753-01**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	48.1500	5.0	50.0000	ND	96.3	42 - 130	12.8	20	
Benzene	95.5300	5.0	100.000	ND	95.5	51 - 117	5.34	20	
Chlorobenzene	45.0100	5.0	50.0000	ND	90.0	46 - 123	1.21	20	
MTBE	52.6800	5.0	50.0000	ND	105	46 - 125	4.65	20	
Toluene	94.7100	5.0	100.000	ND	94.7	49 - 124	2.50	20	
Trichloroethene	50.9200	5.0	50.0000	ND	102	38 - 139	7.38	20	
Surrogate: 1,2-Dichloroethane-d4	*47.86*		*50.0000*		*95.7*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.18*		*50.0000*		*106*	*20 - 173*			
Surrogate: Dibromofluoromethane	*46.81*		*50.0000*		*93.6*	*26 - 178*			
Surrogate: Toluene-d8	*52.50*		*50.0000*		*105*	*31 - 166*			
Batch B5B0745 - MSVOA_S									
Blank (B5B0745-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0745 - MSVOA_S (continued)									
Blank (B5B0745-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
...moform	ND	5.0			NR				
...omethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
...ne	ND	5.0			NR				
...-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0745 - MSVOA_S (continued)									
Blank (B5B0745-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*45.58*		*50.0000*		*91.2*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*46.04*		*50.0000*		*92.1*	*20 - 173*			
Surrogate: Dibromofluoromethane	*47.40*		*50.0000*		*94.8*	*26 - 178*			
Surrogate: Toluene-d8	*49.68*		*50.0000*		*99.4*	*31 - 166*			
LCS (B5B0745-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	53.9300	5.0	50.0000		108	60 - 130			
Benzene	104.500	5.0	100.000		104	73 - 116			
Chlorobenzene	49.1800	5.0	50.0000		98.4	82 - 114			
MTBE	56.8500	5.0	50.0000		114	61 - 124			
Toluene	100.450	5.0	100.000		100	75 - 119			
Trichloroethene	55.8200	5.0	50.0000		112	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*47.38*		*50.0000*		*94.8*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.05*		*50.0000*		*106*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.55*		*50.0000*		*99.1*	*26 - 178*			
Surrogate: Toluene-d8	*50.73*		*50.0000*		*101*	*31 - 166*			
LCS Dup (B5B0745-BSD1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	57.6400	5.0	50.0000		115	60 - 130	6.65	20	
Benzene	97.2700	5.0	100.000		97.3	73 - 116	7.17	20	
Chlorobenzene	48.5000	5.0	50.0000		97.0	82 - 114	1.39	20	
MTBE	54.6700	5.0	50.0000		109	61 - 124	3.91	20	
Toluene	97.3400	5.0	100.000		97.3	75 - 119	3.14	20	
Trichloroethene	49.3800	5.0	50.0000		98.8	73 - 119	12.2	20	
Surrogate: 1,2-Dichloroethane-d4	*51.15*		*50.0000*		*102*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*52.57*		*50.0000*		*105*	*20 - 173*			
Surrogate: Dibromofluoromethane	*47.96*		*50.0000*		*95.9*	*26 - 178*			
Surrogate: Toluene-d8	*51.43*		*50.0000*		*103*	*31 - 166*			
Batch B5C0002 - MSVOA_S									
Blank (B5C0002-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				

...tec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0002 - MSVOA_S (continued)									
Blank (B5C0002-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
...orotoluene	ND	5.0			NR				
...opropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
...ylene chloride	ND	5.0			NR				
...E	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0002 - MSVOA_S (continued)									
Blank (B5C0002-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*47.20*		*50.0000*		*94.4*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*45.05*		*50.0000*		*90.1*	*20 - 173*			
Surrogate: Dibromofluoromethane	*51.62*		*50.0000*		*103*	*26 - 178*			
Surrogate: Toluene-d8	*48.25*		*50.0000*		*96.5*	*31 - 166*			
LCS (B5C0002-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1-Dichloroethene	51.1400	5.0	50.0000		102	60 - 130			
Benzene	99.7900	5.0	100.000		99.8	73 - 116			
Chlorobenzene	50.9300	5.0	50.0000		102	82 - 114			
MTBE	53.5900	5.0	50.0000		107	61 - 124			
Toluene	102.960	5.0	100.000		103	75 - 119			
Trichloroethene	52.7100	5.0	50.0000		105	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*56.27*		*50.0000*		*113*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.86*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*53.73*		*50.0000*		*107*	*26 - 178*			
Surrogate: Toluene-d8	*52.74*		*50.0000*		*105*	*31 - 166*			
LCS Dup (B5C0002-BSD1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1-Dichloroethene	45.2600	5.0	50.0000		90.5	60 - 130	12.2	20	
Benzene	100.980	5.0	100.000		101	73 - 116	1.19	20	
Chlorobenzene	51.3000	5.0	50.0000		103	82 - 114	0.724	20	
MTBE	57.1300	5.0	50.0000		114	61 - 124	6.39	20	
Toluene	103.560	5.0	100.000		104	75 - 119	0.581	20	
Trichloroethene	54.4200	5.0	50.0000		109	73 - 119	3.19	20	
Surrogate: 1,2-Dichloroethane-d4	*53.71*		*50.0000*		*107*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.81*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*57.27*		*50.0000*		*115*	*26 - 178*			
Surrogate: Toluene-d8	*52.77*		*50.0000*		*106*	*31 - 166*			

Certificate of Analysis

ıtec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Notes and Definitions

S4	Surrogate was diluted out.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

ıs:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

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Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Number of Pages	5
Date Received	02/27/2015
Date Reported	03/06/2015

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76137	02/27/2015	ATL

Project ID: 1500744
Project Name: PO# SC09382

Enclosed please find results of analyses of 3 water and 4 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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Telephone: (562)989-4045
Attention: Rachelle Arada

Project ID: 1500744
Date Received 02/27/2015
Date Reported 03/06/2015

Job Number	Order Date	Client
76137	02/27/2015	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 21 samples with the following specification on 02/27/2015.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76137.07	1500744-10	02/25/2015	Aqueous	1
76137.13	1500744-16	02/25/2015	Aqueous	1
76137.21	1500744-24	02/25/2015	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
8151A	03/06/2015	2	Normal	ug/L

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76137.01	1500744-01	02/25/2015	Soil	1
76137.08	1500744-11	02/25/2015	Soil	1
76137.17	1500744-20	02/25/2015	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8151A)	03/06/2015	2	Normal	ug/Kg

76137.02	1500744-02	02/25/2015	Soil	1
76137.03	1500744-04	02/25/2015	Soil	1
76137.04	1500744-05	02/25/2015	Soil	1
76137.05	1500744-07	02/25/2015	Soil	1
76137.06	1500744-08	02/25/2015	Soil	1
76137.09	1500744-12	02/25/2015	Soil	1
76137.10	1500744-13	02/25/2015	Soil	1
76137.11	1500744-14	02/25/2015	Soil	1
76137.12	1500744-15	02/25/2015	Soil	1
76137.14	1500744-17	02/25/2015	Soil	1
76137.15	1500744-18	02/25/2015	Soil	1
76137.16	1500744-19	02/25/2015	Soil	1
76137.18	1500744-21	02/25/2015	Soil	1
76137.19	1500744-22	02/25/2015	Soil	1

Continued

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Ordered By

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755-5225	Project ID: 1500744 Date Received 02/27/2015 Date Reported 03/06/2015
Telephone: (562)989-4045 Attention: Rachelle Arada	

Job Number	Order Date	Client
76137	02/27/2015	ATL

CERTIFICATE OF ANALYSIS

CASE NARRATIVE

76137.20	1500744-23	02/25/2015	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
ARCHIVE	03/06/2015	2	Normal	–

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

American Environmental Testing Laboratory Inc.
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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 2

Project ID: 1500744
Project Name: PO# SC09382

AETL Job Number	Submitted	Client
76137	02/27/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030315

Our Lab I.D.			Method Blank	76137.01	76137.08	76137.17	
Client Sample I.D.				1500744-01	1500744-11	1500744-20	
Date Sampled				02/25/2015	02/25/2015	02/25/2015	
Date Prepared			03/03/2015	03/03/2015	03/03/2015	03/03/2015	
Preparation Method			3550B	3550B	3550B	3550B	
Date Analyzed			03/04/2015	03/04/2015	03/04/2015	03/04/2015	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
Acifluorfen	20	20	ND	ND	ND	ND	
Bentazon	10	10	ND	ND	ND	ND	
Chloramben	10	10	ND	ND	ND	ND	
2,4-D	10	10	ND	ND	ND	ND	
Dalapon	20	20	ND	ND	ND	ND	
2,4-DB	10	10	ND	ND	ND	ND	
DCPA diacid	20	20	ND	ND	ND	ND	
Dicamba	10	10	ND	ND	ND	ND	
3,5-Dichlorobenzoic acid	10	10	ND	ND	ND	ND	
Dichloroprop	10	10	ND	ND	ND	ND	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND	ND	ND	
MCPA	2000	2000	ND	ND	ND	ND	
MCPP	2000	2000	ND	ND	ND	ND	
4-Nitrophenol	10	10	ND	ND	ND	ND	
Pentachlorophenol (PCP)	10	10	ND	ND	ND	ND	
Picloram	10	10	ND	ND	ND	ND	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND	ND	ND	
2,4,5-TP	10	10	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	**76137.01**	**76137.08**	**76137.17**	
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
DCAA	50-150		65.5	58.7	58.5	50.7	

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ANALYTICAL RESULTS

Ordered By

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3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 3

Project ID: 1500744
Project Name: PO# SC09382

AETL Job Number	Submitted	Client
76137	02/27/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315

Our Lab I.D.			Method Blank	76137.07	76137.13	76137.21	
Client Sample I.D.				1500744-10	1500744-16	1500744-24	
Date Sampled				02/25/2015	02/25/2015	02/25/2015	
Date Prepared			03/03/2015	03/03/2015	03/03/2015	03/03/2015	
Preparation Method			3510C	3510C	3510C	3510C	
Date Analyzed			03/04/2015	03/04/2015	03/04/2015	03/04/2015	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
Acifluorfen	1.0	1.0	ND	ND	ND	ND	
Bentazon	0.5	0.5	ND	ND	ND	ND	
Chloramben	0.5	0.5	ND	ND	ND	ND	
2,4-D	0.5	0.5	ND	ND	ND	ND	
Dalapon	1.0	1.0	ND	ND	ND	ND	
2,4-DB	0.5	0.5	ND	ND	ND	ND	
DCPA diacid	1.0	1.0	ND	ND	ND	ND	
Dicamba	0.5	0.5	ND	ND	ND	ND	
3,5-Dichlorobenzoic acid	0.5	0.5	ND	ND	ND	ND	
Dichloroprop	0.5	0.5	ND	ND	ND	ND	
Dinoseb	0.5	0.5	ND	ND	ND	ND	
MCPA	100	100	ND	ND	ND	ND	
MCPP	100	100	ND	ND	ND	ND	
4-Nitrophenol	0.5	0.5	ND	ND	ND	ND	
Pentachlorophenol (PCP)	0.5	0.5	ND	ND	ND	ND	
Picloram	0.5	0.5	ND	ND	ND	ND	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.5	0.5	ND	ND	ND	ND	
2,4,5-TP	0.5	0.5	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	76137.07	76137.13	76137.21	
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
DCAA	50-150		65.6	77.1	79.8	74.0	

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QUALITY CONTROL RESULTS

Ordered By

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3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 4

Project ID: 1500744
Project Name: PO# SC09382

AETL Job Number	Submitted	Client
76137	02/27/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315; LCS: Clean Water; LCS Prepared: 03/03/2015; LCS Analyzed: 03/04/2015; Units: ug/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	72.0	144	50.0	72.5	145	<1	50-150	<50	
Dalapon	50.0	54.5	109	50.0	36.3	72.6	40.1	50-150	<50	
2,4-DB	50.0	43.1	86.2	50.0	26.9	53.8	46.3	50-150	<50	
Dicamba	50.0	56.5	113	50.0	43.4	86.8	26.2	50-150	<50	
Dinoseb	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<50	
MCPA	5,000	4,280	85.6	5,000	5,850	117	31.0	50-150	<50	
MCPP	5,000	5,900	118	5,000	2,540	50.8	79.6	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	42.8	85.6	50.0	29.9	59.8	35.5	50-150	<50	
2,4,5-TP	50.0	27.0	53.9	50.0	46.4	92.8	53.0	50-150	<50	
Surrogates										
DCAA	100	65.6	65.6	100	57.9	57.9	12.5	50-150	<20	

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 5

Project ID: 1500744
Project Name: PO# SC09382

AETL Job Number	Submitted	Client
76137	02/27/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030315; Dup or Spiked Sample: B030315; LCS: Clean Sand; LCS Prepared: 03/03/2015; LCS Analyzed: 03/04/2015; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	26.9	53.8	50.0	38.8	77.6	36.2	50-150	<40	
Dalapon	50.0	30.1	60.2	50.0	45.3	90.6	40.3	50-150	<40	
2,4-DB	50.0	38.9	77.8	50.0	60.0	120	42.7	50-150	<40	
Dicamba	50.0	30.3	60.6	50.0	38.2	76.4	23.1	50-150	<40	
Dichloroprop	50.0	27.8	55.6	50.0	36.7	73.4	27.6	50-150	<40	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	26.3	52.6	50.0	34.0	68.0	25.5	50-150	<40	
MCPA	5,000	2,660	53.1	5,000	3,240	64.8	19.8	50-150	<40	
MCPP	5,000	3,110	62.2	5,000	2,850	57.0	8.7	50-150	<40	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	49.0	98.0	50.0	29.4	58.8	50.0	50-150	<40	
2,4,5-TP	50.0	26.1	52.2	50.0	37.1	74.2	34.8	50-150	<40	
Surrogates										
DCAA	100	70.7	70.7	100	88.7	88.7	22.6	50-150	<40	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6;	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY
LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744 76137

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09382- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-01 / 1278-129-0		Soil	02/25/15 07:50	76137.01
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 07:50		
ATL Lab#: 1500744-02 / 1278-129-1.5		Soil	02/25/15 08:00	76137.02
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 08:00		
ATL Lab#: 1500744-04 / 1278-130-0		Soil	02/25/15 08:30	76137.03
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 08:30		
ATL Lab#: 1500744-05 / 1278-130-1.5		Soil	02/25/15 08:40	76137.04
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 08:40		
ATL Lab#: 1500744-07 / 1278-135-0		Soil	02/25/15 09:05	76137.05
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 09:05		

Released By	Date	Received By	Date
[signature]	2/27/15 1337	[signature]	2/27/15 1337
[signature]	2/27/15 1705	[signature]	02/27/15 1705

ADVANCED TECHNOLOGY
LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744 76137

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-08 / 1278-135-1.5 8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	Soil 03/11/15 09:15	02/25/15 09:15	76137.06
ATL Lab#: 1500744-10 / EBB-1-022515 8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	03/06/15 17:00	Aqueous 03/04/15 10:10	02/25/15 10:10	76137.07
ATL Lab#: 1500744-11 / 1278-136-0 8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	Soil 03/11/15 10:40	02/25/15 10:40	76137.08
ATL Lab#: 1500744-12 / 1278-136-1.5 8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	Soil 03/11/15 10:50	02/25/15 10:50	76137.09
ATL Lab#: 1500744-13 / 1278-136-3.5 8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	Soil 03/11/15 11:00	02/25/15 11:00	76137.10
ATL Lab#: 1500744-14 / 1278-137-0 8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	Soil 03/11/15 11:20	02/25/15 11:20	76137.11
ATL Lab#: 1500744-15 / 1278-137-1.5 8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	Soil 03/11/15 11:30	02/25/15 11:30	76137.12

Released By	Date	Received By	Date
Amber Mangrums	2/27/15 1337	[signature]	2/27/15 1337
[signature]	2/27/15 1705	Antoine [signature]	02/27/15 1705

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744 76137

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-16 / EBB-2-022515		**Aqueous**	**02/25/15 11:45**	76137.13
8151_SUB	**03/06/15 17:00**	03/04/15 11:45		
[Chlorinated Herbicides]				
Amber Unpres - 1000mL				
ATL Lab#: 1500744-17 / 1278-138-0		**Soil**	**02/25/15 11:55**	76137.14
8151_SUB	**03/06/15 17:00**	03/11/15 11:55		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-18 / 1278-138-1.5		**Soil**	**02/25/15 12:00**	76137.15
8151_SUB	**03/06/15 17:00**	03/11/15 12:00		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-19 / 1278-138-3.5		**Soil**	**02/25/15 12:10**	76137.16
8151_SUB	**03/06/15 17:00**	03/11/15 12:10		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-20 / 1278-139-0		**Soil**	**02/25/15 12:20**	76137.17
8151_SUB	**03/06/15 17:00**	03/11/15 12:20		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-21 / 1278-139-1.5		**Soil**	**02/25/15 12:35**	76137.18
8151_SUB	**03/06/15 17:00**	03/11/15 12:35		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-22 / 1278-123-0		**Soil**	**02/25/15 14:00**	76137.19
8151_SUB	**03/06/15 17:00**	03/11/15 14:00		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				

Released By	Date	Received By	Date
[illegible]	2/27/15 1337	[illegible]	2/27/15 1337
[illegible]	2/27/15 1705	[illegible]	02/27/15 1705

ADVANCED TECHNOLOGY
LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744 76137

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-23 / 1278-122-0		Soil	02/25/15 14:20	76137.20
8151_SUB	03/06/15 17:00	03/11/15 14:20		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-24 / EBB-3-022515		Aqueous	02/25/15 15:00	76137.21
8151_SUB	03/06/15 17:00	03/04/15 15:00		
[Chlorinated Herbicides]				
Amber Unpres - 1000mL				

Released By	Date	Received By	Date
[illegible]	2/27/15 1337	[illegible]	2/27/15 1337
[illegible]	2/27/15 1705	[illegible]	02/27/15 1705

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09382- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-01 / 1278-129-0		**Soil**	**02/25/15 07:50**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 07:50		
ATL Lab#: 1500744-02 / 1278-129-1.5		**Soil**	**02/25/15 08:00**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 08:00		
ATL Lab#: 1500744-04 / 1278-130-0		**Soil**	**02/25/15 08:30**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 08:30		
ATL Lab#: 1500744-05 / 1278-130-1.5		**Soil**	**02/25/15 08:40**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 08:40		
ATL Lab#: 1500744-07 / 1278-135-0		**Soil**	**02/25/15 09:05**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 09:05		

Released By	Date	Received By	Date
[illegible]	2/27/15 1337	[illegible]	2/27/15 1337
Released By	Date	Received By	Date

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-08 / 1278-135-1.5		Soil	02/25/15 09:15	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 09:15		
ATL Lab#: 1500744-10 / EBB-1-022515		Aqueous	02/25/15 10:10	
8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	03/06/15 17:00	03/04/15 10:10		
ATL Lab#: 1500744-11 / 1278-136-0		Soil	02/25/15 10:40	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 10:40		
ATL Lab#: 1500744-12 / 1278-136-1.5		Soil	02/25/15 10:50	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 10:50		
ATL Lab#: 1500744-13 / 1278-136-3.5		Soil	02/25/15 11:00	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 11:00		
ATL Lab#: 1500744-14 / 1278-137-0		Soil	02/25/15 11:20	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 11:20		
ATL Lab#: 1500744-15 / 1278-137-1.5		Soil	02/25/15 11:30	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/06/15 17:00	03/11/15 11:30		

Released By	Date	Received By	Date
[illegible]	2/27/15 1337	[illegible]	2/27/15 1337
Released By	Date	Received By	Date

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-16 / EBB-2-022515		**Aqueous**	**02/25/15 11:45**	
8151_SUB	**03/06/15 17:00**	03/04/15 11:45		
[Chlorinated Herbicides]				
Amber Unpres - 1000mL				
ATL Lab#: 1500744-17 / 1278-138-0		**Soil**	**02/25/15 11:55**	
8151_SUB	**03/06/15 17:00**	03/11/15 11:55		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-18 / 1278-138-1.5		**Soil**	**02/25/15 12:00**	
8151_SUB	**03/06/15 17:00**	03/11/15 12:00		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-19 / 1278-138-3.5		**Soil**	**02/25/15 12:10**	
8151_SUB	**03/06/15 17:00**	03/11/15 12:10		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-20 / 1278-139-0		**Soil**	**02/25/15 12:20**	
8151_SUB	**03/06/15 17:00**	03/11/15 12:20		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-21 / 1278-139-1.5		**Soil**	**02/25/15 12:35**	
8151_SUB	**03/06/15 17:00**	03/11/15 12:35		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500744-22 / 1278-123-0		**Soil**	**02/25/15 14:00**	
8151_SUB	**03/06/15 17:00**	03/11/15 14:00		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				

Released By	Date	Received By	Date
Released By	Date	Received By	Date

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500744

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500744-23 / 1278-122-0		**Soil**	**02/25/15 14:20**	
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	**03/06/15 17:00**	03/11/15 14:20		
ATL Lab#: 1500744-24 / EBB-3-022515		**Aqueous**	**02/25/15 15:00**	
8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	**03/06/15 17:00**	03/04/15 15:00		

Released By	Date	Received By	Date
[illegible]	2/27/15 1337	[illegible]	2/27/15 1337
Released By	Date	Received By	Date

STANTEC CHAIN-OF-CUSTODY RECORD

COC #
Page 1 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1278-129-0	2/25/15	0750	SO	40ml VOA(3) 4oz glass jar 8oz glass jar	MeOH/NaHSO4	5	X	X			X			X		
1278-129-1.5	↓	0800	↓	40ml VOA(3) 8oz glass jar	↓	4	↓	↓			↓			↓		
1278-129-3.5	↓	0825	↓	↓	↓	↓	↓	↓			↓			↓		On Hold
1278-130-0	↓	0830	↓	↓	↓	↓	↓	↓			↓			↓		
1278-130-1.5	↓	0840	↓	↓	↓	↓	↓	↓			↓			↓		
1278-130-3.5	↓	0850	↓	↓	↓	↓	↓	↓			↓			↓		On Hold
1278-135-0	↓	0905	↓	↓	↓	↓	↓	↓			↓			↓		
1278-135-1.5	↓	0915	↓	↓	↓	↓	↓	↓			↓			↓		
1278-135-3.5	↓	0930	↓	↓	↓	↓	↓	↓			↓			↓		On Hold
EBB-1-022515	↓	1010	AQ	2 Amber 1L 640ml VOA 40ml VOA(3)	HCl	9	↓	↓			↓			↓		
1278-136-0	↓	1040	SO	40ml VOA(3) 8oz glass jar 4oz glass jar	MeOH NaHSO4	5	↓	↓			↓			↓		

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Sawant / J. Stagno / T. Walsh Shipment Method: Lab Pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a) Relinquished by:	[signature]	Aneya Sawant	Stantec Consulting		
1(b) Received by:	[signature]	Edward Rodriguez	ATL	2-26-15	14:20
2(a) Relinquished by:	[signature]	Edward Rodriguez	ATL	2-26-15	1810
2(b) Received by:	[signature]	FPDWA	ATL	2/26/15	1810
3(a) Relinquished by:					
3(b) Received by:					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 2 of 2

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
	Project Manager: Anne Perez/Kristy Edblad
Telephone: (805) 230-1266	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A	
1278-136-1.5	2/25/15	1050	SO	40mL VOA(3) 8oz glass jar	MeOH/ NaHSO4	4	X	X			X			X	
1278-136-3.5	↓	1100	↓	↓	↓	↓	↓	↓			↓			↓	
1278-137-0	↓	1120	↓	↓	↓	↓	↓	↓			↓			↓	
1278-137-1.5	↓	1130	↓	↓	↓	↓	↓	↓			↓			↓	
EBB-23-022515	↓	1145	AQ	1L Amber(2) 40mL VOA(6) 500mL poly(1)	HCl	9	↓	↓			↓			↓	
1278-138-0	↓	1155	SO	40mL VOA(3) 8oz glass jar	MeOH/ NaHSO4	4	↓	↓			↓			↓	
1278-138-1.5	↓	1200	↓	↓	↓	↓	↓	↓			↓			↓	
1278-138-3.5	↓	1210	↓	↓	↓	↓	↓	↓			↓			↓	
1278-139-0	↓	1220	↓	40mL VOA(3) 8oz glass jar 4oz glass jar	↓	5	↓	↓			↓			↓	
1278-139-1.5	↓	1235	↓	40mL VOA(3) 8oz glass jar	↓	4	↓	↓			↓			↓	
1278-123-0	↓	1400	↓	40mL VOA(3) 8oz glass jar 4oz glass jar	↓	5	↓	↓			↓			↓	

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: Anny A. Sawant / T. Webb / J. Stagno *Shipment Method:* Lab Pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a) *Relinquished by:*	[signature]	Anneya Sawant	Stantec Consulting		
1(b) *Received by:*	[signature]	Edward Rodriguez	ATL	2-26-15	1420
2(a) *Relinquished by:*	[signature]	Edward Rodriguez	ATL	2-26-15	1810
2(b) *Received by:*	[signature]	FPDIWA	ATL	2/26/15	1810
3(a) *Relinquished by:*					
3(b) *Received by:*					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 3 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1278-122-0	2/25/15	1420	SO	1 8 oz glass jar 3 VOAs	MeOH/ NaHSO4	4	X	X			X			X		
EBB-3-022515	↓	1500	AQ	1 L Amber (2) sub mL poly (1) 6 40 mL VOAs	HCl	9	↓	↓			↓			↓		

AS

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: T. Walsh / J. Stayno / A. Sawant Shipment Method: Lab Pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a) Relinquished by:	[signature]	Anuya Sawant	Stantec Consulting		
1(b) Received by:	[signature]	Edward Rodriguez	ATL	2-26-15	14:20
2(a) Relinquished by:	[signature]	Edward Rodriguez	ATL	2-26-15	1810
2(b) Received by:	[signature]	FPDiwa	ATL	2/26/15	1810
3(a) Relinquished by:					
3(b) Received by:					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 1 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chromated Herbicides - 8151A	REMARKS / PRECAUTIONS
1278-129-0	2/25/15	0750	SO		MeOH	4	X	X			X			X	OK 8151A
1278-129-1.5		0800				4									No 8151A Analysis
1278-129-3.5		0825													On Hold
1278-130-0		0830													
1278-130-1.5		0840													
1278-130-3.5		0850													On Hold
1278-135-0		0905													
1278-135-1.5		0915													
1278-135-3.5		0930													On Hold
EBB-1-022515		1010	AQ		HCl	9								X	OK 8151A
1278-136-0		1040	SO		MeOH	5								X	OK 8151A

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

REMARKS / PRECAUTIONS — TAT: ☐ Normal ☐ Rush ☒ Other 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGs ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sampled by: A. Lawant / J. Reyna / Fillah Shipment Method: Cole Pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a)	Relinquished by:	Anuya Lawant	Stantec Consulting		
1(b)	Received by:	Edward Rodriguez	ATL	2-26-15	14:20
2(a)	Relinquished by:	Edward Rodriguez	ATL	2-26-15	18:10
2(b)	Received by:	FEDEX	ATL	2/26/15	1820
3(a)	Relinquished by:				
3(b)	Received by:				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC #
Page 2 of 2

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1288

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ New Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	Matrix*	Container & Size**	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A	Remarks
1278-136-1.5	2/25/15	1050	SO	[illegible]	MCOH/NaHSO4	4	X	X			X				No 8151A
1278-136-3.5	↓	1100	↓	↓	↓	↓	↓	↓			↓				Analysis
1278-137-0		1120													
1278-137-1.5		1130	↓	↓	↓	↓									
EBB-2-022515		1145	AQ	[illegible]	HCl	9								X	OK 8151A
1278-138-0		1155	SO	[illegible]	MCOH/NaHSO4	4									
1278-138-1.5		1200	↓	↓	↓	↓									
1278-138-3.5		1210		↓		↓									
1278-139-0		1220		[illegible]		5								X	OK 8151A
1278-139-1.5		1235		[illegible]		4									
1278-123-0	↓	1400	↓	[illegible]	↓	5	↓	↓			↓				

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: Amy A. Sauvant / T. Walsh / J. Stagno Shipment Method: Lab Pickup Airbill Number:

Signature	Print Name	Company	Date	Time
1(a) Relinquished by: [signature]	Anneya Sauvant	Stantec Consulting		
1(b) Received by: [signature]	Edward Rodriguez	ATL	2-26-15	1420
2(a) Relinquished by: [signature]	Edward Rodriguez	ATL	2-26-15	1810
2(b) Received by: [signature]	FPDIWA	ATL	2/26/15	1810
3(a) Relinquished by:				
3(b) Received by:				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 3 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix*	Container & Size**	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 8010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1278-122-0	2/25/15	1420	SO	1 8-2 g/40 ml 3 mL/40	MeOH/ NaHSO4	4	X	X			X			X		No 8151A Analysis
ERB-3-022515	↓	1500	AQ	1 L Amber(2) 1000 ml Poly(1) 640 ml Vial	HCl	9	↓	↓			↓			X		OK 8151A

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: T. Walsh / J. Stagnol / A. Sawant Shipment Method: Lab Pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a) Relinquished by:	[signature]	Anuya Sawant	Stantec Consulting		
1(b) Received by:	[signature]	Edward Rodriguez	ATL	2-26-15	14:20
2(a) Relinquished by:	[signature]	Edward Rodriguez	ATL	2-26-15	1810
2(b) Received by:	[signature]	FP Dawn	ATL	2/26/15	1810
3(a) Relinquished by:					
3(b) Received by:					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Ortho T = Tedlar B = Brass P = Plastic OT = Other

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500744

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Report To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone: (805) 230-1266
Fax: (805) 230-1277

Invoice To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone :(805) 230-1266
Fax: (805) 230-1277

Date Due:	03/05/15 17:00 (5 day TAT)	Date Received:	02/26/15 14:20
Received By:	Ron Diwa	Date Logged In:	02/26/15 15:39
Logged In By:	Carmen Aguila	Shipped by:	ATL

Please review the checklist below. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues. If you have any questions or further instructions, please contact your Project Manager at (526) 989-4045.

Sample(s) received on ice?	Yes	☐	No	☑	
Sample(s) received on blue ice?	Yes	☑	No	☐	
Cooler temperature within acceptance limit?	Yes	☑	No	☐	
Shipping container received in good condition?	Not Applicable				
Custody seals present on shipping container?	Yes	☐	No	☑	
Custody seals intact on shipping container?	Not Applicable				
Custody seals present on sample bottles?	Yes	☐	No	☑	
Custody seals intact on sample bottles?	Not Applicable				
Chain of Custody (COC) present?	Yes	☑	No	☐	
Sampler name present in COC?	Yes	☑	No	☐	
COC signed when relinquished and received?	Yes	☑	No	☐	
COC agrees with sample labels?	Yes	☐	No	☑	
Samples in proper container/bottle?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample amount for indicated tests?	Yes	☑	No	☐	
All samples received within holding time?	Yes	☑	No	☐	
Water for VOC -- Were VOA vials submitted?	Yes	☑	No	☐	
Water samples submitted?	Yes	☑	No	☐	
VOA vials for VOC meet headspace criteria?	Yes	☑	No	☐	
Water samples meet preservation criteria?	Yes	☑	No	☐	

cooler #1	Temp: 5.7 °C
cooler #2	Temp: 5.2 °C

Sample Receipt Comments:

Printed: 3/2/2015 10:00:32AM
Form Version: 8 Issued: 01/22/2015 11:05 AM

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500744

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Water sample for metals- filter and preserve per client's instruction.
The sample in glass jar for 1278-135-1.5 labeled as 1278-1.5, time of collection matched with the coc @ 0915, bagged together with the 5035 vials.

ADVANCED TECHNOLOGY
LABORATORIES

March 06, 2015

Anne Perez/Kristy Edblad
Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Tel: (805) 230-1266
Fax:(805) 230-1277

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500747
Client Reference : 185832023, 200.0003, Caltrans 07A3322-23

Enclosed are the results for sample(s) received on February 26, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1278-120-0	1500747-01	Soil	2/25/15 14:32	2/26/15 14:20
1278-121-0	1500747-02	Soil	2/25/15 14:01	2/26/15 14:20
1278-121-1.5	1500747-03	Soil	2/25/15 14:16	2/26/15 14:20
1278-140-0	1500747-04	Soil	2/25/15 12:52	2/26/15 14:20
1278-140-1.5	1500747-05	Soil	2/25/15 13:06	2/26/15 14:20
1278-141-0	1500747-07	Soil	2/25/15 12:25	2/26/15 14:20
1278-141-1.5	1500747-08	Soil	2/25/15 12:29	2/26/15 14:20
1278-142-0	1500747-10	Soil	2/25/15 11:17	2/26/15 14:20
1278-142-1.5	1500747-11	Soil	2/25/15 11:22	2/26/15 14:20
1278-143-0	1500747-13	Soil	2/25/15 10:54	2/26/15 14:20
1278-144-0	1500747-14	Soil	2/25/15 10:33	2/26/15 14:20
1278-144-1.5	1500747-15	Soil	2/25/15 10:37	2/26/15 14:20
1278-145-0	1500747-17	Soil	2/25/15 10:10	2/26/15 14:20
1278-145-1.5	1500747-18	Soil	2/25/15 10:15	2/26/15 14:20
1278-146-0	1500747-20	Soil	2/25/15 8:45	2/26/15 14:20
1278-146-1.5	1500747-21	Soil	2/25/15 8:53	2/26/15 14:20
1278-147-0	1500747-23	Soil	2/25/15 8:14	2/26/15 14:20
1278-147-1.5	1500747-24	Soil	2/25/15 8:20	2/26/15 14:20
1278-148-0	1500747-26	Soil	2/25/15 7:49	2/26/15 14:20
1278-148-1.5	1500747-27	Soil	2/25/15 7:54	2/26/15 14:20
EBA-1-022515	1500747-29	Water	2/25/15 9:34	2/26/15 14:20
EBA-2-022515	1500747-30	Water	2/25/15 11:47	2/26/15 14:20
EBA-3-022515	1500747-31	Water	2/25/15 15:06	2/26/15 14:20

Certificate of Analysis

.itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

CASE NARRATIVE

The samples for EPA 8151 (Chlorinated Herbicides) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

EPA 8260 analysis was performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500747-29	EBA-1-022515	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:20	
1500747-30	EBA-2-022515	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:23	
1500747-31	EBA-3-022515	ND	ug/L	0.20	0.11	1	B5C0058	03/03/2015	03/03/15 17:25	

Mercury by AA (Cold Vapor) EPA 7471A

Analyte: Mercury **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500747-01	1278-120-0	0.05	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 19:14	J
1500747-02	1278-121-0	0.03	mg/kg	0.10	0.009	1	B5C0027	03/03/2015	03/03/15 19:16	J
1500747-03	1278-121-1.5	0.03	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:26	J
1500747-04	1278-140-0	0.01	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:36	J
1500747-05	1278-140-1.5	0.009	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:38	J
1500747-07	1278-141-0	0.03	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:40	J
1500747-08	1278-141-1.5	0.09	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:46	J
1500747-10	1278-142-0	0.02	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:48	J
1500747-11	1278-142-1.5	0.05	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:50	J
1500747-13	1278-143-0	0.02	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:52	J
1500747-14	1278-144-0	0.05	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:55	J
1500747-15	1278-144-1.5	0.05	mg/kg	0.10	0.009	1	B5C0028	03/03/2015	03/03/15 19:57	J
1500747-17	1278-145-0	0.05	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:03	J
1500747-18	1278-145-1.5	0.04	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:17	J
1500747-20	1278-146-0	0.02	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:19	J
1500747-21	1278-146-1.5	0.04	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:21	J
1500747-23	1278-147-0	0.03	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:23	J
1500747-24	1278-147-1.5	0.03	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:25	J
1500747-26	1278-148-0	0.04	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:27	J
1500747-27	1278-148-1.5	0.01	mg/kg	0.10	0.009	1	B5C0029	03/03/2015	03/03/15 20:29	J

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-120-0
Lab ID: 1500747-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.99**	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:49	J
Arsenic	**9.2**	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:49	
Barium	**110**	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:49	
Beryllium	**0.98**	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:48	J
Cadmium	**0.86**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:49	J
Chromium	**33**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:49	
Cobalt	**7.6**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:49	
Copper	**26**	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:49	
Lead	**18**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:49	
Molybdenum	**0.78**	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:49	J
Nickel	**25**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:49	
...nium	**1.1**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:49	
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:49	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:49	
Vanadium	**54**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:49	
Zinc	**62**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:49	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:39	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:39	
Surrogate: 4-Bromofluorobenzene	*111 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 19:39*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	84	20	20	10	B5C0070	03/03/2015	03/03/15 22:19	
C23-C32	550	20	20	10	B5C0070	03/03/2015	03/03/15 22:19	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 22:19*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
...1-Trichloroethane	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
1,1,2,2-Tetrachloroethane	ND	4.9	1.9	1	B5C0002	03/02/2015	03/02/15 18:52	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-120-0
Lab ID: 1500747-01

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
1,1-Dichloroethane	ND	4.9	0.95	1	B5C0002	03/02/2015	03/02/15 18:52	
1,1-Dichloroethene	ND	4.9	1.1	1	B5C0002	03/02/2015	03/02/15 18:52	
1,1-Dichloropropene	ND	4.9	1.5	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2,3-Trichloropropane	ND	4.9	1.8	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2,3-Trichlorobenzene	ND	4.9	2.6	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2,4-Trichlorobenzene	ND	4.9	2.0	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2,4-Trimethylbenzene	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2-Dibromo-3-chloropropane	ND	9.7	2.1	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2-Dibromoethane	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2-Dichlorobenzene	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2-Dichloroethane	ND	4.9	0.85	1	B5C0002	03/02/2015	03/02/15 18:52	
1,2-Dichloropropane	ND	4.9	3.3	1	B5C0002	03/02/2015	03/02/15 18:52	
1,3,5-Trimethylbenzene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
1,3-Dichlorobenzene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
1,3-Dichloropropane	ND	4.9	1.1	1	B5C0002	03/02/2015	03/02/15 18:52	
1,4-Dichlorobenzene	ND	4.9	1.7	1	B5C0002	03/02/2015	03/02/15 18:52	
2,2-Dichloropropane	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
2-Chlorotoluene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
4-Chlorotoluene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
4-Isopropyltoluene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
Benzene	ND	4.9	1.1	1	B5C0002	03/02/2015	03/02/15 18:52	
Bromobenzene	ND	4.9	1.6	1	B5C0002	03/02/2015	03/02/15 18:52	
Bromochloromethane	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
Bromodichloromethane	ND	4.9	1.5	1	B5C0002	03/02/2015	03/02/15 18:52	
Bromoform	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
Bromomethane	ND	4.9	2.6	1	B5C0002	03/02/2015	03/02/15 18:52	
Carbon disulfide	ND	4.9	2.2	1	B5C0002	03/02/2015	03/02/15 18:52	
Carbon tetrachloride	ND	4.9	1.5	1	B5C0002	03/02/2015	03/02/15 18:52	
Chlorobenzene	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
Chloroethane	ND	4.9	4.8	1	B5C0002	03/02/2015	03/02/15 18:52	
Chloroform	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
Chloromethane	ND	4.9	0.72	1	B5C0002	03/02/2015	03/02/15 18:52	
cis-1,2-Dichloroethene	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
cis-1,3-Dichloropropene	ND	4.9	2.2	1	B5C0002	03/02/2015	03/02/15 18:52	
Di-isopropyl ether	ND	4.9	0.98	1	B5C0002	03/02/2015	03/02/15 18:52	
Dibromochloromethane	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
Dibromomethane	ND	4.9	1.9	1	B5C0002	03/02/2015	03/02/15 18:52	
Dichlorodifluoromethane	ND	4.9	0.72	1	B5C0002	03/02/2015	03/02/15 18:52	
Ethyl Acetate	ND	49	13	1	B5C0002	03/02/2015	03/02/15 18:52	
Ethyl Ether	ND	49	12	1	B5C0002	03/02/2015	03/02/15 18:52	

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..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-120-0
Lab ID: 1500747-01

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.9	1.1	1	B5C0002	03/02/2015	03/02/15 18:52	
Ethylbenzene	ND	4.9	1.1	1	B5C0002	03/02/2015	03/02/15 18:52	
Freon-113	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
Hexachlorobutadiene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
Isopropylbenzene	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
m,p-Xylene	ND	9.7	2.4	1	B5C0002	03/02/2015	03/02/15 18:52	
Methylene chloride	ND	4.9	4.9	1	B5C0002	03/02/2015	03/02/15 18:52	
MTBE	ND	4.9	0.88	1	B5C0002	03/02/2015	03/02/15 18:52	
n-Butylbenzene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
n-Propylbenzene	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
Naphthalene	ND	4.9	3.1	1	B5C0002	03/02/2015	03/02/15 18:52	
..ylene	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
..-Butylbenzene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
Styrene	ND	4.9	1.3	1	B5C0002	03/02/2015	03/02/15 18:52	
tert-Amyl methyl ether	ND	4.9	0.99	1	B5C0002	03/02/2015	03/02/15 18:52	
tert-Butanol	ND	97	19	1	B5C0002	03/02/2015	03/02/15 18:52	
tert-Butylbenzene	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
Tetrachloroethene	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
Toluene	ND	4.9	0.86	1	B5C0002	03/02/2015	03/02/15 18:52	
trans-1,2-Dichloroethene	ND	4.9	1.4	1	B5C0002	03/02/2015	03/02/15 18:52	
trans-1,3-Dichloropropene	ND	4.9	1.1	1	B5C0002	03/02/2015	03/02/15 18:52	
Trichloroethene	ND	4.9	1.2	1	B5C0002	03/02/2015	03/02/15 18:52	
Trichlorofluoromethane	ND	4.9	1.7	1	B5C0002	03/02/2015	03/02/15 18:52	
Vinyl acetate	ND	49	10	1	B5C0002	03/02/2015	03/02/15 18:52	
Vinyl chloride	ND	4.9	0.99	1	B5C0002	03/02/2015	03/02/15 18:52	
Surrogate: 1,2-Dichloroethane-d4	*127 %*		*20 - 189*		B5C0002	03/02/2015	*03/02/15 18:52*	
Surrogate: 4-Bromofluorobenzene	*87.5 %*		*20 - 173*		B5C0002	03/02/2015	*03/02/15 18:52*	
Surrogate: Dibromofluoromethane	*112 %*		*26 - 178*		B5C0002	03/02/2015	*03/02/15 18:52*	
Surrogate: Toluene-d8	*100 %*		*31 - 166*		B5C0002	03/02/2015	*03/02/15 18:52*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-121-0
Lab ID: 1500747-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**2.1**	2.0	0.25	1	B5C0021	03/03/2015	03/04/15 17:52	
Arsenic	**7.7**	1.0	0.19	1	B5C0021	03/03/2015	03/04/15 17:52	
Barium	**120**	1.0	0.14	1	B5C0021	03/03/2015	03/04/15 17:52	
Beryllium	**1.0**	1.0	0.04	1	B5C0021	03/03/2015	03/04/15 17:51	
Cadmium	**0.90**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:52	J
Chromium	**25**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:52	
Cobalt	**7.7**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:52	
Copper	**40**	2.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:52	
Lead	**94**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:52	
Molybdenum	**1.3**	1.0	0.05	1	B5C0021	03/03/2015	03/04/15 17:52	
Nickel	**21**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:52	
Selenium	**1.1**	1.0	0.15	1	B5C0021	03/03/2015	03/04/15 17:52	
Silver	ND	1.0	0.06	1	B5C0021	03/03/2015	03/04/15 17:52	
Thallium	ND	1.0	0.20	1	B5C0021	03/03/2015	03/04/15 17:52	
Vanadium	**45**	1.0	0.07	1	B5C0021	03/03/2015	03/04/15 17:52	
Zinc	**150**	1.0	0.11	1	B5C0021	03/03/2015	03/04/15 17:52	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:55	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 19:55	
Surrogate: 4-Bromofluorobenzene	*109 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 19:55*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**60**	20	20	10	B5C0070	03/03/2015	03/03/15 22:35	
C23-C32	**520**	20	20	10	B5C0070	03/03/2015	03/03/15 22:35	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 22:35*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
1,1,1-Trichloroethane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5C0002	03/02/2015	03/02/15 19:11	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-121-0
Lab ID: 1500747-02

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
1,1-Dichloroethane	ND	4.4	0.86	1	B5C0002	03/02/2015	03/02/15 19:11	
1,1-Dichloroethene	ND	4.4	0.99	1	B5C0002	03/02/2015	03/02/15 19:11	
1,1-Dichloropropene	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:11	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5C0002	03/02/2015	03/02/15 19:11	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5C0002	03/02/2015	03/02/15 19:11	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5C0002	03/02/2015	03/02/15 19:11	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
1,2-Dibromo-3-chloropropane	ND	8.7	1.9	1	B5C0002	03/02/2015	03/02/15 19:11	
1,2-Dibromoethane	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:11	
1,2-Dichlorobenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
...Dichloroethane	ND	4.4	0.76	1	B5C0002	03/02/2015	03/02/15 19:11	
...-Dichloropropane	ND	4.4	3.0	1	B5C0002	03/02/2015	03/02/15 19:11	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
1,3-Dichloropropane	ND	4.4	0.96	1	B5C0002	03/02/2015	03/02/15 19:11	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5C0002	03/02/2015	03/02/15 19:11	
2,2-Dichloropropane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
2-Chlorotoluene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
4-Chlorotoluene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
4-Isopropyltoluene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
Benzene	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:11	
Bromobenzene	ND	4.4	1.4	1	B5C0002	03/02/2015	03/02/15 19:11	
Bromochloromethane	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
Bromodichloromethane	ND	4.4	1.4	1	B5C0002	03/02/2015	03/02/15 19:11	
Bromoform	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:11	
Bromomethane	ND	4.4	2.3	1	B5C0002	03/02/2015	03/02/15 19:11	
Carbon disulfide	ND	4.4	2.0	1	B5C0002	03/02/2015	03/02/15 19:11	
Carbon tetrachloride	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:11	
Chlorobenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
Chloroethane	ND	4.4	4.3	1	B5C0002	03/02/2015	03/02/15 19:11	
Chloroform	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
Chloromethane	ND	4.4	0.65	1	B5C0002	03/02/2015	03/02/15 19:11	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:11	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5C0002	03/02/2015	03/02/15 19:11	
Di-isopropyl ether	ND	4.4	0.88	1	B5C0002	03/02/2015	03/02/15 19:11	
Dibromochloromethane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
...romomethane	ND	4.4	1.7	1	B5C0002	03/02/2015	03/02/15 19:11	
...lorodifluoromethane	ND	4.4	0.65	1	B5C0002	03/02/2015	03/02/15 19:11	
Ethyl Acetate	ND	44	12	1	B5C0002	03/02/2015	03/02/15 19:11	
Ethyl Ether	ND	44	10	1	B5C0002	03/02/2015	03/02/15 19:11	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-121-0
Lab ID: 1500747-02

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:11	
Ethylbenzene	ND	4.4	0.98	1	B5C0002	03/02/2015	03/02/15 19:11	
Freon-113	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
Hexachlorobutadiene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
Isopropylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
m,p-Xylene	ND	8.7	2.2	1	B5C0002	03/02/2015	03/02/15 19:11	
Methylene chloride	ND	4.4	4.4	1	B5C0002	03/02/2015	03/02/15 19:11	
MTBE	ND	4.4	0.79	1	B5C0002	03/02/2015	03/02/15 19:11	
n-Butylbenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
n-Propylbenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
Naphthalene	ND	4.4	2.8	1	B5C0002	03/02/2015	03/02/15 19:11	
o-Xylene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
sec-Butylbenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
Styrene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
tert-Amyl methyl ether	ND	4.4	0.89	1	B5C0002	03/02/2015	03/02/15 19:11	
tert-Butanol	ND	87	18	1	B5C0002	03/02/2015	03/02/15 19:11	
tert-Butylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
Tetrachloroethene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
Toluene	ND	4.4	0.77	1	B5C0002	03/02/2015	03/02/15 19:11	
trans-1,2-Dichloroethene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:11	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:11	
Trichloroethene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:11	
Trichlorofluoromethane	ND	4.4	1.6	1	B5C0002	03/02/2015	03/02/15 19:11	
Vinyl acetate	ND	44	9.3	1	B5C0002	03/02/2015	03/02/15 19:11	
Vinyl chloride	ND	4.4	0.89	1	B5C0002	03/02/2015	03/02/15 19:11	
Surrogate: 1,2-Dichloroethane-d4	*117 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 19:11*	
Surrogate: 4-Bromofluorobenzene	*84.5 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 19:11*	
Surrogate: Dibromofluoromethane	*109 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 19:11*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 19:11*	

Certificate of Analysis

tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-121-1.5
Lab ID: 1500747-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**3.7**	2.0	0.26	1	B5C0022	03/03/2015	03/04/15 18:10	
Arsenic	**10**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:10	
Barium	**110**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:10	
Beryllium	**1.0**	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:09	
Cadmium	**0.92**	1.0	0.12	1	B5C0022	03/03/2015	03/04/15 18:10	J
Chromium	**38**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:10	
Cobalt	**7.6**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:10	
Copper	**28**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:10	
Lead	**22**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:10	
Molybdenum	**0.62**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:10	J
Nickel	**30**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:10	
nium	**1.2**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:10	
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:10	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:10	
Vanadium	**60**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:10	
Zinc	**73**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:10	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:11	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:11	
Surrogate: 4-Bromofluorobenzene	*111 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 20:11*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	3.2	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 21:47	
C23-C32	33	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 21:47	
Surrogate: p-Terphenyl	*77.5 %*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 21:47*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
,2-Tetrachloroethane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
.-Trichloroethane	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5C0002	03/02/2015	03/02/15 19:29	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-121-1.5
Lab ID: 1500747-03

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
1,1-Dichloroethane	ND	4.4	0.86	1	B5C0002	03/02/2015	03/02/15 19:29	
1,1-Dichloroethene	ND	4.4	0.99	1	B5C0002	03/02/2015	03/02/15 19:29	
1,1-Dichloropropene	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2-Dibromo-3-chloropropane	ND	8.8	1.9	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2-Dibromoethane	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2-Dichlorobenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2-Dichloroethane	ND	4.4	0.76	1	B5C0002	03/02/2015	03/02/15 19:29	
1,2-Dichloropropane	ND	4.4	3.0	1	B5C0002	03/02/2015	03/02/15 19:29	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
1,3-Dichloropropane	ND	4.4	0.96	1	B5C0002	03/02/2015	03/02/15 19:29	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5C0002	03/02/2015	03/02/15 19:29	
2,2-Dichloropropane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
2-Chlorotoluene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
4-Chlorotoluene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
4-Isopropyltoluene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Benzene	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:29	
Bromobenzene	ND	4.4	1.4	1	B5C0002	03/02/2015	03/02/15 19:29	
Bromochloromethane	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
Bromodichloromethane	ND	4.4	1.4	1	B5C0002	03/02/2015	03/02/15 19:29	
Bromoform	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:29	
Bromomethane	ND	4.4	2.3	1	B5C0002	03/02/2015	03/02/15 19:29	
Carbon disulfide	ND	4.4	2.0	1	B5C0002	03/02/2015	03/02/15 19:29	
Carbon tetrachloride	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:29	
Chlorobenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Chloroethane	ND	4.4	4.3	1	B5C0002	03/02/2015	03/02/15 19:29	
Chloroform	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
Chloromethane	ND	4.4	0.65	1	B5C0002	03/02/2015	03/02/15 19:29	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:29	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5C0002	03/02/2015	03/02/15 19:29	
Di-isopropyl ether	ND	4.4	0.89	1	B5C0002	03/02/2015	03/02/15 19:29	
Dibromochloromethane	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Dibromomethane	ND	4.4	1.7	1	B5C0002	03/02/2015	03/02/15 19:29	
Dichlorodifluoromethane	ND	4.4	0.65	1	B5C0002	03/02/2015	03/02/15 19:29	
Ethyl Acetate	ND	44	12	1	B5C0002	03/02/2015	03/02/15 19:29	
Ethyl Ether	ND	44	11	1	B5C0002	03/02/2015	03/02/15 19:29	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-121-1.5
Lab ID: 1500747-03

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:29	
Ethylbenzene	ND	4.4	0.98	1	B5C0002	03/02/2015	03/02/15 19:29	
Freon-113	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Hexachlorobutadiene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
Isopropylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
m,p-Xylene	ND	8.8	2.2	1	B5C0002	03/02/2015	03/02/15 19:29	
Methylene chloride	ND	4.4	4.4	1	B5C0002	03/02/2015	03/02/15 19:29	
MTBE	ND	4.4	0.79	1	B5C0002	03/02/2015	03/02/15 19:29	
n-Butylbenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
n-Propylbenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Naphthalene	ND	4.4	2.8	1	B5C0002	03/02/2015	03/02/15 19:29	
...ylene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
...c-Butylbenzene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Styrene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
tert-Amyl methyl ether	ND	4.4	0.90	1	B5C0002	03/02/2015	03/02/15 19:29	
tert-Butanol	ND	88	18	1	B5C0002	03/02/2015	03/02/15 19:29	
tert-Butylbenzene	ND	4.4	1.2	1	B5C0002	03/02/2015	03/02/15 19:29	
Tetrachloroethene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Toluene	ND	4.4	0.78	1	B5C0002	03/02/2015	03/02/15 19:29	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5C0002	03/02/2015	03/02/15 19:29	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5C0002	03/02/2015	03/02/15 19:29	
Trichloroethene	ND	4.4	1.1	1	B5C0002	03/02/2015	03/02/15 19:29	
Trichlorofluoromethane	ND	4.4	1.6	1	B5C0002	03/02/2015	03/02/15 19:29	
Vinyl acetate	ND	44	9.4	1	B5C0002	03/02/2015	03/02/15 19:29	
Vinyl chloride	ND	4.4	0.90	1	B5C0002	03/02/2015	03/02/15 19:29	
Surrogate: 1,2-Dichloroethane-d4	*126 %*		*20 - 189*		B5C0002	03/02/2015	*03/02/15 19:29*	
Surrogate: 4-Bromofluorobenzene	*91.5 %*		*20 - 173*		B5C0002	03/02/2015	*03/02/15 19:29*	
Surrogate: Dibromofluoromethane	*120 %*		*26 - 178*		B5C0002	03/02/2015	*03/02/15 19:29*	
Surrogate: Toluene-d8	*104 %*		*31 - 166*		B5C0002	03/02/2015	*03/02/15 19:29*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-140-0
Lab ID: 1500747-04

Title 22 Metals by ICP-AES EPA 6010B — Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:24	
Arsenic	**5.6**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:24	
Barium	**48**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:24	
Beryllium	**0.77**	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:23	J
Cadmium	**1.0**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:24	
Chromium	**14**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:24	
Cobalt	**5.3**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:24	
Copper	**19**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:24	
Lead	**36**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:24	
Molybdenum	**0.65**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:24	J
Nickel	**14**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:24	
Selenium	**1.6**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:24	
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:24	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:24	
Vanadium	**26**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:24	
Zinc	**63**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:24	

Gasoline Range Organics by EPA 8015B (Modified) — Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:27	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:27	
Surrogate: 4-Bromofluorobenzene	*110 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 20:27*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**3.3**	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 21:15	
C23-C32	**28**	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 21:15	
Surrogate: p-Terphenyl	*74.8 %*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 21:15*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
1,1,1-Trichloroethane	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
1,1,2,2-Tetrachloroethane	ND	5.1	2.0	1	B5C0002	03/02/2015	03/02/15 19:48	

Certificate of Analysis

tec

290 Conejo Ridge Avenue, Suite 200

Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23

Report To : Anne Perez/Kristy Edblad

Reported : 03/06/2015

Client Sample ID 1278-140-0

Lab ID: 1500747-04

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
1,1-Dichloroethane	ND	5.1	1.0	1	B5C0002	03/02/2015	03/02/15 19:48	
1,1-Dichloroethene	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
1,1-Dichloropropene	ND	5.1	1.6	1	B5C0002	03/02/2015	03/02/15 19:48	
1,2,3-Trichloropropane	ND	5.1	1.9	1	B5C0002	03/02/2015	03/02/15 19:48	
1,2,3-Trichlorobenzene	ND	5.1	2.8	1	B5C0002	03/02/2015	03/02/15 19:48	
1,2,4-Trichlorobenzene	ND	5.1	2.1	1	B5C0002	03/02/2015	03/02/15 19:48	
1,2,4-Trimethylbenzene	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5C0002	03/02/2015	03/02/15 19:48	
1,2-Dibromoethane	ND	5.1	1.5	1	B5C0002	03/02/2015	03/02/15 19:48	
1,2-Dichlorobenzene	ND	5.1	1.5	1	B5C0002	03/02/2015	03/02/15 19:48	
Dichloroethane	ND	5.1	0.89	1	B5C0002	03/02/2015	03/02/15 19:48	
Dichloropropane	ND	5.1	3.5	1	B5C0002	03/02/2015	03/02/15 19:48	
1,3,5-Trimethylbenzene	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
1,3-Dichlorobenzene	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
1,3-Dichloropropane	ND	5.1	1.1	1	B5C0002	03/02/2015	03/02/15 19:48	
1,4-Dichlorobenzene	ND	5.1	1.8	1	B5C0002	03/02/2015	03/02/15 19:48	
2,2-Dichloropropane	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
2-Chlorotoluene	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
4-Chlorotoluene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
4-Isopropyltoluene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
Benzene	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
Bromobenzene	ND	5.1	1.7	1	B5C0002	03/02/2015	03/02/15 19:48	
Bromochloromethane	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
Bromodichloromethane	ND	5.1	1.6	1	B5C0002	03/02/2015	03/02/15 19:48	
Bromoform	ND	5.1	1.5	1	B5C0002	03/02/2015	03/02/15 19:48	
Bromomethane	ND	5.1	2.7	1	B5C0002	03/02/2015	03/02/15 19:48	
Carbon disulfide	ND	5.1	2.4	1	B5C0002	03/02/2015	03/02/15 19:48	
Carbon tetrachloride	ND	5.1	1.5	1	B5C0002	03/02/2015	03/02/15 19:48	
Chlorobenzene	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
Chloroethane	ND	5.1	5.1	1	B5C0002	03/02/2015	03/02/15 19:48	
Chloroform	ND	5.1	1.5	1	B5C0002	03/02/2015	03/02/15 19:48	
Chloromethane	ND	5.1	0.76	1	B5C0002	03/02/2015	03/02/15 19:48	
cis-1,2-Dichloroethene	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
cis-1,3-Dichloropropene	ND	5.1	2.3	1	B5C0002	03/02/2015	03/02/15 19:48	
Di-isopropyl ether	ND	5.1	1.0	1	B5C0002	03/02/2015	03/02/15 19:48	
Dibromochloromethane	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
bromomethane	ND	5.1	2.0	1	B5C0002	03/02/2015	03/02/15 19:48	
lorodifluoromethane	ND	5.1	0.76	1	B5C0002	03/02/2015	03/02/15 19:48	
Ethyl Acetate	ND	51	14	1	B5C0002	03/02/2015	03/02/15 19:48	
Ethyl Ether	ND	51	12	1	B5C0002	03/02/2015	03/02/15 19:48	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-140-0
Lab ID: 1500747-04

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
Ethylbenzene	ND	5.1	1.1	1	B5C0002	03/02/2015	03/02/15 19:48	
Freon-113	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
Hexachlorobutadiene	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
Isopropylbenzene	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
m,p-Xylene	ND	10	2.5	1	B5C0002	03/02/2015	03/02/15 19:48	
Methylene chloride	ND	5.1	5.1	1	B5C0002	03/02/2015	03/02/15 19:48	
MTBE	ND	5.1	0.92	1	B5C0002	03/02/2015	03/02/15 19:48	
n-Butylbenzene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
n-Propylbenzene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
Naphthalene	ND	5.1	3.2	1	B5C0002	03/02/2015	03/02/15 19:48	
o-Xylene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
sec-Butylbenzene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
Styrene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
tert-Amyl methyl ether	ND	5.1	1.0	1	B5C0002	03/02/2015	03/02/15 19:48	
tert-Butanol	ND	100	20	1	B5C0002	03/02/2015	03/02/15 19:48	
tert-Butylbenzene	ND	5.1	1.4	1	B5C0002	03/02/2015	03/02/15 19:48	
Tetrachloroethene	ND	5.1	1.3	1	B5C0002	03/02/2015	03/02/15 19:48	
Toluene	ND	5.1	0.90	1	B5C0002	03/02/2015	03/02/15 19:48	
trans-1,2-Dichloroethene	ND	5.1	1.5	1	B5C0002	03/02/2015	03/02/15 19:48	
trans-1,3-Dichloropropene	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
Trichloroethene	ND	5.1	1.2	1	B5C0002	03/02/2015	03/02/15 19:48	
Trichlorofluoromethane	ND	5.1	1.8	1	B5C0002	03/02/2015	03/02/15 19:48	
Vinyl acetate	ND	51	11	1	B5C0002	03/02/2015	03/02/15 19:48	
Vinyl chloride	ND	5.1	1.0	1	B5C0002	03/02/2015	03/02/15 19:48	
Surrogate: 1,2-Dichloroethane-d4	*123 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 19:48*	
Surrogate: 4-Bromofluorobenzene	*92.4 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 19:48*	
Surrogate: Dibromofluoromethane	*119 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 19:48*	
Surrogate: Toluene-d8	*106 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 19:48*	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-140-1.5
Lab ID: 1500747-05

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:28	
Arsenic	4.7	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:28	
Barium	41	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:28	
Beryllium	0.60	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:27	J
Cadmium	0.77	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:28	J
Chromium	10	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:28	
Cobalt	7.0	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:28	
Copper	10	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:28	
Lead	82	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:28	
Molybdenum	0.24	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:28	J
...kel	26	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:28	
...nium	0.89	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:28	J
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:28	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:28	
Vanadium	20	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:28	
Zinc	46	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:28	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:43	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:43	
Surrogate: 4-Bromofluorobenzene	*111 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 20:43*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 16:14	
C23-C32	3.0	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 16:14	
Surrogate: p-Terphenyl	*74.4 %*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 16:14*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
...1-Trichloroethane	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
1,1,2,2-Tetrachloroethane	ND	6.0	2.3	1	B5C0002	03/02/2015	03/02/15 20:07	
1,1,2-Trichloroethane	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-140-1.5

Lab ID: 1500747-05

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	6.0	1.2	1	B5C0002	03/02/2015	03/02/15 20:07	
1,1-Dichloroethene	ND	6.0	1.4	1	B5C0002	03/02/2015	03/02/15 20:07	
1,1-Dichloropropene	ND	6.0	1.9	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2,3-Trichloropropane	ND	6.0	2.2	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2,3-Trichlorobenzene	ND	6.0	3.3	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2,4-Trichlorobenzene	ND	6.0	2.5	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2,4-Trimethylbenzene	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2-Dibromo-3-chloropropane	ND	12	2.6	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2-Dibromoethane	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2-Dichlorobenzene	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2-Dichloroethane	ND	6.0	1.1	1	B5C0002	03/02/2015	03/02/15 20:07	
1,2-Dichloropropane	ND	6.0	4.1	1	B5C0002	03/02/2015	03/02/15 20:07	
1,3,5-Trimethylbenzene	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
1,3-Dichlorobenzene	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
1,3-Dichloropropane	ND	6.0	1.3	1	B5C0002	03/02/2015	03/02/15 20:07	
1,4-Dichlorobenzene	ND	6.0	2.1	1	B5C0002	03/02/2015	03/02/15 20:07	
2,2-Dichloropropane	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	
2-Chlorotoluene	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
4-Chlorotoluene	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
4-Isopropyltoluene	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
Benzene	ND	6.0	1.4	1	B5C0002	03/02/2015	03/02/15 20:07	
Bromobenzene	ND	6.0	2.0	1	B5C0002	03/02/2015	03/02/15 20:07	
Bromochloromethane	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
Bromodichloromethane	ND	6.0	1.9	1	B5C0002	03/02/2015	03/02/15 20:07	
Bromoform	ND	6.0	1.8	1	B5C0002	03/02/2015	03/02/15 20:07	
Bromomethane	ND	6.0	3.2	1	B5C0002	03/02/2015	03/02/15 20:07	
Carbon disulfide	ND	6.0	2.8	1	B5C0002	03/02/2015	03/02/15 20:07	
Carbon tetrachloride	ND	6.0	1.8	1	B5C0002	03/02/2015	03/02/15 20:07	
Chlorobenzene	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	
Chloroethane	ND	6.0	6.0	1	B5C0002	03/02/2015	03/02/15 20:07	
Chloroform	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
Chloromethane	ND	6.0	0.90	1	B5C0002	03/02/2015	03/02/15 20:07	
cis-1,2-Dichloroethene	ND	6.0	1.4	1	B5C0002	03/02/2015	03/02/15 20:07	
cis-1,3-Dichloropropene	ND	6.0	2.8	1	B5C0002	03/02/2015	03/02/15 20:07	
Di-isopropyl ether	ND	6.0	1.2	1	B5C0002	03/02/2015	03/02/15 20:07	
Dibromochloromethane	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	
Dibromomethane	ND	6.0	2.4	1	B5C0002	03/02/2015	03/02/15 20:07	
Dichlorodifluoromethane	ND	6.0	0.89	1	B5C0002	03/02/2015	03/02/15 20:07	
Ethyl Acetate	ND	60	16	1	B5C0002	03/02/2015	03/02/15 20:07	
Ethyl Ether	ND	60	14	1	B5C0002	03/02/2015	03/02/15 20:07	
Ethyl tert-butyl ether	ND	6.0	1.4	1	B5C0002	03/02/2015	03/02/15 20:07	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-140-1.5
Lab ID: 1500747-05

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	6.0	1.4	1	B5C0002	03/02/2015	03/02/15 20:07	
Freon-113	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
Hexachlorobutadiene	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
Isopropylbenzene	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
m,p-Xylene	ND	12	3.0	1	B5C0002	03/02/2015	03/02/15 20:07	
Methylene chloride	ND	6.0	6.0	1	B5C0002	03/02/2015	03/02/15 20:07	
MTBE	ND	6.0	1.1	1	B5C0002	03/02/2015	03/02/15 20:07	
n-Butylbenzene	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
n-Propylbenzene	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	
Naphthalene	ND	6.0	3.8	1	B5C0002	03/02/2015	03/02/15 20:07	
o-Xylene	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	
...Butylbenzene	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
...ene	ND	6.0	1.6	1	B5C0002	03/02/2015	03/02/15 20:07	
tert-Amyl methyl ether	ND	6.0	1.2	1	B5C0002	03/02/2015	03/02/15 20:07	
tert-Butanol	ND	120	24	1	B5C0002	03/02/2015	03/02/15 20:07	
tert-Butylbenzene	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
Tetrachloroethene	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	
Toluene	ND	6.0	1.1	1	B5C0002	03/02/2015	03/02/15 20:07	
trans-1,2-Dichloroethene	ND	6.0	1.7	1	B5C0002	03/02/2015	03/02/15 20:07	
trans-1,3-Dichloropropene	ND	6.0	1.4	1	B5C0002	03/02/2015	03/02/15 20:07	
Trichloroethene	ND	6.0	1.5	1	B5C0002	03/02/2015	03/02/15 20:07	
Trichlorofluoromethane	ND	6.0	2.2	1	B5C0002	03/02/2015	03/02/15 20:07	
Vinyl acetate	ND	60	13	1	B5C0002	03/02/2015	03/02/15 20:07	
Vinyl chloride	ND	6.0	1.2	1	B5C0002	03/02/2015	03/02/15 20:07	
Surrogate: 1,2-Dichloroethane-d4	*131 %*	*20 - 189*			B5C0002	03/02/2015	*03/02/15 20:07*	
Surrogate: 4-Bromofluorobenzene	*95.5 %*	*20 - 173*			B5C0002	03/02/2015	*03/02/15 20:07*	
Surrogate: Dibromofluoromethane	*120 %*	*26 - 178*			B5C0002	03/02/2015	*03/02/15 20:07*	
Surrogate: Toluene-d8	*105 %*	*31 - 166*			B5C0002	03/02/2015	*03/02/15 20:07*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-141-0
Lab ID: 1500747-07

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.53**	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:31	J
Arsenic	**1.8**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:31	
Barium	**35**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:31	
Beryllium	**0.36**	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:30	J
Cadmium	**0.66**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:31	J
Chromium	**6.8**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:31	
Cobalt	**2.3**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:31	
Copper	**15**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:31	
Lead	**28**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:31	
Molybdenum	**1.5**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:31	
Nickel	**7.1**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:31	
Selenium	**0.62**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:31	J
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:31	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:31	
Vanadium	**17**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:31	
Zinc	**52**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:31	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:59	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 20:59	
Surrogate: 4-Bromofluorobenzene	*106 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 20:59*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	7.2	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 22:03	
C23-C32	59	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 22:03	
Surrogate: p-Terphenyl	*69.7 %*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 22:03*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	7.1	1.9	1	B5C0045	03/03/2015	03/03/15 10:48	
1,1,1-Trichloroethane	ND	7.1	1.9	1	B5C0045	03/03/2015	03/03/15 10:48	
1,1,2,2-Tetrachloroethane	ND	7.1	2.7	1	B5C0045	03/03/2015	03/03/15 10:48	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-141-0

Lab ID: 1500747-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
1,1-Dichloroethane	ND	7.1	1.4	1	B5C0045	03/03/2015	03/03/15 10:48	
1,1-Dichloroethene	ND	7.1	1.6	1	B5C0045	03/03/2015	03/03/15 10:48	
1,1-Dichloropropene	ND	7.1	2.2	1	B5C0045	03/03/2015	03/03/15 10:48	
1,2,3-Trichloropropane	ND	7.1	2.6	1	B5C0045	03/03/2015	03/03/15 10:48	
1,2,3-Trichlorobenzene	ND	7.1	3.8	1	B5C0045	03/03/2015	03/03/15 10:48	
1,2,4-Trichlorobenzene	ND	7.1	2.9	1	B5C0045	03/03/2015	03/03/15 10:48	
1,2,4-Trimethylbenzene	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
1,2-Dibromo-3-chloropropane	ND	14	3.0	1	B5C0045	03/03/2015	03/03/15 10:48	
1,2-Dibromoethane	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
1,2-Dichlorobenzene	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
...Dichloroethane	ND	7.1	1.2	1	B5C0045	03/03/2015	03/03/15 10:48	
...Dichloropropane	ND	7.1	4.8	1	B5C0045	03/03/2015	03/03/15 10:48	
1,3,5-Trimethylbenzene	ND	7.1	1.9	1	B5C0045	03/03/2015	03/03/15 10:48	
1,3-Dichlorobenzene	ND	7.1	1.9	1	B5C0045	03/03/2015	03/03/15 10:48	
1,3-Dichloropropane	ND	7.1	1.6	1	B5C0045	03/03/2015	03/03/15 10:48	
1,4-Dichlorobenzene	ND	7.1	2.5	1	B5C0045	03/03/2015	03/03/15 10:48	
2,2-Dichloropropane	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
2-Chlorotoluene	ND	7.1	1.9	1	B5C0045	03/03/2015	03/03/15 10:48	
4-Chlorotoluene	ND	7.1	1.8	1	B5C0045	03/03/2015	03/03/15 10:48	
4-Isopropyltoluene	ND	7.1	1.8	1	B5C0045	03/03/2015	03/03/15 10:48	
Benzene	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
Bromobenzene	ND	7.1	2.3	1	B5C0045	03/03/2015	03/03/15 10:48	
Bromochloromethane	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
Bromodichloromethane	ND	7.1	2.2	1	B5C0045	03/03/2015	03/03/15 10:48	
Bromoform	ND	7.1	2.1	1	B5C0045	03/03/2015	03/03/15 10:48	
Bromomethane	ND	7.1	3.7	1	B5C0045	03/03/2015	03/03/15 10:48	
Carbon disulfide	ND	7.1	3.3	1	B5C0045	03/03/2015	03/03/15 10:48	
Carbon tetrachloride	ND	7.1	2.1	1	B5C0045	03/03/2015	03/03/15 10:48	
Chlorobenzene	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
Chloroethane	ND	7.1	7.0	1	B5C0045	03/03/2015	03/03/15 10:48	
Chloroform	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
Chloromethane	ND	7.1	1.1	1	B5C0045	03/03/2015	03/03/15 10:48	
cis-1,2-Dichloroethene	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
cis-1,3-Dichloropropene	ND	7.1	3.2	1	B5C0045	03/03/2015	03/03/15 10:48	
Di-isopropyl ether	ND	7.1	1.4	1	B5C0045	03/03/2015	03/03/15 10:48	
Dibromochloromethane	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
...bromomethane	ND	7.1	2.8	1	B5C0045	03/03/2015	03/03/15 10:48	
...lorodifluoromethane	ND	7.1	1.0	1	B5C0045	03/03/2015	03/03/15 10:48	
Ethyl Acetate	ND	71	19	1	B5C0045	03/03/2015	03/03/15 10:48	
Ethyl Ether	ND	71	17	1	B5C0045	03/03/2015	03/03/15 10:48	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-141-0
Lab ID: 1500747-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	7.1	1.6	1	B5C0045	03/03/2015	03/03/15 10:48	
Ethylbenzene	ND	7.1	1.6	1	B5C0045	03/03/2015	03/03/15 10:48	
Freon-113	ND	7.1	1.8	1	B5C0045	03/03/2015	03/03/15 10:48	
Hexachlorobutadiene	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
Isopropylbenzene	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
m,p-Xylene	ND	14	3.5	1	B5C0045	03/03/2015	03/03/15 10:48	
Methylene chloride	ND	7.1	7.1	1	B5C0045	03/03/2015	03/03/15 10:48	
MTBE	ND	7.1	1.3	1	B5C0045	03/03/2015	03/03/15 10:48	
n-Butylbenzene	ND	7.1	1.8	1	B5C0045	03/03/2015	03/03/15 10:48	
n-Propylbenzene	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
Naphthalene	ND	7.1	4.5	1	B5C0045	03/03/2015	03/03/15 10:48	
o-Xylene	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
sec-Butylbenzene	ND	7.1	1.8	1	B5C0045	03/03/2015	03/03/15 10:48	
Styrene	ND	7.1	1.8	1	B5C0045	03/03/2015	03/03/15 10:48	
tert-Amyl methyl ether	ND	7.1	1.4	1	B5C0045	03/03/2015	03/03/15 10:48	
tert-Butanol	ND	140	28	1	B5C0045	03/03/2015	03/03/15 10:48	
tert-Butylbenzene	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
Tetrachloroethene	ND	7.1	1.8	1	B5C0045	03/03/2015	03/03/15 10:48	
Toluene	ND	7.1	1.3	1	B5C0045	03/03/2015	03/03/15 10:48	
trans-1,2-Dichloroethene	ND	7.1	2.0	1	B5C0045	03/03/2015	03/03/15 10:48	
trans-1,3-Dichloropropene	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
Trichloroethene	ND	7.1	1.7	1	B5C0045	03/03/2015	03/03/15 10:48	
Trichlorofluoromethane	ND	7.1	2.5	1	B5C0045	03/03/2015	03/03/15 10:48	
Vinyl acetate	ND	71	15	1	B5C0045	03/03/2015	03/03/15 10:48	
Vinyl chloride	ND	7.1	1.4	1	B5C0045	03/03/2015	03/03/15 10:48	
Surrogate: 1,2-Dichloroethane-d4	*124 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 10:48*	
Surrogate: 4-Bromofluorobenzene	*90.0 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 10:48*	
Surrogate: Dibromofluoromethane	*115 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 10:48*	
Surrogate: Toluene-d8	*105 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 10:48*	

Certificate of Analysis

...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-141-1.5
Lab ID: 1500747-08

Title 22 Metals by ICP-AES EPA 6010B — Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.66**	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:35	J
Arsenic	**5.5**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:35	
Barium	**59**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:35	
Beryllium	**0.61**	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:34	J
Cadmium	**3.1**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:35	
Chromium	**20**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:35	
Cobalt	**4.2**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:35	
Copper	**25**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:35	
Lead	**100**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:35	
Molybdenum	**6.6**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:35	
...ckel	**29**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:35	
...nium	**2.7**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:35	
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:35	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:35	
Vanadium	**51**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:35	
Zinc	**83**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:35	

Gasoline Range Organics by EPA 8015B (Modified) — Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 21:15	
C4-C8	ND	1.0	0.20	1	B5C0074	02/25/2015	03/03/15 21:15	
Surrogate: 4-Bromofluorobenzene	*106 %*	*37 - 153*			B5C0074	02/25/2015	*03/03/15 21:15*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**6.0**	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 21:31	
C23-C32	**39**	1.0	1.0	1	B5C0070	03/03/2015	03/03/15 21:31	
Surrogate: p-Terphenyl	*77.3 %*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 21:31*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
...1-Trichloroethane	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
1,1,2,2-Tetrachloroethane	ND	5.5	2.1	1	B5C0045	03/03/2015	03/03/15 11:07	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-141-1.5

Lab ID: 1500747-08

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
1,1-Dichloroethane	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:07	
1,1-Dichloroethene	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 11:07	
1,1-Dichloropropene	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2,3-Trichloropropane	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2,3-Trichlorobenzene	ND	5.5	3.0	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2,4-Trichlorobenzene	ND	5.5	2.2	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2,4-Trimethylbenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2-Dibromoethane	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2-Dichlorobenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2-Dichloroethane	ND	5.5	0.96	1	B5C0045	03/03/2015	03/03/15 11:07	
1,2-Dichloropropane	ND	5.5	3.7	1	B5C0045	03/03/2015	03/03/15 11:07	
1,3,5-Trimethylbenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:07	
1,3-Dichlorobenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:07	
1,3-Dichloropropane	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 11:07	
1,4-Dichlorobenzene	ND	5.5	1.9	1	B5C0045	03/03/2015	03/03/15 11:07	
2,2-Dichloropropane	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
2-Chlorotoluene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:07	
4-Chlorotoluene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
4-Isopropyltoluene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
Benzene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Bromobenzene	ND	5.5	1.8	1	B5C0045	03/03/2015	03/03/15 11:07	
Bromochloromethane	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:07	
Bromodichloromethane	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 11:07	
Bromoform	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
Bromomethane	ND	5.5	2.9	1	B5C0045	03/03/2015	03/03/15 11:07	
Carbon disulfide	**2.9**	5.5	2.5	1	B5C0045	03/03/2015	03/03/15 11:07	J
Carbon tetrachloride	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
Chlorobenzene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Chloroethane	ND	5.5	5.4	1	B5C0045	03/03/2015	03/03/15 11:07	
Chloroform	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
Chloromethane	ND	5.5	0.81	1	B5C0045	03/03/2015	03/03/15 11:07	
cis-1,2-Dichloroethene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
cis-1,3-Dichloropropene	ND	5.5	2.5	1	B5C0045	03/03/2015	03/03/15 11:07	
Di-isopropyl ether	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:07	
Dibromochloromethane	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Dibromomethane	ND	5.5	2.2	1	B5C0045	03/03/2015	03/03/15 11:07	
Dichlorodifluoromethane	ND	5.5	0.81	1	B5C0045	03/03/2015	03/03/15 11:07	
Ethyl Acetate	ND	55	14	1	B5C0045	03/03/2015	03/03/15 11:07	
Ethyl Ether	ND	55	13	1	B5C0045	03/03/2015	03/03/15 11:07	

Certificate of Analysis

,tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-141-1.5
Lab ID: 1500747-08

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Ethylbenzene	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 11:07	
Freon-113	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
Hexachlorobutadiene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:07	
Isopropylbenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
m,p-Xylene	ND	11	2.7	1	B5C0045	03/03/2015	03/03/15 11:07	
Methylene chloride	ND	5.5	5.5	1	B5C0045	03/03/2015	03/03/15 11:07	
MTBE	ND	5.5	0.99	1	B5C0045	03/03/2015	03/03/15 11:07	
n-Butylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
n-Propylbenzene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Naphthalene	ND	5.5	3.5	1	B5C0045	03/03/2015	03/03/15 11:07	
ylene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Butylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
Styrene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
tert-Amyl methyl ether	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:07	
tert-Butanol	ND	110	22	1	B5C0045	03/03/2015	03/03/15 11:07	
tert-Butylbenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:07	
Tetrachloroethene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:07	
Toluene	ND	5.5	0.97	1	B5C0045	03/03/2015	03/03/15 11:07	
trans-1,2-Dichloroethene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:07	
trans-1,3-Dichloropropene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Trichloroethene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:07	
Trichlorofluoromethane	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 11:07	
Vinyl acetate	ND	55	12	1	B5C0045	03/03/2015	03/03/15 11:07	
Vinyl chloride	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:07	
Surrogate: 1,2-Dichloroethane-d4	*137 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 11:07*	
Surrogate: 4-Bromofluorobenzene	*96.3 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 11:07*	
Surrogate: Dibromofluoromethane	*126 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 11:07*	
Surrogate: Toluene-d8	*105 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 11:07*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-142-0
Lab ID: 1500747-10

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**2.1**	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:46	
Arsenic	**6.2**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:46	
Barium	**99**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:45	
Beryllium	1.1	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:44	
Cadmium	**0.79**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:46	J
Chromium	**18**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:45	
Cobalt	**5.9**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:46	
Copper	**20**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:45	
Lead	**120**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:45	
Molybdenum	**0.95**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:45	J
Nickel	**16**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:46	
Selenium	**1.2**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:46	
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:45	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:46	
Vanadium	**40**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:45	
Zinc	**55**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:45	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/03/2015	03/03/15 23:52	
C4-C8	ND	1.0	0.20	1	B5C0085	03/03/2015	03/03/15 23:52	
Surrogate: 4-Bromofluorobenzene	*110 %*	*37 - 153*			B5C0085	03/03/2015	*03/03/15 23:52*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**100**	20	20	10	B5C0070	03/03/2015	03/03/15 23:23	
C23-C32	**1200**	20	20	10	B5C0070	03/03/2015	03/03/15 23:23	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0070	03/03/2015	*03/03/15 23:23*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
1,1,1-Trichloroethane	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:26	
1,1,2,2-Tetrachloroethane	ND	5.5	2.1	1	B5C0045	03/03/2015	03/03/15 11:26	

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-142-0

Lab ID: 1500747-10

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
1,1-Dichloroethane	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:26	
1,1-Dichloroethene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
1,1-Dichloropropene	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 11:26	
1,2,3-Trichloropropane	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 11:26	
1,2,3-Trichlorobenzene	ND	5.5	3.0	1	B5C0045	03/03/2015	03/03/15 11:26	
1,2,4-Trichlorobenzene	ND	5.5	2.3	1	B5C0045	03/03/2015	03/03/15 11:26	
1,2,4-Trimethylbenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5C0045	03/03/2015	03/03/15 11:26	
1,2-Dibromoethane	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
1,2-Dichlorobenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
..Dichloroethane	ND	5.5	0.96	1	B5C0045	03/03/2015	03/03/15 11:26	
..Dichloropropane	ND	5.5	3.8	1	B5C0045	03/03/2015	03/03/15 11:26	
1,3,5-Trimethylbenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:26	
1,3-Dichlorobenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:26	
1,3-Dichloropropane	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 11:26	
1,4-Dichlorobenzene	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 11:26	
2,2-Dichloropropane	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
2-Chlorotoluene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:26	
4-Chlorotoluene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
4-Isopropyltoluene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
Benzene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
Bromobenzene	ND	5.5	1.8	1	B5C0045	03/03/2015	03/03/15 11:26	
Bromochloromethane	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
Bromodichloromethane	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 11:26	
Bromoform	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
Bromomethane	ND	5.5	2.9	1	B5C0045	03/03/2015	03/03/15 11:26	
Carbon disulfide	ND	5.5	2.6	1	B5C0045	03/03/2015	03/03/15 11:26	
Carbon tetrachloride	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 11:26	
Chlorobenzene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
Chloroethane	ND	5.5	5.5	1	B5C0045	03/03/2015	03/03/15 11:26	
Chloroform	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
Chloromethane	ND	5.5	0.82	1	B5C0045	03/03/2015	03/03/15 11:26	
cis-1,2-Dichloroethene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
cis-1,3-Dichloropropene	ND	5.5	2.5	1	B5C0045	03/03/2015	03/03/15 11:26	
Di-isopropyl ether	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:26	
Dibromochloromethane	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
..romomethane	ND	5.5	2.2	1	B5C0045	03/03/2015	03/03/15 11:26	
..lorodifluoromethane	ND	5.5	0.82	1	B5C0045	03/03/2015	03/03/15 11:26	
Ethyl Acetate	ND	55	15	1	B5C0045	03/03/2015	03/03/15 11:26	
Ethyl Ether	ND	55	13	1	B5C0045	03/03/2015	03/03/15 11:26	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-142-0
Lab ID: 1500747-10

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
Ethylbenzene	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 11:26	
Freon-113	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
Hexachlorobutadiene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:26	
Isopropylbenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
m,p-Xylene	ND	11	2.8	1	B5C0045	03/03/2015	03/03/15 11:26	
Methylene chloride	ND	5.5	5.5	1	B5C0045	03/03/2015	03/03/15 11:26	
MTBE	ND	5.5	1.0	1	B5C0045	03/03/2015	03/03/15 11:26	
n-Butylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
n-Propylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
Naphthalene	ND	5.5	3.5	1	B5C0045	03/03/2015	03/03/15 11:26	
o-Xylene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
sec-Butylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
Styrene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
tert-Amyl methyl ether	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:26	
tert-Butanol	ND	110	22	1	B5C0045	03/03/2015	03/03/15 11:26	
tert-Butylbenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 11:26	
Tetrachloroethene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 11:26	
Toluene	ND	5.5	0.98	1	B5C0045	03/03/2015	03/03/15 11:26	
trans-1,2-Dichloroethene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 11:26	
trans-1,3-Dichloropropene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
Trichloroethene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 11:26	
Trichlorofluoromethane	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 11:26	
Vinyl acetate	ND	55	12	1	B5C0045	03/03/2015	03/03/15 11:26	
Vinyl chloride	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 11:26	
Surrogate: 1,2-Dichloroethane-d4	*134 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 11:26*	
Surrogate: 4-Bromofluorobenzene	*88.4 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 11:26*	
Surrogate: Dibromofluoromethane	*117 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 11:26*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 11:26*	

Certificate of Analysis

...fec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-142-1.5
Lab ID: 1500747-11

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.1**	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:49	J
Arsenic	**5.5**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:49	
Barium	**73**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:49	
Beryllium	**0.78**	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:48	J
Cadmium	**1.0**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:49	J
Chromium	**17**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:49	
Cobalt	**4.5**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:49	
Copper	**24**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:49	
Lead	**40**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:49	
Molybdenum	**1.9**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:49	
Nickel	**16**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:49	
...nium	**0.86**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:49	J
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:49	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:49	
Vanadium	**36**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:49	
Zinc	**52**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:49	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:08	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:08	
Surrogate: 4-Bromofluorobenzene	*105 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 00:08*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**34**	10	10	5	B5C0081	03/03/2015	03/04/15 05:08	
C23-C32	**410**	10	10	5	B5C0081	03/03/2015	03/04/15 05:08	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 05:08*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
...,1-Trichloroethane	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
1,1,2,2-Tetrachloroethane	ND	4.7	1.8	1	B5C0045	03/03/2015	03/03/15 11:44	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-142-1.5

Lab ID: 1500747-11

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
1,1-Dichloroethane	ND	4.7	0.91	1	B5C0045	03/03/2015	03/03/15 11:44	
1,1-Dichloroethene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
1,1-Dichloropropene	ND	4.7	1.4	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2,3-Trichloropropane	ND	4.7	1.7	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2,3-Trichlorobenzene	ND	4.7	2.5	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2,4-Trichlorobenzene	ND	4.7	1.9	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2,4-Trimethylbenzene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2-Dibromo-3-chloropropane	ND	9.3	2.0	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2-Dibromoethane	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2-Dichlorobenzene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2-Dichloroethane	ND	4.7	0.81	1	B5C0045	03/03/2015	03/03/15 11:44	
1,2-Dichloropropane	ND	4.7	3.2	1	B5C0045	03/03/2015	03/03/15 11:44	
1,3,5-Trimethylbenzene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
1,3-Dichlorobenzene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
1,3-Dichloropropane	ND	4.7	1.0	1	B5C0045	03/03/2015	03/03/15 11:44	
1,4-Dichlorobenzene	ND	4.7	1.7	1	B5C0045	03/03/2015	03/03/15 11:44	
2,2-Dichloropropane	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
2-Chlorotoluene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
4-Chlorotoluene	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
4-Isopropyltoluene	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
Benzene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Bromobenzene	ND	4.7	1.5	1	B5C0045	03/03/2015	03/03/15 11:44	
Bromochloromethane	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
Bromodichloromethane	ND	4.7	1.5	1	B5C0045	03/03/2015	03/03/15 11:44	
Bromoform	ND	4.7	1.4	1	B5C0045	03/03/2015	03/03/15 11:44	
Bromomethane	ND	4.7	2.4	1	B5C0045	03/03/2015	03/03/15 11:44	
Carbon disulfide	ND	4.7	2.2	1	B5C0045	03/03/2015	03/03/15 11:44	
Carbon tetrachloride	ND	4.7	1.4	1	B5C0045	03/03/2015	03/03/15 11:44	
Chlorobenzene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Chloroethane	ND	4.7	4.6	1	B5C0045	03/03/2015	03/03/15 11:44	
Chloroform	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
Chloromethane	ND	4.7	0.69	1	B5C0045	03/03/2015	03/03/15 11:44	
cis-1,2-Dichloroethene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
cis-1,3-Dichloropropene	ND	4.7	2.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Di-isopropyl ether	ND	4.7	0.94	1	B5C0045	03/03/2015	03/03/15 11:44	
Dibromochloromethane	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Dibromomethane	ND	4.7	1.8	1	B5C0045	03/03/2015	03/03/15 11:44	
Dichlorodifluoromethane	ND	4.7	0.69	1	B5C0045	03/03/2015	03/03/15 11:44	
Ethyl Acetate	ND	47	12	1	B5C0045	03/03/2015	03/03/15 11:44	
Ethyl Ether	ND	47	11	1	B5C0045	03/03/2015	03/03/15 11:44	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-142-1.5
Lab ID: 1500747-11

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Ethylbenzene	ND	4.7	1.0	1	B5C0045	03/03/2015	03/03/15 11:44	
Freon-113	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
Hexachlorobutadiene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
Isopropylbenzene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
m,p-Xylene	ND	9.3	2.3	1	B5C0045	03/03/2015	03/03/15 11:44	
Methylene chloride	ND	4.7	4.7	1	B5C0045	03/03/2015	03/03/15 11:44	
MTBE	ND	4.7	0.84	1	B5C0045	03/03/2015	03/03/15 11:44	
n-Butylbenzene	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
n-Propylbenzene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Naphthalene	ND	4.7	3.0	1	B5C0045	03/03/2015	03/03/15 11:44	
...vlene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
...-Butylbenzene	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
Styrene	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
tert-Amyl methyl ether	ND	4.7	0.95	1	B5C0045	03/03/2015	03/03/15 11:44	
tert-Butanol	ND	93	19	1	B5C0045	03/03/2015	03/03/15 11:44	
tert-Butylbenzene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
Tetrachloroethene	ND	4.7	1.2	1	B5C0045	03/03/2015	03/03/15 11:44	
Toluene	ND	4.7	0.82	1	B5C0045	03/03/2015	03/03/15 11:44	
trans-1,2-Dichloroethene	ND	4.7	1.3	1	B5C0045	03/03/2015	03/03/15 11:44	
trans-1,3-Dichloropropene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Trichloroethene	ND	4.7	1.1	1	B5C0045	03/03/2015	03/03/15 11:44	
Trichlorofluoromethane	ND	4.7	1.7	1	B5C0045	03/03/2015	03/03/15 11:44	
Vinyl acetate	ND	47	10	1	B5C0045	03/03/2015	03/03/15 11:44	
Vinyl chloride	ND	4.7	0.95	1	B5C0045	03/03/2015	03/03/15 11:44	
Surrogate: 1,2-Dichloroethane-d4	*125 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 11:44*	
Surrogate: 4-Bromofluorobenzene	*86.8 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 11:44*	
Surrogate: Dibromofluoromethane	*120 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 11:44*	
Surrogate: Toluene-d8	*105 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 11:44*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-143-0
Lab ID: 1500747-13

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.3**	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:52	J
Arsenic	**7.1**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:52	
Barium	**88**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:52	
Beryllium	**0.91**	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:51	J
Cadmium	**0.74**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:52	J
Chromium	**21**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:52	
Cobalt	**7.5**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:52	
Copper	**21**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:52	
Lead	**13**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:52	
Molybdenum	**0.58**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:52	J
Nickel	**19**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:52	
Selenium	**0.81**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:52	J
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:52	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:52	
Vanadium	**44**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:52	
Zinc	**46**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:52	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:24	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:24	
Surrogate: 4-Bromofluorobenzene	*114 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 00:24*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**28**	10	10	5	B5C0081	03/03/2015	03/04/15 05:40	
C23-C32	**340**	10	10	5	B5C0081	03/03/2015	03/04/15 05:40	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 05:40*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
1,1,1-Trichloroethane	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
1,1,2,2-Tetrachloroethane	ND	5.2	2.0	1	B5C0045	03/03/2015	03/03/15 12:03	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-143-0

Lab ID: 1500747-13

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
1,1-Dichloroethane	ND	5.2	1.0	1	B5C0045	03/03/2015	03/03/15 12:03	
1,1-Dichloroethene	ND	5.2	1.2	1	B5C0045	03/03/2015	03/03/15 12:03	
1,1-Dichloropropene	ND	5.2	1.6	1	B5C0045	03/03/2015	03/03/15 12:03	
1,2,3-Trichloropropane	ND	5.2	1.9	1	B5C0045	03/03/2015	03/03/15 12:03	
1,2,3-Trichlorobenzene	ND	5.2	2.8	1	B5C0045	03/03/2015	03/03/15 12:03	
1,2,4-Trichlorobenzene	ND	5.2	2.1	1	B5C0045	03/03/2015	03/03/15 12:03	
1,2,4-Trimethylbenzene	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5C0045	03/03/2015	03/03/15 12:03	
1,2-Dibromoethane	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
1,2-Dichlorobenzene	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
Dichloroethane	ND	5.2	0.91	1	B5C0045	03/03/2015	03/03/15 12:03	
-Dichloropropane	ND	5.2	3.5	1	B5C0045	03/03/2015	03/03/15 12:03	
1,3,5-Trimethylbenzene	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
1,3-Dichlorobenzene	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
1,3-Dichloropropane	ND	5.2	1.1	1	B5C0045	03/03/2015	03/03/15 12:03	
1,4-Dichlorobenzene	ND	5.2	1.9	1	B5C0045	03/03/2015	03/03/15 12:03	
2,2-Dichloropropane	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
2-Chlorotoluene	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
4-Chlorotoluene	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
4-Isopropyltoluene	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
Benzene	ND	5.2	1.2	1	B5C0045	03/03/2015	03/03/15 12:03	
Bromobenzene	ND	5.2	1.7	1	B5C0045	03/03/2015	03/03/15 12:03	
Bromochloromethane	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
Bromodichloromethane	ND	5.2	1.6	1	B5C0045	03/03/2015	03/03/15 12:03	
Bromoform	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
Bromomethane	ND	5.2	2.7	1	B5C0045	03/03/2015	03/03/15 12:03	
Carbon disulfide	3.2	5.2	2.4	1	B5C0045	03/03/2015	03/03/15 12:03	J
Carbon tetrachloride	ND	5.2	1.6	1	B5C0045	03/03/2015	03/03/15 12:03	
Chlorobenzene	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
Chloroethane	ND	5.2	5.2	1	B5C0045	03/03/2015	03/03/15 12:03	
Chloroform	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
Chloromethane	ND	5.2	0.77	1	B5C0045	03/03/2015	03/03/15 12:03	
cis-1,2-Dichloroethene	ND	5.2	1.2	1	B5C0045	03/03/2015	03/03/15 12:03	
cis-1,3-Dichloropropene	ND	5.2	2.4	1	B5C0045	03/03/2015	03/03/15 12:03	
Di-isopropyl ether	ND	5.2	1.1	1	B5C0045	03/03/2015	03/03/15 12:03	
Dibromochloromethane	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
romomethane	ND	5.2	2.1	1	B5C0045	03/03/2015	03/03/15 12:03	
dichlorodifluoromethane	ND	5.2	0.77	1	B5C0045	03/03/2015	03/03/15 12:03	
Ethyl Acetate	ND	52	14	1	B5C0045	03/03/2015	03/03/15 12:03	
Ethyl Ether	ND	52	12	1	B5C0045	03/03/2015	03/03/15 12:03	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-143-0

Lab ID: 1500747-13

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.2	1.2	1	B5C0045	03/03/2015	03/03/15 12:03	
Ethylbenzene	ND	5.2	1.2	1	B5C0045	03/03/2015	03/03/15 12:03	
Freon-113	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
Hexachlorobutadiene	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
Isopropylbenzene	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
m,p-Xylene	ND	10	2.6	1	B5C0045	03/03/2015	03/03/15 12:03	
Methylene chloride	ND	5.2	5.2	1	B5C0045	03/03/2015	03/03/15 12:03	
MTBE	ND	5.2	0.94	1	B5C0045	03/03/2015	03/03/15 12:03	
n-Butylbenzene	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
n-Propylbenzene	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
Naphthalene	ND	5.2	3.3	1	B5C0045	03/03/2015	03/03/15 12:03	
o-Xylene	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
sec-Butylbenzene	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
Styrene	ND	5.2	1.4	1	B5C0045	03/03/2015	03/03/15 12:03	
tert-Amyl methyl ether	ND	5.2	1.1	1	B5C0045	03/03/2015	03/03/15 12:03	
tert-Butanol	ND	100	21	1	B5C0045	03/03/2015	03/03/15 12:03	
tert-Butylbenzene	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
Tetrachloroethene	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
Toluene	ND	5.2	0.92	1	B5C0045	03/03/2015	03/03/15 12:03	
trans-1,2-Dichloroethene	ND	5.2	1.5	1	B5C0045	03/03/2015	03/03/15 12:03	
trans-1,3-Dichloropropene	ND	5.2	1.2	1	B5C0045	03/03/2015	03/03/15 12:03	
Trichloroethene	ND	5.2	1.3	1	B5C0045	03/03/2015	03/03/15 12:03	
Trichlorofluoromethane	ND	5.2	1.9	1	B5C0045	03/03/2015	03/03/15 12:03	
Vinyl acetate	ND	52	11	1	B5C0045	03/03/2015	03/03/15 12:03	
Vinyl chloride	ND	5.2	1.1	1	B5C0045	03/03/2015	03/03/15 12:03	
Surrogate: 1,2-Dichloroethane-d4	*133 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 12:03*	
Surrogate: 4-Bromofluorobenzene	*89.0 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 12:03*	
Surrogate: Dibromofluoromethane	*123 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 12:03*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 12:03*	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-144-0
Lab ID: 1500747-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.94**	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:55	J
Arsenic	**8.9**	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:55	
Barium	**91**	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:55	
Beryllium	**0.95**	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:55	J
Cadmium	**1.3**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:55	
Chromium	**31**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:55	
Cobalt	**6.6**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:55	
Copper	**29**	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:55	
Lead	**31**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:55	
Molybdenum	**2.5**	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:55	
Nickel	**27**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:55	
nium	**1.3**	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:55	
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:55	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:55	
Vanadium	**54**	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:55	
Zinc	**70**	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:55	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:40	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:40	
Surrogate: 4-Bromofluorobenzene	*113 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 00:40*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**21**	10	10	5	B5C0081	03/03/2015	03/04/15 05:24	
C23-C32	210	10	10	5	B5C0081	03/03/2015	03/04/15 05:24	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 05:24*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
1-Trichloroethane	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
1,1,2,2-Tetrachloroethane	ND	4.9	1.9	1	B5C0045	03/03/2015	03/03/15 12:22	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-144-0
Lab ID: 1500747-14

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
1,1-Dichloroethane	ND	4.9	0.96	1	B5C0045	03/03/2015	03/03/15 12:22	
1,1-Dichloroethene	ND	4.9	1.1	1	B5C0045	03/03/2015	03/03/15 12:22	
1,1-Dichloropropene	ND	4.9	1.5	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2,3-Trichloropropane	ND	4.9	1.8	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2,3-Trichlorobenzene	ND	4.9	2.6	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2,4-Trichlorobenzene	ND	4.9	2.0	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2,4-Trimethylbenzene	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2-Dibromo-3-chloropropane	ND	9.8	2.1	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2-Dibromoethane	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2-Dichlorobenzene	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2-Dichloroethane	ND	4.9	0.85	1	B5C0045	03/03/2015	03/03/15 12:22	
1,2-Dichloropropane	ND	4.9	3.3	1	B5C0045	03/03/2015	03/03/15 12:22	
1,3,5-Trimethylbenzene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
1,3-Dichlorobenzene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
1,3-Dichloropropane	ND	4.9	1.1	1	B5C0045	03/03/2015	03/03/15 12:22	
1,4-Dichlorobenzene	ND	4.9	1.7	1	B5C0045	03/03/2015	03/03/15 12:22	
2,2-Dichloropropane	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
2-Chlorotoluene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
4-Chlorotoluene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
4-Isopropyltoluene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
Benzene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Bromobenzene	ND	4.9	1.6	1	B5C0045	03/03/2015	03/03/15 12:22	
Bromochloromethane	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
Bromodichloromethane	ND	4.9	1.5	1	B5C0045	03/03/2015	03/03/15 12:22	
Bromoform	ND	4.9	1.5	1	B5C0045	03/03/2015	03/03/15 12:22	
Bromomethane	ND	4.9	2.6	1	B5C0045	03/03/2015	03/03/15 12:22	
Carbon disulfide	9.4	4.9	2.3	1	B5C0045	03/03/2015	03/03/15 12:22	
Carbon tetrachloride	ND	4.9	1.5	1	B5C0045	03/03/2015	03/03/15 12:22	
Chlorobenzene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Chloroethane	ND	4.9	4.8	1	B5C0045	03/03/2015	03/03/15 12:22	
Chloroform	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
Chloromethane	ND	4.9	0.73	1	B5C0045	03/03/2015	03/03/15 12:22	
cis-1,2-Dichloroethene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
cis-1,3-Dichloropropene	ND	4.9	2.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Di-isopropyl ether	ND	4.9	0.99	1	B5C0045	03/03/2015	03/03/15 12:22	
Dibromochloromethane	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Dibromomethane	ND	4.9	1.9	1	B5C0045	03/03/2015	03/03/15 12:22	
Dichlorodifluoromethane	ND	4.9	0.72	1	B5C0045	03/03/2015	03/03/15 12:22	
Ethyl Acetate	ND	49	13	1	B5C0045	03/03/2015	03/03/15 12:22	
Ethyl Ether	ND	49	12	1	B5C0045	03/03/2015	03/03/15 12:22	

Certificate of Analysis

...ltec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-144-0

Lab ID: 1500747-14

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.9	1.1	1	B5C0045	03/03/2015	03/03/15 12:22	
Ethylbenzene	ND	4.9	1.1	1	B5C0045	03/03/2015	03/03/15 12:22	
Freon-113	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
Hexachlorobutadiene	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
Isopropylbenzene	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
m,p-Xylene	ND	9.8	2.4	1	B5C0045	03/03/2015	03/03/15 12:22	
Methylene chloride	ND	4.9	4.9	1	B5C0045	03/03/2015	03/03/15 12:22	
MTBE	ND	4.9	0.88	1	B5C0045	03/03/2015	03/03/15 12:22	
n-Butylbenzene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
n-Propylbenzene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Naphthalene	ND	4.9	3.1	1	B5C0045	03/03/2015	03/03/15 12:22	
...ylene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
...-Butylbenzene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
Styrene	ND	4.9	1.3	1	B5C0045	03/03/2015	03/03/15 12:22	
tert-Amyl methyl ether	ND	4.9	1.0	1	B5C0045	03/03/2015	03/03/15 12:22	
tert-Butanol	ND	98	20	1	B5C0045	03/03/2015	03/03/15 12:22	
tert-Butylbenzene	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
Tetrachloroethene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Toluene	ND	4.9	0.86	1	B5C0045	03/03/2015	03/03/15 12:22	
trans-1,2-Dichloroethene	ND	4.9	1.4	1	B5C0045	03/03/2015	03/03/15 12:22	
trans-1,3-Dichloropropene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Trichloroethene	ND	4.9	1.2	1	B5C0045	03/03/2015	03/03/15 12:22	
Trichlorofluoromethane	ND	4.9	1.8	1	B5C0045	03/03/2015	03/03/15 12:22	
Vinyl acetate	ND	49	10	1	B5C0045	03/03/2015	03/03/15 12:22	
Vinyl chloride	ND	4.9	1.0	1	B5C0045	03/03/2015	03/03/15 12:22	
Surrogate: 1,2-Dichloroethane-d4	*132 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 12:22*	
Surrogate: 4-Bromofluorobenzene	*88.5 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 12:22*	
Surrogate: Dibromofluoromethane	*126 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 12:22*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 12:22*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-144-1.5
Lab ID: 1500747-15

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0022	03/03/2015	03/04/15 18:59	
Arsenic	7.6	1.0	0.19	1	B5C0022	03/03/2015	03/04/15 18:59	
Barium	43	1.0	0.14	1	B5C0022	03/03/2015	03/04/15 18:59	
Beryllium	0.74	1.0	0.04	1	B5C0022	03/03/2015	03/04/15 18:58	J
Cadmium	0.81	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:59	J
Chromium	28	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:59	
Cobalt	8.7	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:59	
Copper	32	2.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:59	
Lead	11	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:59	
Molybdenum	ND	1.0	0.05	1	B5C0022	03/03/2015	03/04/15 18:59	
Nickel	29	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:59	
Selenium	0.90	1.0	0.15	1	B5C0022	03/03/2015	03/04/15 18:59	J
Silver	ND	1.0	0.06	1	B5C0022	03/03/2015	03/04/15 18:59	
Thallium	ND	1.0	0.20	1	B5C0022	03/03/2015	03/04/15 18:59	
Vanadium	40	1.0	0.07	1	B5C0022	03/03/2015	03/04/15 18:59	
Zinc	59	1.0	0.11	1	B5C0022	03/03/2015	03/04/15 18:59	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:55	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 00:55	
Surrogate: 4-Bromofluorobenzene	*104 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 00:55*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 03:16	
C23-C32	6.7	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 03:16	
Surrogate: p-Terphenyl	*89.3 %*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 03:16*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
1,1,1-Trichloroethane	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
1,1,2,2-Tetrachloroethane	ND	5.5	2.1	1	B5C0045	03/03/2015	03/03/15 12:40	
1,1,2-Trichloroethane	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	

...tec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-144-1.5
Lab ID: 1500747-15

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 12:40	
1,1-Dichloroethene	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 12:40	
1,1-Dichloropropene	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2,3-Trichloropropane	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2,3-Trichlorobenzene	ND	5.5	3.0	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2,4-Trichlorobenzene	ND	5.5	2.3	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2,4-Trimethylbenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2-Dibromoethane	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2-Dichlorobenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 12:40	
1,2-Dichloroethane	ND	5.5	0.96	1	B5C0045	03/03/2015	03/03/15 12:40	
Dichloropropane	ND	5.5	3.8	1	B5C0045	03/03/2015	03/03/15 12:40	
,5-Trimethylbenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 12:40	
1,3-Dichlorobenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 12:40	
1,3-Dichloropropane	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 12:40	
1,4-Dichlorobenzene	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 12:40	
2,2-Dichloropropane	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	
2-Chlorotoluene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 12:40	
4-Chlorotoluene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
4-Isopropyltoluene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
Benzene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	
Bromobenzene	ND	5.5	1.8	1	B5C0045	03/03/2015	03/03/15 12:40	
Bromochloromethane	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 12:40	
Bromodichloromethane	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 12:40	
Bromoform	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 12:40	
Bromomethane	ND	5.5	2.9	1	B5C0045	03/03/2015	03/03/15 12:40	
Carbon disulfide	ND	5.5	2.6	1	B5C0045	03/03/2015	03/03/15 12:40	
Carbon tetrachloride	ND	5.5	1.7	1	B5C0045	03/03/2015	03/03/15 12:40	
Chlorobenzene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	
Chloroethane	ND	5.5	5.5	1	B5C0045	03/03/2015	03/03/15 12:40	
Chloroform	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 12:40	
Chloromethane	ND	5.5	0.82	1	B5C0045	03/03/2015	03/03/15 12:40	
cis-1,2-Dichloroethene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	
cis-1,3-Dichloropropene	ND	5.5	2.5	1	B5C0045	03/03/2015	03/03/15 12:40	
Di-isopropyl ether	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 12:40	
Dibromochloromethane	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
Dibromomethane	ND	5.5	2.2	1	B5C0045	03/03/2015	03/03/15 12:40	
hlorodifluoromethane	ND	5.5	0.82	1	B5C0045	03/03/2015	03/03/15 12:40	
l Acetate	ND	55	15	1	B5C0045	03/03/2015	03/03/15 12:40	
Ethyl Ether	ND	55	13	1	B5C0045	03/03/2015	03/03/15 12:40	
Ethyl tert-butyl ether	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-144-1.5
Lab ID: 1500747-15

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.5	1.2	1	B5C0045	03/03/2015	03/03/15 12:40	
Freon-113	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
Hexachlorobutadiene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 12:40	
Isopropylbenzene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 12:40	
m,p-Xylene	ND	11	2.7	1	B5C0045	03/03/2015	03/03/15 12:40	
Methylene chloride	ND	5.5	5.5	1	B5C0045	03/03/2015	03/03/15 12:40	
MTBE	ND	5.5	1.0	1	B5C0045	03/03/2015	03/03/15 12:40	
n-Butylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
n-Propylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
Naphthalene	ND	5.5	3.5	1	B5C0045	03/03/2015	03/03/15 12:40	
o-Xylene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
sec-Butylbenzene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
Styrene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
tert-Amyl methyl ether	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 12:40	
tert-Butanol	ND	110	22	1	B5C0045	03/03/2015	03/03/15 12:40	
tert-Butylbenzene	ND	5.5	1.5	1	B5C0045	03/03/2015	03/03/15 12:40	
Tetrachloroethene	ND	5.5	1.4	1	B5C0045	03/03/2015	03/03/15 12:40	
Toluene	ND	5.5	0.98	1	B5C0045	03/03/2015	03/03/15 12:40	
trans-1,2-Dichloroethene	ND	5.5	1.6	1	B5C0045	03/03/2015	03/03/15 12:40	
trans-1,3-Dichloropropene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	
Trichloroethene	ND	5.5	1.3	1	B5C0045	03/03/2015	03/03/15 12:40	
Trichlorofluoromethane	ND	5.5	2.0	1	B5C0045	03/03/2015	03/03/15 12:40	
Vinyl acetate	ND	55	12	1	B5C0045	03/03/2015	03/03/15 12:40	
Vinyl chloride	ND	5.5	1.1	1	B5C0045	03/03/2015	03/03/15 12:40	
Surrogate: 1,2-Dichloroethane-d4	*131 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 12:40*	
Surrogate: 4-Bromofluorobenzene	*87.3 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 12:40*	
Surrogate: Dibromofluoromethane	*119 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 12:40*	
Surrogate: Toluene-d8	*106 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 12:40*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-145-0
Lab ID: 1500747-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.80**	2.0	0.25	1	B5C0023	03/03/2015	03/04/15 19:10	J
Arsenic	**5.6**	1.0	0.19	1	B5C0023	03/03/2015	03/04/15 19:10	
Barium	**70**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:10	
Beryllium	**0.81**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:09	J
Cadmium	**1.7**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:10	
Chromium	**33**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:10	
Cobalt	**4.3**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:10	
Copper	**20**	2.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:10	
Lead	**17**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:10	
Molybdenum	**3.9**	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:10	
Nickel	**28**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:10	
...ium	**1.5**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:10	
Silver	ND	1.0	0.06	1	B5C0023	03/03/2015	03/04/15 19:10	
Thallium	ND	1.0	0.20	1	B5C0023	03/03/2015	03/04/15 19:10	
Vanadium	**55**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:10	
Zinc	**63**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:10	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 01:11	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 01:11	
Surrogate: 4-Bromofluorobenzene	*113 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 01:11*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**1.2**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 03:32	
C23-C32	**5.9**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 03:32	
Surrogate: p-Terphenyl	*72.8 %*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 03:32*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
...,1-Trichloroethane	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
1,1,2,2-Tetrachloroethane	ND	4.6	1.8	1	B5C0045	03/03/2015	03/03/15 12:59	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-145-0
Lab ID: 1500747-17

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
1,1-Dichloroethane	ND	4.6	0.91	1	B5C0045	03/03/2015	03/03/15 12:59	
1,1-Dichloroethene	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
1,1-Dichloropropene	ND	4.6	1.4	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2,3-Trichloropropane	ND	4.6	1.7	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2,3-Trichlorobenzene	ND	4.6	2.5	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2,4-Trichlorobenzene	ND	4.6	1.9	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2,4-Trimethylbenzene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2-Dibromo-3-chloropropane	ND	9.3	2.0	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2-Dibromoethane	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2-Dichlorobenzene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2-Dichloroethane	ND	4.6	0.81	1	B5C0045	03/03/2015	03/03/15 12:59	
1,2-Dichloropropane	ND	4.6	3.2	1	B5C0045	03/03/2015	03/03/15 12:59	
1,3,5-Trimethylbenzene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
1,3-Dichlorobenzene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
1,3-Dichloropropane	ND	4.6	1.0	1	B5C0045	03/03/2015	03/03/15 12:59	
1,4-Dichlorobenzene	ND	4.6	1.7	1	B5C0045	03/03/2015	03/03/15 12:59	
2,2-Dichloropropane	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
2-Chlorotoluene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
4-Chlorotoluene	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
4-Isopropyltoluene	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
Benzene	**2.9**	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	J
Bromobenzene	ND	4.6	1.5	1	B5C0045	03/03/2015	03/03/15 12:59	
Bromochloromethane	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
Bromodichloromethane	ND	4.6	1.4	1	B5C0045	03/03/2015	03/03/15 12:59	
Bromoform	ND	4.6	1.4	1	B5C0045	03/03/2015	03/03/15 12:59	
Bromomethane	ND	4.6	2.4	1	B5C0045	03/03/2015	03/03/15 12:59	
Carbon disulfide	**3.1**	4.6	2.1	1	B5C0045	03/03/2015	03/03/15 12:59	J
Carbon tetrachloride	ND	4.6	1.4	1	B5C0045	03/03/2015	03/03/15 12:59	
Chlorobenzene	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
Chloroethane	ND	4.6	4.6	1	B5C0045	03/03/2015	03/03/15 12:59	
Chloroform	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
Chloromethane	ND	4.6	0.69	1	B5C0045	03/03/2015	03/03/15 12:59	
cis-1,2-Dichloroethene	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
cis-1,3-Dichloropropene	ND	4.6	2.1	1	B5C0045	03/03/2015	03/03/15 12:59	
Di-isopropyl ether	ND	4.6	0.94	1	B5C0045	03/03/2015	03/03/15 12:59	
Dibromochloromethane	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
Dibromomethane	ND	4.6	1.8	1	B5C0045	03/03/2015	03/03/15 12:59	
Dichlorodifluoromethane	ND	4.6	0.69	1	B5C0045	03/03/2015	03/03/15 12:59	
Ethyl Acetate	ND	46	12	1	B5C0045	03/03/2015	03/03/15 12:59	
Ethyl Ether	ND	46	11	1	B5C0045	03/03/2015	03/03/15 12:59	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-145-0
Lab ID: 1500747-17

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
Ethylbenzene	**1.8**	4.6	1.0	1	B5C0045	03/03/2015	03/03/15 12:59	J
Freon-113	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
Hexachlorobutadiene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
Isopropylbenzene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
m,p-Xylene	ND	9.3	2.3	1	B5C0045	03/03/2015	03/03/15 12:59	
Methylene chloride	ND	4.6	4.6	1	B5C0045	03/03/2015	03/03/15 12:59	
MTBE	ND	4.6	0.84	1	B5C0045	03/03/2015	03/03/15 12:59	
n-Butylbenzene	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
n-Propylbenzene	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
Naphthalene	ND	4.6	3.0	1	B5C0045	03/03/2015	03/03/15 12:59	
...lene	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
...-Butylbenzene	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
Styrene	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
tert-Amyl methyl ether	ND	4.6	0.95	1	B5C0045	03/03/2015	03/03/15 12:59	
tert-Butanol	ND	93	19	1	B5C0045	03/03/2015	03/03/15 12:59	
tert-Butylbenzene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
Tetrachloroethene	ND	4.6	1.2	1	B5C0045	03/03/2015	03/03/15 12:59	
Toluene	**4.2**	4.6	0.82	1	B5C0045	03/03/2015	03/03/15 12:59	J
trans-1,2-Dichloroethene	ND	4.6	1.3	1	B5C0045	03/03/2015	03/03/15 12:59	
trans-1,3-Dichloropropene	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
Trichloroethene	ND	4.6	1.1	1	B5C0045	03/03/2015	03/03/15 12:59	
Trichlorofluoromethane	ND	4.6	1.7	1	B5C0045	03/03/2015	03/03/15 12:59	
Vinyl acetate	ND	46	9.9	1	B5C0045	03/03/2015	03/03/15 12:59	
Vinyl chloride	ND	4.6	0.95	1	B5C0045	03/03/2015	03/03/15 12:59	
Surrogate: 1,2-Dichloroethane-d4	*124 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 12:59*	
Surrogate: 4-Bromofluorobenzene	*89.3 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 12:59*	
Surrogate: Dibromofluoromethane	*121 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 12:59*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 12:59*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-145-1.5
Lab ID: 1500747-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.26**	2.0	0.25	1	B5C0023	03/03/2015	03/04/15 19:30	J
Arsenic	**6.1**	1.0	0.19	1	B5C0023	03/03/2015	03/04/15 19:30	
Barium	**65**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:30	
Beryllium	**0.81**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:29	J
Cadmium	**1.0**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:30	J
Chromium	**26**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:30	
Cobalt	**7.0**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:30	
Copper	**24**	2.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:30	
Lead	**110**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:30	
Molybdenum	**1.0**	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:30	
Nickel	**20**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:30	
Selenium	**1.3**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:30	
Silver	ND	1.0	0.06	1	B5C0023	03/03/2015	03/04/15 19:30	
Thallium	ND	1.0	0.20	1	B5C0023	03/03/2015	03/04/15 19:30	
Vanadium	**37**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:30	
Zinc	**54**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:30	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 16:14	
C4-C8	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 16:14	
Surrogate: 4-Bromofluorobenzene	*110 %*	*37 - 153*			B5C0108	03/04/2015	*03/04/15 16:14*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**3.4**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 03:48	
C23-C32	**29**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 03:48	
Surrogate: p-Terphenyl	*85.6 %*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 03:48*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
1,1,1-Trichloroethane	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
1,1,2,2-Tetrachloroethane	ND	5.7	2.2	1	B5C0045	03/03/2015	03/03/15 13:18	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-145-1.5
Lab ID: 1500747-18

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
1,1-Dichloroethane	ND	5.7	1.1	1	B5C0045	03/03/2015	03/03/15 13:18	
1,1-Dichloroethene	ND	5.7	1.3	1	B5C0045	03/03/2015	03/03/15 13:18	
1,1-Dichloropropene	ND	5.7	1.7	1	B5C0045	03/03/2015	03/03/15 13:18	
1,2,3-Trichloropropane	ND	5.7	2.1	1	B5C0045	03/03/2015	03/03/15 13:18	
1,2,3-Trichlorobenzene	ND	5.7	3.1	1	B5C0045	03/03/2015	03/03/15 13:18	
1,2,4-Trichlorobenzene	ND	5.7	2.3	1	B5C0045	03/03/2015	03/03/15 13:18	
1,2,4-Trimethylbenzene	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5C0045	03/03/2015	03/03/15 13:18	
1,2-Dibromoethane	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
1,2-Dichlorobenzene	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
Dichloroethane	ND	5.7	0.99	1	B5C0045	03/03/2015	03/03/15 13:18	
-Dichloropropane	ND	5.7	3.9	1	B5C0045	03/03/2015	03/03/15 13:18	
1,3,5-Trimethylbenzene	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
1,3-Dichlorobenzene	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
1,3-Dichloropropane	ND	5.7	1.3	1	B5C0045	03/03/2015	03/03/15 13:18	
1,4-Dichlorobenzene	ND	5.7	2.0	1	B5C0045	03/03/2015	03/03/15 13:18	
2,2-Dichloropropane	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
2-Chlorotoluene	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
4-Chlorotoluene	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
4-Isopropyltoluene	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
Benzene	ND	5.7	1.3	1	B5C0045	03/03/2015	03/03/15 13:18	
Bromobenzene	ND	5.7	1.9	1	B5C0045	03/03/2015	03/03/15 13:18	
Bromochloromethane	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
Bromodichloromethane	ND	5.7	1.8	1	B5C0045	03/03/2015	03/03/15 13:18	
Bromoform	ND	5.7	1.7	1	B5C0045	03/03/2015	03/03/15 13:18	
Bromomethane	ND	5.7	3.0	1	B5C0045	03/03/2015	03/03/15 13:18	
Carbon disulfide	4.1	5.7	2.6	1	B5C0045	03/03/2015	03/03/15 13:18	J
Carbon tetrachloride	ND	5.7	1.7	1	B5C0045	03/03/2015	03/03/15 13:18	
Chlorobenzene	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
Chloroethane	ND	5.7	5.6	1	B5C0045	03/03/2015	03/03/15 13:18	
Chloroform	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
Chloromethane	ND	5.7	0.85	1	B5C0045	03/03/2015	03/03/15 13:18	
cis-1,2-Dichloroethene	ND	5.7	1.3	1	B5C0045	03/03/2015	03/03/15 13:18	
cis-1,3-Dichloropropene	ND	5.7	2.6	1	B5C0045	03/03/2015	03/03/15 13:18	
Di-isopropyl ether	ND	5.7	1.2	1	B5C0045	03/03/2015	03/03/15 13:18	
Dibromochloromethane	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
romomethane	ND	5.7	2.2	1	B5C0045	03/03/2015	03/03/15 13:18	
ilorodifluoromethane	ND	5.7	0.84	1	B5C0045	03/03/2015	03/03/15 13:18	
Ethyl Acetate	ND	57	15	1	B5C0045	03/03/2015	03/03/15 13:18	
Ethyl Ether	ND	57	14	1	B5C0045	03/03/2015	03/03/15 13:18	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-145-1.5
Lab ID: 1500747-18

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.7	1.3	1	B5C0045	03/03/2015	03/03/15 13:18	
Ethylbenzene	ND	5.7	1.3	1	B5C0045	03/03/2015	03/03/15 13:18	
Freon-113	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
Hexachlorobutadiene	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
Isopropylbenzene	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
m,p-Xylene	ND	11	2.8	1	B5C0045	03/03/2015	03/03/15 13:18	
Methylene chloride	ND	5.7	5.7	1	B5C0045	03/03/2015	03/03/15 13:18	
MTBE	ND	5.7	1.0	1	B5C0045	03/03/2015	03/03/15 13:18	
n-Butylbenzene	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
n-Propylbenzene	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
Naphthalene	ND	5.7	3.6	1	B5C0045	03/03/2015	03/03/15 13:18	
o-Xylene	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
sec-Butylbenzene	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
Styrene	ND	5.7	1.5	1	B5C0045	03/03/2015	03/03/15 13:18	
tert-Amyl methyl ether	ND	5.7	1.2	1	B5C0045	03/03/2015	03/03/15 13:18	
tert-Butanol	ND	110	23	1	B5C0045	03/03/2015	03/03/15 13:18	
tert-Butylbenzene	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
Tetrachloroethene	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
Toluene	ND	5.7	1.0	1	B5C0045	03/03/2015	03/03/15 13:18	
trans-1,2-Dichloroethene	ND	5.7	1.6	1	B5C0045	03/03/2015	03/03/15 13:18	
trans-1,3-Dichloropropene	ND	5.7	1.3	1	B5C0045	03/03/2015	03/03/15 13:18	
Trichloroethene	ND	5.7	1.4	1	B5C0045	03/03/2015	03/03/15 13:18	
Trichlorofluoromethane	ND	5.7	2.0	1	B5C0045	03/03/2015	03/03/15 13:18	
Vinyl acetate	ND	57	12	1	B5C0045	03/03/2015	03/03/15 13:18	
Vinyl chloride	ND	5.7	1.2	1	B5C0045	03/03/2015	03/03/15 13:18	
Surrogate: 1,2-Dichloroethane-d4	*129 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 13:18*	
Surrogate: 4-Bromofluorobenzene	*90.2 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 13:18*	
Surrogate: Dibromofluoromethane	*114 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 13:18*	
Surrogate: Toluene-d8	*107 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 13:18*	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-146-0
Lab ID: 1500747-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.89**	2.0	0.25	1	B5C0023	03/03/2015	03/04/15 19:33	J
Arsenic	14	1.0	0.19	1	B5C0023	03/03/2015	03/04/15 19:33	
Barium	**110**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:33	
Beryllium	**0.98**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:33	J
Cadmium	**0.66**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:33	J
Chromium	**36**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:33	
Cobalt	**8.8**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:33	
Copper	**26**	2.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:33	
Lead	**22**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:33	
Molybdenum	ND	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:33	
...ckel	**25**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:33	
...ium	**1.1**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:33	
Silver	ND	1.0	0.06	1	B5C0023	03/03/2015	03/04/15 19:33	
Thallium	ND	1.0	0.20	1	B5C0023	03/03/2015	03/04/15 19:33	
Vanadium	**51**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:33	
Zinc	**56**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:33	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 01:43	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 01:43	
Surrogate: 4-Bromofluorobenzene	*111 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 01:43*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	19	10	10	5	B5C0081	03/03/2015	03/04/15 04:52	
C23-C32	180	10	10	5	B5C0081	03/03/2015	03/04/15 04:52	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 04:52*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...2-Tetrachloroethane	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
...1-Trichloroethane	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
1,1,2,2-Tetrachloroethane	ND	4.5	1.7	1	B5C0045	03/03/2015	03/03/15 13:36	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-146-0
Lab ID: 1500747-20

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
1,1-Dichloroethane	ND	4.5	0.88	1	B5C0045	03/03/2015	03/03/15 13:36	
1,1-Dichloroethene	ND	4.5	1.0	1	B5C0045	03/03/2015	03/03/15 13:36	
1,1-Dichloropropene	ND	4.5	1.4	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2,3-Trichloropropane	ND	4.5	1.6	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2,3-Trichlorobenzene	ND	4.5	2.4	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2,4-Trichlorobenzene	ND	4.5	1.8	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2,4-Trimethylbenzene	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2-Dibromo-3-chloropropane	ND	9.0	1.9	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2-Dibromoethane	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2-Dichlorobenzene	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2-Dichloroethane	ND	4.5	0.78	1	B5C0045	03/03/2015	03/03/15 13:36	
1,2-Dichloropropane	ND	4.5	3.1	1	B5C0045	03/03/2015	03/03/15 13:36	
1,3,5-Trimethylbenzene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
1,3-Dichlorobenzene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
1,3-Dichloropropane	ND	4.5	0.99	1	B5C0045	03/03/2015	03/03/15 13:36	
1,4-Dichlorobenzene	ND	4.5	1.6	1	B5C0045	03/03/2015	03/03/15 13:36	
2,2-Dichloropropane	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
2-Chlorotoluene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
4-Chlorotoluene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
4-Isopropyltoluene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
Benzene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Bromobenzene	ND	4.5	1.5	1	B5C0045	03/03/2015	03/03/15 13:36	
Bromochloromethane	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
Bromodichloromethane	ND	4.5	1.4	1	B5C0045	03/03/2015	03/03/15 13:36	
Bromoform	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
Bromomethane	ND	4.5	2.4	1	B5C0045	03/03/2015	03/03/15 13:36	
Carbon disulfide	**4.1**	4.5	2.1	1	B5C0045	03/03/2015	03/03/15 13:36	J
Carbon tetrachloride	ND	4.5	1.4	1	B5C0045	03/03/2015	03/03/15 13:36	
Chlorobenzene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Chloroethane	ND	4.5	4.4	1	B5C0045	03/03/2015	03/03/15 13:36	
Chloroform	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
Chloromethane	ND	4.5	0.67	1	B5C0045	03/03/2015	03/03/15 13:36	
cis-1,2-Dichloroethene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
cis-1,3-Dichloropropene	ND	4.5	2.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Di-isopropyl ether	ND	4.5	0.91	1	B5C0045	03/03/2015	03/03/15 13:36	
Dibromochloromethane	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Dibromomethane	ND	4.5	1.8	1	B5C0045	03/03/2015	03/03/15 13:36	
Dichlorodifluoromethane	ND	4.5	0.66	1	B5C0045	03/03/2015	03/03/15 13:36	
Ethyl Acetate	ND	45	12	1	B5C0045	03/03/2015	03/03/15 13:36	
Ethyl Ether	ND	45	11	1	B5C0045	03/03/2015	03/03/15 13:36	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-146-0

Lab ID: 1500747-20

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.5	1.0	1	B5C0045	03/03/2015	03/03/15 13:36	
Ethylbenzene	ND	4.5	1.0	1	B5C0045	03/03/2015	03/03/15 13:36	
Freon-113	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
Hexachlorobutadiene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
Isopropylbenzene	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
m,p-Xylene	ND	9.0	2.2	1	B5C0045	03/03/2015	03/03/15 13:36	
Methylene chloride	ND	4.5	4.5	1	B5C0045	03/03/2015	03/03/15 13:36	
MTBE	ND	4.5	0.81	1	B5C0045	03/03/2015	03/03/15 13:36	
n-Butylbenzene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
n-Propylbenzene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Naphthalene	ND	4.5	2.9	1	B5C0045	03/03/2015	03/03/15 13:36	
...ylene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
...Butylbenzene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
Styrene	ND	4.5	1.2	1	B5C0045	03/03/2015	03/03/15 13:36	
tert-Amyl methyl ether	ND	4.5	0.92	1	B5C0045	03/03/2015	03/03/15 13:36	
tert-Butanol	ND	90	18	1	B5C0045	03/03/2015	03/03/15 13:36	
tert-Butylbenzene	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
Tetrachloroethene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Toluene	ND	4.5	0.79	1	B5C0045	03/03/2015	03/03/15 13:36	
trans-1,2-Dichloroethene	ND	4.5	1.3	1	B5C0045	03/03/2015	03/03/15 13:36	
trans-1,3-Dichloropropene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Trichloroethene	ND	4.5	1.1	1	B5C0045	03/03/2015	03/03/15 13:36	
Trichlorofluoromethane	ND	4.5	1.6	1	B5C0045	03/03/2015	03/03/15 13:36	
Vinyl acetate	ND	45	9.6	1	B5C0045	03/03/2015	03/03/15 13:36	
Vinyl chloride	ND	4.5	0.92	1	B5C0045	03/03/2015	03/03/15 13:36	
Surrogate: 1,2-Dichloroethane-d4	*134 %*	*20 - 189*			B5C0045	03/03/2015	*03/03/15 13:36*	
Surrogate: 4-Bromofluorobenzene	*88.1 %*	*20 - 173*			B5C0045	03/03/2015	*03/03/15 13:36*	
Surrogate: Dibromofluoromethane	*127 %*	*26 - 178*			B5C0045	03/03/2015	*03/03/15 13:36*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5C0045	03/03/2015	*03/03/15 13:36*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-146-1.5
Lab ID: 1500747-21

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.3**	2.0	0.25	1	B5C0023	03/03/2015	03/04/15 19:36	J
Arsenic	**19**	1.0	0.19	1	B5C0023	03/03/2015	03/04/15 19:36	
Barium	**160**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:36	
Beryllium	**1.6**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:36	
Cadmium	**1.4**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:36	
Chromium	**59**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:36	
Cobalt	**14**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:36	
Copper	**62**	2.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:36	
Lead	**430**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:36	
Molybdenum	**0.46**	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:36	J
Nickel	**44**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:36	
Selenium	**1.6**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:36	
Silver	ND	1.0	0.06	1	B5C0023	03/03/2015	03/04/15 19:36	
Thallium	ND	1.0	0.20	1	B5C0023	03/03/2015	03/04/15 19:36	
Vanadium	**90**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:36	
Zinc	**130**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:36	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 01:59	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 01:59	
Surrogate: 4-Bromofluorobenzene	*112 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 01:59*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**12**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 04:20	
C23-C32	**29**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 04:20	
Surrogate: p-Terphenyl	*82.9 %*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 04:20*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.6	1.5	1	B5C0079	03/03/2015	03/03/15 18:35	
1,1,1-Trichloroethane	ND	5.6	1.5	1	B5C0079	03/03/2015	03/03/15 18:35	
1,1,2,2-Tetrachloroethane	ND	5.6	2.2	1	B5C0079	03/03/2015	03/03/15 18:35	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-146-1.5

Lab ID: 1500747-21

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
1,1-Dichloroethane	ND	5.6	1.1	1	B5C0079	03/03/2015	03/03/15 18:35	
1,1-Dichloroethene	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
1,1-Dichloropropene	ND	5.6	1.7	1	B5C0079	03/03/2015	03/03/15 18:35	
1,2,3-Trichloropropane	ND	5.6	2.0	1	B5C0079	03/03/2015	03/03/15 18:35	
1,2,3-Trichlorobenzene	ND	5.6	3.0	1	B5C0079	03/03/2015	03/03/15 18:35	
1,2,4-Trichlorobenzene	ND	5.6	2.3	1	B5C0079	03/03/2015	03/03/15 18:35	
1,2,4-Trimethylbenzene	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5C0079	03/03/2015	03/03/15 18:35	
1,2-Dibromoethane	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
1,2-Dichlorobenzene	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
Dichloroethane	ND	5.6	0.97	1	B5C0079	03/03/2015	03/03/15 18:35	
-Dichloropropane	ND	5.6	3.8	1	B5C0079	03/03/2015	03/03/15 18:35	
1,3,5-Trimethylbenzene	ND	5.6	1.5	1	B5C0079	03/03/2015	03/03/15 18:35	
1,3-Dichlorobenzene	ND	5.6	1.5	1	B5C0079	03/03/2015	03/03/15 18:35	
1,3-Dichloropropane	ND	5.6	1.2	1	B5C0079	03/03/2015	03/03/15 18:35	
1,4-Dichlorobenzene	ND	5.6	2.0	1	B5C0079	03/03/2015	03/03/15 18:35	
2,2-Dichloropropane	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
2-Chlorotoluene	ND	5.6	1.5	1	B5C0079	03/03/2015	03/03/15 18:35	
4-Chlorotoluene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
4-Isopropyltoluene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
Benzene	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
Bromobenzene	ND	5.6	1.8	1	B5C0079	03/03/2015	03/03/15 18:35	
Bromochloromethane	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
Bromodichloromethane	ND	5.6	1.7	1	B5C0079	03/03/2015	03/03/15 18:35	
Bromoform	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
Bromomethane	ND	5.6	2.9	1	B5C0079	03/03/2015	03/03/15 18:35	
Carbon disulfide	4.5	5.6	2.6	1	B5C0079	03/03/2015	03/03/15 18:35	J
Carbon tetrachloride	ND	5.6	1.7	1	B5C0079	03/03/2015	03/03/15 18:35	
Chlorobenzene	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
Chloroethane	ND	5.6	5.5	1	B5C0079	03/03/2015	03/03/15 18:35	
Chloroform	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
Chloromethane	ND	5.6	0.82	1	B5C0079	03/03/2015	03/03/15 18:35	
cis-1,2-Dichloroethene	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
cis-1,3-Dichloropropene	ND	5.6	2.5	1	B5C0079	03/03/2015	03/03/15 18:35	
Di-isopropyl ether	ND	5.6	1.1	1	B5C0079	03/03/2015	03/03/15 18:35	
Dibromochloromethane	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
vomomethane	ND	5.6	2.2	1	B5C0079	03/03/2015	03/03/15 18:35	
alorodifluoromethane	ND	5.6	0.82	1	B5C0079	03/03/2015	03/03/15 18:35	
Ethyl Acetate	ND	56	15	1	B5C0079	03/03/2015	03/03/15 18:35	
Ethyl Ether	ND	56	13	1	B5C0079	03/03/2015	03/03/15 18:35	

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Client Sample ID 1278-146-1.5
Lab ID: 1500747-21

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
Ethylbenzene	ND	5.6	1.2	1	B5C0079	03/03/2015	03/03/15 18:35	
Freon-113	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
Hexachlorobutadiene	ND	5.6	1.5	1	B5C0079	03/03/2015	03/03/15 18:35	
Isopropylbenzene	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
m,p-Xylene	ND	11	2.8	1	B5C0079	03/03/2015	03/03/15 18:35	
Methylene chloride	ND	5.6	5.6	1	B5C0079	03/03/2015	03/03/15 18:35	
MTBE	ND	5.6	1.0	1	B5C0079	03/03/2015	03/03/15 18:35	
n-Butylbenzene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
n-Propylbenzene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
Naphthalene	ND	5.6	3.5	1	B5C0079	03/03/2015	03/03/15 18:35	
o-Xylene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
sec-Butylbenzene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
Styrene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
tert-Amyl methyl ether	ND	5.6	1.1	1	B5C0079	03/03/2015	03/03/15 18:35	
tert-Butanol	ND	110	22	1	B5C0079	03/03/2015	03/03/15 18:35	
tert-Butylbenzene	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
Tetrachloroethene	ND	5.6	1.4	1	B5C0079	03/03/2015	03/03/15 18:35	
Toluene	ND	5.6	0.98	1	B5C0079	03/03/2015	03/03/15 18:35	
trans-1,2-Dichloroethene	ND	5.6	1.6	1	B5C0079	03/03/2015	03/03/15 18:35	
trans-1,3-Dichloropropene	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
Trichloroethene	ND	5.6	1.3	1	B5C0079	03/03/2015	03/03/15 18:35	
Trichlorofluoromethane	ND	5.6	2.0	1	B5C0079	03/03/2015	03/03/15 18:35	
Vinyl acetate	ND	56	12	1	B5C0079	03/03/2015	03/03/15 18:35	
Vinyl chloride	ND	5.6	1.1	1	B5C0079	03/03/2015	03/03/15 18:35	
Surrogate: 1,2-Dichloroethane-d4	*124 %*	*20 - 189*			B5C0079	03/03/2015	*03/03/15 18:35*	
Surrogate: 4-Bromofluorobenzene	*87.4 %*	*20 - 173*			B5C0079	03/03/2015	*03/03/15 18:35*	
Surrogate: Dibromofluoromethane	*114 %*	*26 - 178*			B5C0079	03/03/2015	*03/03/15 18:35*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5C0079	03/03/2015	*03/03/15 18:35*	

Certificate of Analysis

.itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-147-0
Lab ID: 1500747-23

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.66**	2.0	0.25	1	B5C0023	03/03/2015	03/04/15 19:41	J
Arsenic	**5.7**	1.0	0.19	1	B5C0023	03/03/2015	03/04/15 19:41	
Barium	**58**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:40	
Beryllium	**0.70**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:40	J
Cadmium	**0.80**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:41	J
Chromium	**15**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:40	
Cobalt	**5.0**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:41	
Copper	17	2.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:40	
Lead	**24**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:41	
Molybdenum	1.1	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:40	
Nickel	**16**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:40	
Selenium	**0.85**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:41	J
Silver	ND	1.0	0.06	1	B5C0023	03/03/2015	03/04/15 19:40	
Thallium	ND	1.0	0.20	1	B5C0023	03/03/2015	03/04/15 19:41	
Vanadium	**32**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:40	
Zinc	**53**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:40	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 12:56	
C4-C8	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 12:56	
Surrogate: 4-Bromofluorobenzene	*99.3 %*	*37 - 153*			B5C0108	03/04/2015	*03/04/15 12:56*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**5.4**	2.0	2.0	2	B5C0081	03/03/2015	03/04/15 04:36	
C23-C32	55	2.0	2.0	2	B5C0081	03/03/2015	03/04/15 04:36	
Surrogate: p-Terphenyl	*65.5 %*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 04:36*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
,1-Trichloroethane	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
1,1,2,2-Tetrachloroethane	ND	4.5	1.7	1	B5C0079	03/03/2015	03/03/15 18:54	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-147-0
Lab ID: 1500747-23

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
1,1-Dichloroethane	ND	4.5	0.88	1	B5C0079	03/03/2015	03/03/15 18:54	
1,1-Dichloroethene	ND	4.5	1.0	1	B5C0079	03/03/2015	03/03/15 18:54	
1,1-Dichloropropene	ND	4.5	1.4	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2,3-Trichloropropane	ND	4.5	1.6	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2,3-Trichlorobenzene	ND	4.5	2.4	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2,4-Trichlorobenzene	ND	4.5	1.8	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2,4-Trimethylbenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2-Dibromo-3-chloropropane	ND	9.0	1.9	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2-Dibromoethane	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2-Dichlorobenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2-Dichloroethane	ND	4.5	0.78	1	B5C0079	03/03/2015	03/03/15 18:54	
1,2-Dichloropropane	ND	4.5	3.1	1	B5C0079	03/03/2015	03/03/15 18:54	
1,3,5-Trimethylbenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
1,3-Dichlorobenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
1,3-Dichloropropane	ND	4.5	0.99	1	B5C0079	03/03/2015	03/03/15 18:54	
1,4-Dichlorobenzene	ND	4.5	1.6	1	B5C0079	03/03/2015	03/03/15 18:54	
2,2-Dichloropropane	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
2-Chlorotoluene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
4-Chlorotoluene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
4-Isopropyltoluene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
Benzene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Bromobenzene	ND	4.5	1.5	1	B5C0079	03/03/2015	03/03/15 18:54	
Bromochloromethane	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
Bromodichloromethane	ND	4.5	1.4	1	B5C0079	03/03/2015	03/03/15 18:54	
Bromoform	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
Bromomethane	ND	4.5	2.4	1	B5C0079	03/03/2015	03/03/15 18:54	
Carbon disulfide	ND	4.5	2.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Carbon tetrachloride	ND	4.5	1.4	1	B5C0079	03/03/2015	03/03/15 18:54	
Chlorobenzene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Chloroethane	ND	4.5	4.5	1	B5C0079	03/03/2015	03/03/15 18:54	
Chloroform	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
Chloromethane	ND	4.5	0.67	1	B5C0079	03/03/2015	03/03/15 18:54	
cis-1,2-Dichloroethene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
cis-1,3-Dichloropropene	ND	4.5	2.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Di-isopropyl ether	ND	4.5	0.91	1	B5C0079	03/03/2015	03/03/15 18:54	
Dibromochloromethane	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Dibromomethane	ND	4.5	1.8	1	B5C0079	03/03/2015	03/03/15 18:54	
Dichlorodifluoromethane	ND	4.5	0.67	1	B5C0079	03/03/2015	03/03/15 18:54	
Ethyl Acetate	ND	45	12	1	B5C0079	03/03/2015	03/03/15 18:54	
Ethyl Ether	ND	45	11	1	B5C0079	03/03/2015	03/03/15 18:54	

Certificate of Analysis

...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-147-0
Lab ID: 1500747-23

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.5	1.0	1	B5C0079	03/03/2015	03/03/15 18:54	
Ethylbenzene	ND	4.5	1.0	1	B5C0079	03/03/2015	03/03/15 18:54	
Freon-113	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
Hexachlorobutadiene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
Isopropylbenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
m,p-Xylene	ND	9.0	2.2	1	B5C0079	03/03/2015	03/03/15 18:54	
Methylene chloride	ND	4.5	4.5	1	B5C0079	03/03/2015	03/03/15 18:54	
MTBE	ND	4.5	0.81	1	B5C0079	03/03/2015	03/03/15 18:54	
n-Butylbenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
n-Propylbenzene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Naphthalene	ND	4.5	2.9	1	B5C0079	03/03/2015	03/03/15 18:54	
...ylene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
...-Butylbenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
Styrene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 18:54	
tert-Amyl methyl ether	ND	4.5	0.92	1	B5C0079	03/03/2015	03/03/15 18:54	
tert-Butanol	ND	90	18	1	B5C0079	03/03/2015	03/03/15 18:54	
tert-Butylbenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
Tetrachloroethene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Toluene	ND	4.5	0.80	1	B5C0079	03/03/2015	03/03/15 18:54	
trans-1,2-Dichloroethene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 18:54	
trans-1,3-Dichloropropene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Trichloroethene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 18:54	
Trichlorofluoromethane	ND	4.5	1.6	1	B5C0079	03/03/2015	03/03/15 18:54	
Vinyl acetate	ND	45	9.6	1	B5C0079	03/03/2015	03/03/15 18:54	
Vinyl chloride	ND	4.5	0.92	1	B5C0079	03/03/2015	03/03/15 18:54	
Surrogate: 1,2-Dichloroethane-d4	*137 %*		*20 - 189*		B5C0079	03/03/2015	*03/03/15 18:54*	
Surrogate: 4-Bromofluorobenzene	*89.4 %*		*20 - 173*		B5C0079	03/03/2015	*03/03/15 18:54*	
Surrogate: Dibromofluoromethane	*124 %*		*26 - 178*		B5C0079	03/03/2015	*03/03/15 18:54*	
Surrogate: Toluene-d8	*102 %*		*31 - 166*		B5C0079	03/03/2015	*03/03/15 18:54*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-147-1.5
Lab ID: 1500747-24

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.2**	2.0	0.26	1	B5C0023	03/03/2015	03/04/15 19:44	J
Arsenic	**18**	1.0	0.19	1	B5C0023	03/03/2015	03/04/15 19:44	
Barium	**130**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:44	
Beryllium	**1.2**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:43	
Cadmium	**0.85**	1.0	0.12	1	B5C0023	03/03/2015	03/04/15 19:44	J
Chromium	**45**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:44	
Cobalt	**9.1**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:44	
Copper	**27**	2.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:44	
Lead	**100**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:44	
Molybdenum	**0.29**	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:44	J
Nickel	**30**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:44	
Selenium	**1.2**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:44	
Silver	ND	1.0	0.06	1	B5C0023	03/03/2015	03/04/15 19:44	
Thallium	ND	1.0	0.20	1	B5C0023	03/03/2015	03/04/15 19:44	
Vanadium	**62**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:44	
Zinc	**69**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:44	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 13:12	
C4-C8	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 13:12	
Surrogate: 4-Bromofluorobenzene	*101 %*	*37 - 153*			B5C0108	03/04/2015	*03/04/15 13:12*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**1.9**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 04:04	
C23-C32	**22**	1.0	1.0	1	B5C0081	03/03/2015	03/04/15 04:04	
Surrogate: p-Terphenyl	*75.2 %*	*26 - 123*			B5C0081	03/03/2015	*03/04/15 04:04*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
1,1,1-Trichloroethane	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
1,1,2,2-Tetrachloroethane	ND	4.5	1.8	1	B5C0079	03/03/2015	03/03/15 19:13	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-147-1.5
Lab ID: 1500747-24

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
1,1-Dichloroethane	ND	4.5	0.89	1	B5C0079	03/03/2015	03/03/15 19:13	
1,1-Dichloroethene	ND	4.5	1.0	1	B5C0079	03/03/2015	03/03/15 19:13	
1,1-Dichloropropene	ND	4.5	1.4	1	B5C0079	03/03/2015	03/03/15 19:13	
1,2,3-Trichloropropane	ND	4.5	1.6	1	B5C0079	03/03/2015	03/03/15 19:13	
1,2,3-Trichlorobenzene	ND	4.5	2.5	1	B5C0079	03/03/2015	03/03/15 19:13	
1,2,4-Trichlorobenzene	ND	4.5	1.9	1	B5C0079	03/03/2015	03/03/15 19:13	
1,2,4-Trimethylbenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
1,2-Dibromo-3-chloropropane	ND	9.1	1.9	1	B5C0079	03/03/2015	03/03/15 19:13	
1,2-Dibromoethane	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
1,2-Dichlorobenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
...Dichloroethane	ND	4.5	0.79	1	B5C0079	03/03/2015	03/03/15 19:13	
...Dichloropropane	ND	4.5	3.1	1	B5C0079	03/03/2015	03/03/15 19:13	
1,3,5-Trimethylbenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
1,3-Dichlorobenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
1,3-Dichloropropane	ND	4.5	1.0	1	B5C0079	03/03/2015	03/03/15 19:13	
1,4-Dichlorobenzene	ND	4.5	1.6	1	B5C0079	03/03/2015	03/03/15 19:13	
2,2-Dichloropropane	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
2-Chlorotoluene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
4-Chlorotoluene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
4-Isopropyltoluene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
Benzene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Bromobenzene	ND	4.5	1.5	1	B5C0079	03/03/2015	03/03/15 19:13	
Bromochloromethane	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
Bromodichloromethane	ND	4.5	1.4	1	B5C0079	03/03/2015	03/03/15 19:13	
Bromoform	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
Bromomethane	ND	4.5	2.4	1	B5C0079	03/03/2015	03/03/15 19:13	
Carbon disulfide	3.8	4.5	2.1	1	B5C0079	03/03/2015	03/03/15 19:13	J
Carbon tetrachloride	ND	4.5	1.4	1	B5C0079	03/03/2015	03/03/15 19:13	
Chlorobenzene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Chloroethane	ND	4.5	4.5	1	B5C0079	03/03/2015	03/03/15 19:13	
Chloroform	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
Chloromethane	ND	4.5	0.67	1	B5C0079	03/03/2015	03/03/15 19:13	
cis-1,2-Dichloroethene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
cis-1,3-Dichloropropene	ND	4.5	2.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Di-isopropyl ether	ND	4.5	0.92	1	B5C0079	03/03/2015	03/03/15 19:13	
Dibromochloromethane	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
...bromomethane	ND	4.5	1.8	1	B5C0079	03/03/2015	03/03/15 19:13	
...lorodifluoromethane	ND	4.5	0.67	1	B5C0079	03/03/2015	03/03/15 19:13	
Ethyl Acetate	ND	45	12	1	B5C0079	03/03/2015	03/03/15 19:13	
Ethyl Ether	ND	45	11	1	B5C0079	03/03/2015	03/03/15 19:13	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-147-1.5
Lab ID: 1500747-24

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Ethylbenzene	ND	4.5	1.0	1	B5C0079	03/03/2015	03/03/15 19:13	
Freon-113	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
Hexachlorobutadiene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
Isopropylbenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
m,p-Xylene	ND	9.1	2.3	1	B5C0079	03/03/2015	03/03/15 19:13	
Methylene chloride	ND	4.5	4.5	1	B5C0079	03/03/2015	03/03/15 19:13	
MTBE	ND	4.5	0.82	1	B5C0079	03/03/2015	03/03/15 19:13	
n-Butylbenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
n-Propylbenzene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Naphthalene	ND	4.5	2.9	1	B5C0079	03/03/2015	03/03/15 19:13	
o-Xylene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
sec-Butylbenzene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
Styrene	ND	4.5	1.2	1	B5C0079	03/03/2015	03/03/15 19:13	
tert-Amyl methyl ether	ND	4.5	0.92	1	B5C0079	03/03/2015	03/03/15 19:13	
tert-Butanol	ND	91	18	1	B5C0079	03/03/2015	03/03/15 19:13	
tert-Butylbenzene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
Tetrachloroethene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Toluene	ND	4.5	0.80	1	B5C0079	03/03/2015	03/03/15 19:13	
trans-1,2-Dichloroethene	ND	4.5	1.3	1	B5C0079	03/03/2015	03/03/15 19:13	
trans-1,3-Dichloropropene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Trichloroethene	ND	4.5	1.1	1	B5C0079	03/03/2015	03/03/15 19:13	
Trichlorofluoromethane	ND	4.5	1.6	1	B5C0079	03/03/2015	03/03/15 19:13	
Vinyl acetate	ND	45	9.7	1	B5C0079	03/03/2015	03/03/15 19:13	
Vinyl chloride	ND	4.5	0.93	1	B5C0079	03/03/2015	03/03/15 19:13	
Surrogate: 1,2-Dichloroethane-d4	*133 %*	*20 - 189*			B5C0079	03/03/2015	*03/03/15 19:13*	
Surrogate: 4-Bromofluorobenzene	*89.7 %*	*20 - 173*			B5C0079	03/03/2015	*03/03/15 19:13*	
Surrogate: Dibromofluoromethane	*119 %*	*26 - 178*			B5C0079	03/03/2015	*03/03/15 19:13*	
Surrogate: Toluene-d8	*106 %*	*31 - 166*			B5C0079	03/03/2015	*03/03/15 19:13*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-148-0
Lab ID: 1500747-26

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.0**	2.0	0.25	**1**	B5C0023	03/03/2015	03/04/15 19:48	J
Arsenic	**4.2**	1.0	0.19	**1**	B5C0023	03/03/2015	03/04/15 19:48	
Barium	**140**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:47	
Beryllium	**0.80**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:46	J
Cadmium	**0.89**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:48	J
Chromium	**13**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:47	
Cobalt	**7.8**	1.0	0.15	**1**	B5C0023	03/03/2015	03/04/15 19:48	
Copper	**14**	2.0	0.05	**1**	B5C0023	03/03/2015	03/04/15 19:47	
Lead	**29**	1.0	0.07	**1**	B5C0023	03/03/2015	03/04/15 19:48	
Molybdenum	**0.81**	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:47	J
N...ckel	**20**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:47	
...ium	**0.81**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:48	J
Silver	ND	1.0	0.06	**1**	B5C0023	03/03/2015	03/04/15 19:47	
Thallium	ND	1.0	0.20	**1**	B5C0023	03/03/2015	03/04/15 19:48	
Vanadium	**30**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:47	
Zinc	**47**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:47	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 13:27	
C4-C8	ND	1.0	0.20	1	B5C0108	03/04/2015	03/04/15 13:27	
Surrogate: 4-Bromofluorobenzene	*99.2 %*	*37 - 153*			B5C0108	03/04/2015	*03/04/15 13:27*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**2.9**	2.0	2.0	2	B5C0086	03/03/2015	03/04/15 23:14	
C23-C32	14	2.0	2.0	2	B5C0086	03/03/2015	03/04/15 23:14	
Surrogate: p-Terphenyl	*86.3 %*	*26 - 123*			B5C0086	03/03/2015	*03/04/15 23:14*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
...-Trichloroethane	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
1,1,2,2-Tetrachloroethane	ND	4.9	1.9	1	B5C0079	03/03/2015	03/03/15 19:31	

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-148-0
Lab ID: 1500747-26

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
1,1-Dichloroethane	ND	4.9	0.96	1	B5C0079	03/03/2015	03/03/15 19:31	
1,1-Dichloroethene	ND	4.9	1.1	1	B5C0079	03/03/2015	03/03/15 19:31	
1,1-Dichloropropene	ND	4.9	1.5	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2,3-Trichloropropane	ND	4.9	1.8	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2,3-Trichlorobenzene	ND	4.9	2.7	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2,4-Trichlorobenzene	ND	4.9	2.0	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2,4-Trimethylbenzene	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2-Dibromo-3-chloropropane	ND	9.8	2.1	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2-Dibromoethane	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2-Dichlorobenzene	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2-Dichloroethane	ND	4.9	0.86	1	B5C0079	03/03/2015	03/03/15 19:31	
1,2-Dichloropropane	ND	4.9	3.3	1	B5C0079	03/03/2015	03/03/15 19:31	
1,3,5-Trimethylbenzene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
1,3-Dichlorobenzene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
1,3-Dichloropropane	ND	4.9	1.1	1	B5C0079	03/03/2015	03/03/15 19:31	
1,4-Dichlorobenzene	ND	4.9	1.7	1	B5C0079	03/03/2015	03/03/15 19:31	
2,2-Dichloropropane	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
2-Chlorotoluene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
4-Chlorotoluene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
4-Isopropyltoluene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
Benzene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Bromobenzene	ND	4.9	1.6	1	B5C0079	03/03/2015	03/03/15 19:31	
Bromochloromethane	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
Bromodichloromethane	ND	4.9	1.5	1	B5C0079	03/03/2015	03/03/15 19:31	
Bromoform	ND	4.9	1.5	1	B5C0079	03/03/2015	03/03/15 19:31	
Bromomethane	ND	4.9	2.6	1	B5C0079	03/03/2015	03/03/15 19:31	
Carbon disulfide	**2.6**	4.9	2.3	1	B5C0079	03/03/2015	03/03/15 19:31	J
Carbon tetrachloride	ND	4.9	1.5	1	B5C0079	03/03/2015	03/03/15 19:31	
Chlorobenzene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Chloroethane	ND	4.9	4.9	1	B5C0079	03/03/2015	03/03/15 19:31	
Chloroform	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
Chloromethane	ND	4.9	0.73	1	B5C0079	03/03/2015	03/03/15 19:31	
cis-1,2-Dichloroethene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
cis-1,3-Dichloropropene	ND	4.9	2.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Di-isopropyl ether	ND	4.9	0.99	1	B5C0079	03/03/2015	03/03/15 19:31	
Dibromochloromethane	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Dibromomethane	ND	4.9	1.9	1	B5C0079	03/03/2015	03/03/15 19:31	
Dichlorodifluoromethane	ND	4.9	0.73	1	B5C0079	03/03/2015	03/03/15 19:31	
Ethyl Acetate	ND	49	13	1	B5C0079	03/03/2015	03/03/15 19:31	
Ethyl Ether	ND	49	12	1	B5C0079	03/03/2015	03/03/15 19:31	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-148-0
Lab ID: 1500747-26

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.9	1.1	1	B5C0079	03/03/2015	03/03/15 19:31	
Ethylbenzene	ND	4.9	1.1	1	B5C0079	03/03/2015	03/03/15 19:31	
Freon-113	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
Hexachlorobutadiene	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
Isopropylbenzene	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
m,p-Xylene	ND	9.8	2.4	1	B5C0079	03/03/2015	03/03/15 19:31	
Methylene chloride	ND	4.9	4.9	1	B5C0079	03/03/2015	03/03/15 19:31	
MTBE	ND	4.9	0.89	1	B5C0079	03/03/2015	03/03/15 19:31	
n-Butylbenzene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
n-Propylbenzene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Naphthalene	ND	4.9	3.1	1	B5C0079	03/03/2015	03/03/15 19:31	
...ylene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
...Butylbenzene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
Styrene	ND	4.9	1.3	1	B5C0079	03/03/2015	03/03/15 19:31	
tert-Amyl methyl ether	ND	4.9	1.0	1	B5C0079	03/03/2015	03/03/15 19:31	
tert-Butanol	ND	98	20	1	B5C0079	03/03/2015	03/03/15 19:31	
tert-Butylbenzene	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
Tetrachloroethene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Toluene	ND	4.9	0.87	1	B5C0079	03/03/2015	03/03/15 19:31	
trans-1,2-Dichloroethene	ND	4.9	1.4	1	B5C0079	03/03/2015	03/03/15 19:31	
trans-1,3-Dichloropropene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Trichloroethene	ND	4.9	1.2	1	B5C0079	03/03/2015	03/03/15 19:31	
Trichlorofluoromethane	ND	4.9	1.8	1	B5C0079	03/03/2015	03/03/15 19:31	
Vinyl acetate	ND	49	10	1	B5C0079	03/03/2015	03/03/15 19:31	
Vinyl chloride	ND	4.9	1.0	1	B5C0079	03/03/2015	03/03/15 19:31	
Surrogate: 1,2-Dichloroethane-d4	*133 %*	*20 - 189*			B5C0079	03/03/2015	*03/03/15 19:31*	
Surrogate: 4-Bromofluorobenzene	*89.4 %*	*20 - 173*			B5C0079	03/03/2015	*03/03/15 19:31*	
Surrogate: Dibromofluoromethane	*123 %*	*26 - 178*			B5C0079	03/03/2015	*03/03/15 19:31*	
Surrogate: Toluene-d8	*107 %*	*31 - 166*			B5C0079	03/03/2015	*03/03/15 19:31*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-148-1.5
Lab ID: 1500747-27

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.34**	2.0	0.25	1	B5C0023	03/03/2015	03/04/15 19:51	J
Arsenic	**6.0**	1.0	0.19	1	B5C0023	03/03/2015	03/04/15 19:51	
Barium	**61**	1.0	0.14	1	B5C0023	03/03/2015	03/04/15 19:51	
Beryllium	**0.75**	1.0	0.04	1	B5C0023	03/03/2015	03/04/15 19:50	J
Cadmium	**0.71**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:51	J
Chromium	**18**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:51	
Cobalt	**4.7**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:51	
Copper	**13**	2.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:51	
Lead	**93**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:51	
Molybdenum	**0.09**	1.0	0.05	1	B5C0023	03/03/2015	03/04/15 19:51	J
Nickel	**14**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:51	
Selenium	**0.68**	1.0	0.15	1	B5C0023	03/03/2015	03/04/15 19:51	J
Silver	ND	1.0	0.06	1	B5C0023	03/03/2015	03/04/15 19:51	
Thallium	ND	1.0	0.20	1	B5C0023	03/03/2015	03/04/15 19:51	
Vanadium	**32**	1.0	0.07	1	B5C0023	03/03/2015	03/04/15 19:51	
Zinc	**89**	1.0	0.11	1	B5C0023	03/03/2015	03/04/15 19:51	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 02:15	
C4-C8	ND	1.0	0.20	1	B5C0085	03/04/2015	03/04/15 02:15	
Surrogate: 4-Bromofluorobenzene	*110 %*	*37 - 153*			B5C0085	03/04/2015	*03/04/15 02:15*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**15**	5.0	5.0	5	B5C0086	03/03/2015	03/04/15 23:47	
C23-C32	**120**	5.0	5.0	5	B5C0086	03/03/2015	03/04/15 23:47	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0086	03/03/2015	*03/04/15 23:47*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
1,1,1-Trichloroethane	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5C0091	03/04/2015	03/04/15 10:23	

Certificate of Analysis

...tec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID 1278-148-1.5
Lab ID: 1500747-27

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
1,1-Dichloroethane	ND	4.4	0.86	1	B5C0091	03/04/2015	03/04/15 10:23	
1,1-Dichloroethene	ND	4.4	0.99	1	B5C0091	03/04/2015	03/04/15 10:23	
1,1-Dichloropropene	ND	4.4	1.3	1	B5C0091	03/04/2015	03/04/15 10:23	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5C0091	03/04/2015	03/04/15 10:23	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5C0091	03/04/2015	03/04/15 10:23	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5C0091	03/04/2015	03/04/15 10:23	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
1,2-Dibromo-3-chloropropane	ND	8.8	1.9	1	B5C0091	03/04/2015	03/04/15 10:23	
1,2-Dibromoethane	ND	4.4	1.3	1	B5C0091	03/04/2015	03/04/15 10:23	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5C0091	03/04/2015	03/04/15 10:23	
...Dichloroethane	ND	4.4	0.77	1	B5C0091	03/04/2015	03/04/15 10:23	
...-Dichloropropane	ND	4.4	3.0	1	B5C0091	03/04/2015	03/04/15 10:23	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
1,3-Dichloropropane	ND	4.4	0.97	1	B5C0091	03/04/2015	03/04/15 10:23	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5C0091	03/04/2015	03/04/15 10:23	
2,2-Dichloropropane	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
2-Chlorotoluene	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
4-Chlorotoluene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
4-Isopropyltoluene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
Benzene	ND	4.4	1.0	1	B5C0091	03/04/2015	03/04/15 10:23	
Bromobenzene	ND	4.4	1.4	1	B5C0091	03/04/2015	03/04/15 10:23	
Bromochloromethane	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
Bromodichloromethane	ND	4.4	1.4	1	B5C0091	03/04/2015	03/04/15 10:23	
Bromoform	ND	4.4	1.3	1	B5C0091	03/04/2015	03/04/15 10:23	
Bromomethane	ND	4.4	2.3	1	B5C0091	03/04/2015	03/04/15 10:23	
Carbon disulfide	2.1	4.4	2.0	1	B5C0091	03/04/2015	03/04/15 10:23	J
Carbon tetrachloride	ND	4.4	1.3	1	B5C0091	03/04/2015	03/04/15 10:23	
Chlorobenzene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
Chloroethane	ND	4.4	4.3	1	B5C0091	03/04/2015	03/04/15 10:23	
Chloroform	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
Chloromethane	ND	4.4	0.65	1	B5C0091	03/04/2015	03/04/15 10:23	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5C0091	03/04/2015	03/04/15 10:23	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5C0091	03/04/2015	03/04/15 10:23	
Di-isopropyl ether	ND	4.4	0.89	1	B5C0091	03/04/2015	03/04/15 10:23	
Dibromochloromethane	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
...romomethane	ND	4.4	1.7	1	B5C0091	03/04/2015	03/04/15 10:23	
...lorodifluoromethane	ND	4.4	0.65	1	B5C0091	03/04/2015	03/04/15 10:23	
Ethyl Acetate	ND	44	12	1	B5C0091	03/04/2015	03/04/15 10:23	
Ethyl Ether	ND	44	11	1	B5C0091	03/04/2015	03/04/15 10:23	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID 1278-148-1.5
Lab ID: 1500747-27

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5C0091	03/04/2015	03/04/15 10:23	
Ethylbenzene	ND	4.4	0.98	1	B5C0091	03/04/2015	03/04/15 10:23	
Freon-113	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
Hexachlorobutadiene	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
Isopropylbenzene	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
m,p-Xylene	ND	8.8	2.2	1	B5C0091	03/04/2015	03/04/15 10:23	
Methylene chloride	ND	4.4	4.4	1	B5C0091	03/04/2015	03/04/15 10:23	
MTBE	ND	4.4	0.79	1	B5C0091	03/04/2015	03/04/15 10:23	
n-Butylbenzene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
n-Propylbenzene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
Naphthalene	ND	4.4	2.8	1	B5C0091	03/04/2015	03/04/15 10:23	
o-Xylene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
sec-Butylbenzene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
Styrene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
tert-Amyl methyl ether	ND	4.4	0.90	1	B5C0091	03/04/2015	03/04/15 10:23	
tert-Butanol	ND	88	18	1	B5C0091	03/04/2015	03/04/15 10:23	
tert-Butylbenzene	ND	4.4	1.2	1	B5C0091	03/04/2015	03/04/15 10:23	
Tetrachloroethene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
Toluene	ND	4.4	0.78	1	B5C0091	03/04/2015	03/04/15 10:23	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5C0091	03/04/2015	03/04/15 10:23	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5C0091	03/04/2015	03/04/15 10:23	
Trichloroethene	ND	4.4	1.1	1	B5C0091	03/04/2015	03/04/15 10:23	
Trichlorofluoromethane	ND	4.4	1.6	1	B5C0091	03/04/2015	03/04/15 10:23	
Vinyl acetate	ND	44	9.4	1	B5C0091	03/04/2015	03/04/15 10:23	
Vinyl chloride	ND	4.4	0.90	1	B5C0091	03/04/2015	03/04/15 10:23	
Surrogate: 1,2-Dichloroethane-d4	*122 %*		*20 - 189*		B5C0091	03/04/2015	*03/04/15 10:23*	
Surrogate: 4-Bromofluorobenzene	*87.1 %*		*20 - 173*		B5C0091	03/04/2015	*03/04/15 10:23*	
Surrogate: Dibromofluoromethane	*108 %*		*26 - 178*		B5C0091	03/04/2015	*03/04/15 10:23*	
Surrogate: Toluene-d8	*99.0 %*		*31 - 166*		B5C0091	03/04/2015	*03/04/15 10:23*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-1-022515
Lab ID: 1500747-29

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:34	
Arsenic	**0.0026**	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:34	J
Barium	**0.0045**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:34	
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:33	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:34	
Chromium	**0.0010**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:34	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:34	
Copper	**0.0011**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:34	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:34	
Molybdenum	**0.0005**	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:34	J
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:34	
...nium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:34	
...ver	ND	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:34	
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:34	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:34	
Zinc	**0.0078**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:34	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 14:06	
C4-C8	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 14:06	
Surrogate: 4-Bromofluorobenzene	*90.7 %*	*70 - 130*			B5B0736	02/27/2015	*02/27/15 14:06*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5C0044	03/02/2015	03/03/15 04:12	
C23-C32	ND	0.05	0.05	1	B5C0044	03/02/2015	03/03/15 04:12	
Surrogate: p-Terphenyl	*63.4 %*	*20 - 141*			B5C0044	03/02/2015	*03/03/15 04:12*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 15:52	
...1-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 15:52	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 15:52	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 15:52	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-1-022515
Lab ID: 1500747-29

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:52	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:52	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:52	
1,2-Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:52	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:52	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 15:52	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 15:52	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 15:52	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:52	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 15:52	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 15:52	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 15:52	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:52	
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:52	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 15:52	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 15:52	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 15:52	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 15:52	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 15:52	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 15:52	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 15:52	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 15:52	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:52	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 15:52	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 15:52	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 15:52	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 15:52	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:52	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 15:52	
Dibromomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:52	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:52	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 15:52	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 15:52	

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-1-022515

Lab ID: 1500747-29

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl-tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 15:52	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:52	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 15:52	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 15:52	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 15:52	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 15:52	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 15:52	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:52	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 15:52	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 15:52	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 15:52	
..vlene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 15:52	
..-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 15:52	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 15:52	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:52	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 15:52	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 15:52	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 15:52	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 15:52	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:52	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 15:52	
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 15:52	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 15:52	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 15:52	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 15:52	
Surrogate: 1,2-Dichloroethane-d4	*88.2 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 15:52*	
Surrogate: 4-Bromofluorobenzene	*95.6 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 15:52*	
Surrogate: Dibromofluoromethane	*90.0 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 15:52*	
Surrogate: Toluene-d8	*81.4 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 15:52*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-2-022515

Lab ID: 1500747-30

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:38	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:38	
Barium	**0.0005**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:38	J
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:37	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:38	
Chromium	**0.0008**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:38	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:38	
Copper	**0.0010**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:38	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:38	
Molybdenum	ND	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:38	
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:38	
Selenium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:38	
Silver	ND	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:38	
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:38	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:38	
Zinc	0.0034	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:38	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 14:26	
C4-C8	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 14:26	
Surrogate: 4-Bromofluorobenzene	*84.0 %*	*70 - 130*			B5B0736	02/27/2015	*02/27/15 14:26*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5C0044	03/02/2015	03/03/15 04:28	
C23-C32	ND	0.05	0.05	1	B5C0044	03/02/2015	03/03/15 04:28	
Surrogate: p-Terphenyl	*63.5 %*	*20 - 141*			B5C0044	03/02/2015	*03/03/15 04:28*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 16:16	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 16:16	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 16:16	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 16:16	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Client Sample ID EBA-2-022515

Lab ID: 1500747-30

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:16	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:16	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 16:16	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:16	
...Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:16	
...,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:16	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 16:16	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 16:16	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 16:16	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:16	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 16:16	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 16:16	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 16:16	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:16	
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:16	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 16:16	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 16:16	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 16:16	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 16:16	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 16:16	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 16:16	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 16:16	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 16:16	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:16	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 16:16	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 16:16	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 16:16	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 16:16	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:16	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 16:16	
...romomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:16	
...lorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:16	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 16:16	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 16:16	

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-2-022515
Lab ID: 1500747-30

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 16:16	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:16	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 16:16	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 16:16	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 16:16	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 16:16	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 16:16	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:16	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:16	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:16	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 16:16	
o-Xylene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 16:16	
sec-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 16:16	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 16:16	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:16	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 16:16	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 16:16	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 16:16	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 16:16	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:16	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:16	
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:16	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 16:16	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 16:16	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:16	
Surrogate: 1,2-Dichloroethane-d4	*87.5 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 16:16*	
Surrogate: 4-Bromofluorobenzene	*93.7 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 16:16*	
Surrogate: Dibromofluoromethane	*88.8 %*	*55 - 138*			B5B0728	02/27/2015	*02/27/15 16:16*	
Surrogate: Toluene-d8	*79.6 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 16:16*	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-3-022515
Lab ID: 1500747-31

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0062	03/03/2015	03/04/15 11:42	
Arsenic	ND	0.010	0.0024	1	B5C0062	03/03/2015	03/04/15 11:42	
Barium	**0.0005**	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:42	J
Beryllium	ND	0.0030	0.0002	1	B5C0062	03/03/2015	03/04/15 11:41	
Cadmium	ND	0.0030	0.0001	1	B5C0062	03/03/2015	03/04/15 11:42	
Chromium	**0.0010**	0.0030	0.0003	1	B5C0062	03/03/2015	03/04/15 11:42	J
Cobalt	ND	0.0030	0.0004	1	B5C0062	03/03/2015	03/04/15 11:42	
Copper	**0.0050**	0.0090	0.0009	1	B5C0062	03/03/2015	03/04/15 11:42	J
Lead	ND	0.0050	0.0014	1	B5C0062	03/03/2015	03/04/15 11:42	
Molybdenum	ND	0.0050	0.0005	1	B5C0062	03/03/2015	03/04/15 11:42	
Nickel	ND	0.0050	0.0004	1	B5C0062	03/03/2015	03/04/15 11:42	
...nium	ND	0.010	0.0040	1	B5C0062	03/03/2015	03/04/15 11:42	
...ver	ND	0.0030	0.0006	1	B5C0062	03/03/2015	03/04/15 11:42	
Thallium	ND	0.015	0.0026	1	B5C0062	03/03/2015	03/04/15 11:42	
Vanadium	ND	0.0030	0.0013	1	B5C0062	03/03/2015	03/04/15 11:42	
Zinc	**0.0048**	0.025	0.0017	1	B5C0062	03/03/2015	03/04/15 11:42	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 14:46	
C4-C8	ND	0.05	0.05	1	B5B0736	02/27/2015	02/27/15 14:46	
Surrogate: 4-Bromofluorobenzene	*91.5 %*	*70 - 130*			B5B0736	02/27/2015	*02/27/15 14:46*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5C0044	03/02/2015	03/03/15 04:44	
C23-C32	ND	0.05	0.05	1	B5C0044	03/02/2015	03/03/15 04:44	
Surrogate: p-Terphenyl	*64.3 %*	*20 - 141*			B5C0044	03/02/2015	*03/03/15 04:44*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 16:41	
...-Trichloroethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 16:41	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 16:41	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5B0728	02/27/2015	02/27/15 16:41	

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/06/2015

Client Sample ID EBA-3-022515
Lab ID: 1500747-31

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:41	
1,1-Dichloroethene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:41	
1,1-Dichloropropene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2-Dibromoethane	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2-Dichloroethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:41	
1,2-Dichloropropane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:41	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:41	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 16:41	
1,3-Dichloropropane	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 16:41	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5B0728	02/27/2015	02/27/15 16:41	
2,2-Dichloropropane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:41	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5B0728	02/27/2015	02/27/15 16:41	
2-Chlorotoluene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 16:41	
4-Chlorotoluene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 16:41	
4-Isopropyltoluene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:41	
Benzene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:41	
Bromobenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 16:41	
Bromochloromethane	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 16:41	
Bromodichloromethane	ND	0.50	0.20	1	B5B0728	02/27/2015	02/27/15 16:41	
Bromoform	ND	0.50	0.34	1	B5B0728	02/27/2015	02/27/15 16:41	
Bromomethane	ND	0.50	0.49	1	B5B0728	02/27/2015	02/27/15 16:41	
Carbon disulfide	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 16:41	
Carbon tetrachloride	ND	0.50	0.18	1	B5B0728	02/27/2015	02/27/15 16:41	
Chlorobenzene	ND	0.50	0.33	1	B5B0728	02/27/2015	02/27/15 16:41	
Chloroethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:41	
Chloroform	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 16:41	
Chloromethane	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 16:41	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 16:41	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5B0728	02/27/2015	02/27/15 16:41	
Di-isopropyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:41	
Dibromochloromethane	ND	0.50	0.44	1	B5B0728	02/27/2015	02/27/15 16:41	
Dibromomethane	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:41	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:41	
Ethyl Acetate	ND	10	4.0	1	B5B0728	02/27/2015	02/27/15 16:41	
Ethyl Ether	ND	10	2.9	1	B5B0728	02/27/2015	02/27/15 16:41	

Certificate of Analysis

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Client Sample ID EBA-3-022515
Lab ID: 1500747-31

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5B0728	02/27/2015	02/27/15 16:41	
Ethylbenzene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:41	
Freon-113	ND	0.50	0.35	1	B5B0728	02/27/2015	02/27/15 16:41	
Hexachlorobutadiene	ND	0.50	0.47	1	B5B0728	02/27/2015	02/27/15 16:41	
Isopropylbenzene	ND	0.50	0.25	1	B5B0728	02/27/2015	02/27/15 16:41	
m,p-Xylene	ND	1.0	0.46	1	B5B0728	02/27/2015	02/27/15 16:41	
Methylene chloride	ND	1.0	1.0	1	B5B0728	02/27/2015	02/27/15 16:41	
MTBE	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:41	
n-Butylbenzene	ND	0.50	0.27	1	B5B0728	02/27/2015	02/27/15 16:41	
n-Propylbenzene	ND	0.50	0.26	1	B5B0728	02/27/2015	02/27/15 16:41	
Naphthalene	ND	0.50	0.40	1	B5B0728	02/27/2015	02/27/15 16:41	
...lene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 16:41	
...-Butylbenzene	ND	0.50	0.36	1	B5B0728	02/27/2015	02/27/15 16:41	
Styrene	ND	0.50	0.29	1	B5B0728	02/27/2015	02/27/15 16:41	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:41	
tert-Butanol	ND	10	7.6	1	B5B0728	02/27/2015	02/27/15 16:41	
tert-Butylbenzene	ND	0.50	0.32	1	B5B0728	02/27/2015	02/27/15 16:41	
Tetrachloroethene	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 16:41	
Toluene	ND	0.50	0.21	1	B5B0728	02/27/2015	02/27/15 16:41	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:41	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5B0728	02/27/2015	02/27/15 16:41	
Trichloroethene	ND	0.50	0.31	1	B5B0728	02/27/2015	02/27/15 16:41	
Trichlorofluoromethane	ND	0.50	0.28	1	B5B0728	02/27/2015	02/27/15 16:41	
Vinyl acetate	ND	10	2.6	1	B5B0728	02/27/2015	02/27/15 16:41	
Vinyl chloride	ND	0.50	0.23	1	B5B0728	02/27/2015	02/27/15 16:41	
Surrogate: 1,2-Dichloroethane-d4	*87.2 %*	*49 - 148*			B5B0728	02/27/2015	*02/27/15 16:41*	
Surrogate: 4-Bromofluorobenzene	*94.8 %*	*65 - 132*			B5B0728	02/27/2015	*02/27/15 16:41*	
Surrogate: Dibromofluoromethane	*90.6 %*	*53 - 138*			B5B0728	02/27/2015	*02/27/15 16:41*	
Surrogate: Toluene-d8	*82.6 %*	*60 - 120*			B5B0728	02/27/2015	*02/27/15 16:41*	

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QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0021 - EPA 3050B_S									
Blank (B5C0021-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.192913	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.087571	2.0			NR				J
Lead	0.157638	1.0			NR				J
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.727018	1.0			NR				J
LCS (B5C0021-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	46.6636	2.0	50.0000		93.3	80 - 120			
Arsenic	46.2994	1.0	50.0000		92.6	80 - 120			
Barium	48.8312	1.0	50.0000		97.7	80 - 120			
Beryllium	48.1228	1.0	50.0000		96.2	80 - 120			
Cadmium	47.3004	1.0	50.0000		94.6	80 - 120			
Chromium	49.3229	1.0	50.0000		98.6	80 - 120			
Cobalt	48.8464	1.0	50.0000		97.7	80 - 120			
Copper	46.7753	2.0	50.0000		93.6	80 - 120			
Lead	48.8470	1.0	50.0000		97.7	80 - 120			
Molybdenum	48.8542	1.0	50.0000		97.7	80 - 120			
Nickel	47.3135	1.0	50.0000		94.6	80 - 120			
Selenium	45.7776	1.0	50.0000		91.6	80 - 120			
Silver	46.6702	1.0	50.0000		93.3	80 - 120			
Thallium	47.9869	1.0	50.0000		96.0	80 - 120			
Vanadium	51.0118	1.0	50.0000		102	80 - 120			
Zinc	46.7496	1.0	50.0000		93.5	80 - 120			
Duplicate (B5C0021-DUP1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0		ND	NR			20	
Arsenic	4.77083	1.0		5.18918	NR		8.40	20	
Barium	37.7935	1.0		38.8990	NR		2.88	20	
Beryllium	0.596068	1.0		0.602958	NR		1.15	20	J
Cadmium	0.748310	1.0		0.860002	NR		13.9	20	J
Chromium	11.0154	1.0		11.6837	NR		5.89	20	
Cobalt	7.62912	1.0		5.53445	NR		31.8	20	R

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0021 - EPA 3050B_S (continued)									
Duplicate (B5C0021-DUP1) - Continued		**Source: 1500744-15**			**Prepared: 3/3/2015 Analyzed: 3/4/2015**				
Copper	10.4651	2.0		12.2462	NR		15.7	20	
Lead	23.9702	1.0		17.0744	NR		33.6	20	R
Molybdenum	0.665652	1.0		1.44098	NR		73.6	20	R, J
Nickel	16.4441	1.0		19.1137	NR		15.0	20	
Selenium	0.882764	1.0		0.998697	NR		12.3	20	J
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	21.3179	1.0		23.6820	NR		10.5	20	
Zinc	41.2901	1.0		49.4178	NR		17.9	20	
Matrix Spike (B5C0021-MS1)		**Source: 1500744-15**			**Prepared: 3/3/2015 Analyzed: 3/4/2015**				
Antimony	84.5595	2.0	124.378	ND	68.0	28 - 106			
Arsenic	98.2414	1.0	124.378	5.18918	74.8	57 - 109			
Barium	131.270	1.0	124.378	38.8990	74.3	18 - 159			
Beryllium	97.8930	1.0	124.378	0.602958	78.2	61 - 107			
ıium	93.2059	1.0	124.378	0.860002	74.2	53 - 104			
ɔmium	110.924	1.0	124.378	11.6837	79.8	53 - 121			
Cobalt	99.6943	1.0	124.378	5.53445	75.7	55 - 109			
Copper	109.786	2.0	124.378	12.2462	78.4	58 - 124			
Lead	107.534	1.0	124.378	17.0744	72.7	35 - 129			
Molybdenum	96.2276	1.0	124.378	1.44098	76.2	57 - 108			
Nickel	109.091	1.0	124.378	19.1137	72.3	44 - 122			
Selenium	93.8068	1.0	124.378	0.998697	74.6	54 - 104			
Silver	97.1059	1.0	124.378	ND	78.1	60 - 112			
Thallium	90.1528	1.0	124.378	ND	72.5	50 - 103			
Vanadium	121.821	1.0	124.378	23.6820	78.9	54 - 123			
Zinc	134.379	1.0	124.378	49.4178	68.3	29 - 132			
Matrix Spike Dup (B5C0021-MSD1)		**Source: 1500744-15**			**Prepared: 3/3/2015 Analyzed: 3/4/2015**				
Antimony	82.8835	2.0	125.628	ND	66.0	28 - 106	2.00	20	
Arsenic	96.7211	1.0	125.628	5.18918	72.9	57 - 109	1.56	20	
Barium	128.676	1.0	125.628	38.8990	71.5	18 - 159	2.00	20	
Beryllium	96.7767	1.0	125.628	0.602958	76.6	61 - 107	1.15	20	
Cadmium	92.9196	1.0	125.628	0.860002	73.3	53 - 104	0.308	20	
Chromium	105.879	1.0	125.628	11.6837	75.0	53 - 121	4.65	20	
Cobalt	99.5439	1.0	125.628	5.53445	74.8	55 - 109	0.151	20	
Copper	110.618	2.0	125.628	12.2462	78.3	58 - 124	0.754	20	
Lead	108.094	1.0	125.628	17.0744	72.5	35 - 129	0.519	20	
Molybdenum	95.6506	1.0	125.628	1.44098	75.0	57 - 108	0.601	20	
Nickel	109.222	1.0	125.628	19.1137	71.7	44 - 122	0.120	20	
Selenium	92.5415	1.0	125.628	0.998697	72.9	54 - 104	1.36	20	
Silver	96.7727	1.0	125.628	ND	77.0	60 - 112	0.344	20	
Thallium	88.8729	1.0	125.628	ND	70.7	50 - 103	1.43	20	
·dium	121.385	1.0	125.628	23.6820	77.8	54 - 123	0.359	20	
	142.803	1.0	125.628	49.4178	74.3	29 - 132	6.08	20	
Batch B5C0022 - EPA 3050B_S									

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0022 - EPA 3050B_S (continued)									
Blank (B5C0022-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.190071	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.112974	2.0			NR				J
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.260248	1.0			NR				J
LCS (B5C0022-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	44.9198	2.0	50.0000		89.8	80 - 120			
Arsenic	43.2775	1.0	50.0000		86.6	80 - 120			
Barium	48.2761	1.0	50.0000		96.6	80 - 120			
Beryllium	48.4710	1.0	50.0000		96.9	80 - 120			
Cadmium	46.3171	1.0	50.0000		92.6	80 - 120			
Chromium	48.9647	1.0	50.0000		97.9	80 - 120			
Cobalt	48.4260	1.0	50.0000		96.9	80 - 120			
Copper	46.4074	2.0	50.0000		92.8	80 - 120			
Lead	47.4790	1.0	50.0000		95.0	80 - 120			
Molybdenum	48.1353	1.0	50.0000		96.3	80 - 120			
Nickel	46.7083	1.0	50.0000		93.4	80 - 120			
Selenium	44.0862	1.0	50.0000		88.2	80 - 120			
Silver	46.1308	1.0	50.0000		92.3	80 - 120			
Thallium	45.9394	1.0	50.0000		91.9	80 - 120			
Vanadium	50.8180	1.0	50.0000		102	80 - 120			
Zinc	45.4773	1.0	50.0000		91.0	80 - 120			
Duplicate (B5C0022-DUP1)		Source: 1500747-03			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	36.6005	2.0		3.65948	NR		164	20	R
Arsenic	16.7133	1.0		10.2785	NR		47.7	20	R
Barium	123.295	1.0		110.120	NR		11.3	20	
Beryllium	1.17198	1.0		1.01592	NR		14.3	20	
Cadmium	1.14398	1.0		0.920700	NR		21.6	20	R
Chromium	44.9861	1.0		38.4272	NR		15.7	20	
Cobalt	8.53628	1.0		7.64949	NR		11.0	20	
Copper	32.9545	2.0		28.4042	NR		14.8	20	
Lead	22.8712	1.0		22.1737	NR		3.10	20	
Molybdenum	1.20990	1.0		0.619476	NR		64.5	20	R
Nickel	32.0063	1.0		29.8091	NR		7.11	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0022 - EPA 3050B_S (continued)									
Duplicate (B5C0022-DUP1) - Continued		**Source: 1500747-03**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Selenium	1.13747	1.0		1.23637	NR		8.33	20	
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	71.0843	1.0		59.6864	NR		17.4	20	
Zinc	78.0691	1.0		73.2557	NR		6.36	20	
Matrix Spike (B5C0022-MS1)		**Source: 1500747-03**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	85.7341	2.0	125.000	3.65948	65.7	28 - 106			
Arsenic	104.461	1.0	125.000	10.2785	75.3	57 - 109			
Barium	205.580	1.0	125.000	110.120	76.4	18 - 159			
Beryllium	103.825	1.0	125.000	1.01592	82.2	61 - 107			
Cadmium	95.8176	1.0	125.000	0.920700	75.9	53 - 104			
Chromium	139.289	1.0	125.000	38.4272	80.7	53 - 121			
Cobalt	104.402	1.0	125.000	7.64949	77.4	55 - 109			
Copper	145.538	2.0	125.000	28.4042	93.7	58 - 124			
	118.618	1.0	125.000	22.1737	77.2	35 - 129			
...bdenum	99.9590	1.0	125.000	0.619476	79.5	57 - 108			
Nickel	122.291	1.0	125.000	29.8091	74.0	44 - 122			
Selenium	97.3075	1.0	125.000	1.23637	76.9	54 - 104			
Silver	104.241	1.0	125.000	ND	83.4	60 - 112			
Thallium	85.9192	1.0	125.000	ND	68.7	50 - 103			
Vanadium	172.541	1.0	125.000	59.6864	90.3	54 - 123			
Zinc	163.350	1.0	125.000	73.2557	72.1	29 - 132			
Matrix Spike Dup (B5C0022-MSD1)		**Source: 1500747-03**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	88.0594	2.0	125.000	3.65948	67.5	28 - 106	2.68	20	
Arsenic	107.318	1.0	125.000	10.2785	77.6	57 - 109	2.70	20	
Barium	206.641	1.0	125.000	110.120	77.2	18 - 159	0.515	20	
Beryllium	109.050	1.0	125.000	1.01592	86.4	61 - 107	4.91	20	
Cadmium	99.0982	1.0	125.000	0.920700	78.5	53 - 104	3.37	20	
Chromium	144.955	1.0	125.000	38.4272	85.2	53 - 121	3.99	20	
Cobalt	107.322	1.0	125.000	7.64949	79.7	55 - 109	2.76	20	
Copper	139.745	2.0	125.000	28.4042	89.1	58 - 124	4.06	20	
Lead	116.622	1.0	125.000	22.1737	75.6	35 - 129	1.70	20	
Molybdenum	102.704	1.0	125.000	0.619476	81.7	57 - 108	2.71	20	
Nickel	125.384	1.0	125.000	29.8091	76.5	44 - 122	2.50	20	
Selenium	99.6180	1.0	125.000	1.23637	78.7	54 - 104	2.35	20	
Silver	107.424	1.0	125.000	ND	85.9	60 - 112	3.01	20	
Thallium	89.2119	1.0	125.000	ND	71.4	50 - 103	3.76	20	
Vanadium	173.257	1.0	125.000	59.6864	90.9	54 - 123	0.414	20	
Zinc	166.090	1.0	125.000	73.2557	74.3	29 - 132	1.66	20	
Batch B5C0023 - EPA 3050B_S									
...k (B5C0023-BLK1)					Prepared: 3/3/2015 Analyzed: 3/5/2015				
...mony	ND	2.0			NR				
Arsenic	ND	1.0			NR				

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0023 - EPA 3050B_S (continued)									
Blank (B5C0023-BLK1) - Continued					Prepared: 3/3/2015 Analyzed: 3/5/2015				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.179161	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.068863	2.0			NR				J
Lead	0.080287	1.0			NR				J
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.426617	1.0			NR				J
LCS (B5C0023-BS1)					Prepared: 3/3/2015 Analyzed: 3/5/2015				
Antimony	45.7452	2.0	50.0000		91.5	80 - 120			
Arsenic	45.0942	1.0	50.0000		90.2	80 - 120			
Barium	48.2886	1.0	50.0000		96.6	80 - 120			
Beryllium	47.9013	1.0	50.0000		95.8	80 - 120			
Cadmium	46.6040	1.0	50.0000		93.2	80 - 120			
Chromium	49.0669	1.0	50.0000		98.1	80 - 120			
Cobalt	48.0770	1.0	50.0000		96.2	80 - 120			
Copper	47.1004	2.0	50.0000		94.2	80 - 120			
Lead	48.1279	1.0	50.0000		96.3	80 - 120			
Molybdenum	48.2685	1.0	50.0000		96.5	80 - 120			
Nickel	46.8454	1.0	50.0000		93.7	80 - 120			
Selenium	43.5570	1.0	50.0000		87.1	80 - 120			
Silver	46.9981	1.0	50.0000		94.0	80 - 120			
Thallium	46.2357	1.0	50.0000		92.5	80 - 120			
Vanadium	50.3452	1.0	50.0000		101	80 - 120			
Zinc	45.7781	1.0	50.0000		91.6	80 - 120			
Duplicate (B5C0023-DUP1)		Source: 1500747-17			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	0.995191	2.0		0.797507	NR		22.1	20	R, J
Arsenic	5.63606	1.0		5.59321	NR		0.763	20	
Barium	70.7814	1.0		70.0110	NR		1.09	20	
Beryllium	0.933174	1.0		0.812174	NR		13.9	20	J
Cadmium	1.79754	1.0		1.74196	NR		3.14	20	
Chromium	37.2360	1.0		32.6727	NR		13.1	20	
Cobalt	4.12582	1.0		4.29652	NR		4.05	20	
Copper	19.7642	2.0		19.9895	NR		1.13	20	
Lead	15.2651	1.0		16.5164	NR		7.87	20	
Molybdenum	3.99662	1.0		3.93469	NR		1.56	20	
Nickel	28.1671	1.0		28.2604	NR		0.331	20	
Selenium	1.64628	1.0		1.50176	NR		9.18	20	
Silver	ND	1.0		ND	NR			20	

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0023 - EPA 3050B_S (continued)									
Duplicate (B5C0023-DUP1) - Continued		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Thallium	ND	1.0		ND	NR			20	
Vanadium	62.1359	1.0		55.2152	NR		11.8	20	
Zinc	61.3055	1.0		63.0510	NR		2.81	20	
Matrix Spike (B5C0023-MS1)		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	92.8654	2.0	125.000	0.797507	73.7	28 - 106			
Arsenic	108.910	1.0	125.000	5.59321	82.7	57 - 109			
Barium	193.858	1.0	125.000	70.0110	99.1	18 - 159			
Beryllium	113.953	1.0	125.000	0.812174	90.5	61 - 107			
Cadmium	104.731	1.0	125.000	1.74196	82.4	53 - 104			
Chromium	148.415	1.0	125.000	32.6727	92.6	53 - 121			
Cobalt	110.893	1.0	125.000	4.29652	85.3	55 - 109			
Copper	140.497	2.0	125.000	19.9895	96.4	58 - 124			
Lead	194.708	1.0	125.000	16.5164	143	35 - 129			M1
Molybdenum	112.607	1.0	125.000	3.93469	86.9	57 - 108			
...l	134.265	1.0	125.000	28.2604	84.8	44 - 122			
...nium	106.711	1.0	125.000	1.50176	84.2	54 - 104			
Silver	116.727	1.0	125.000	ND	93.4	60 - 112			
Thallium	95.4576	1.0	125.000	ND	76.4	50 - 103			
Vanadium	185.216	1.0	125.000	55.2152	104	54 - 123			
Zinc	167.343	1.0	125.000	63.0510	83.4	29 - 132			
Matrix Spike Dup (B5C0023-MSD1)		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	85.1782	2.0	125.000	0.797507	67.5	28 - 106	8.64	20	
Arsenic	99.2098	1.0	125.000	5.59321	74.9	57 - 109	9.32	20	
Barium	167.868	1.0	125.000	70.0110	78.3	18 - 159	14.4	20	
Beryllium	103.876	1.0	125.000	0.812174	82.5	61 - 107	9.25	20	
Cadmium	95.0735	1.0	125.000	1.74196	74.7	53 - 104	9.67	20	
Chromium	137.360	1.0	125.000	32.6727	83.7	53 - 121	7.74	20	
Cobalt	100.876	1.0	125.000	4.29652	77.3	55 - 109	9.46	20	
Copper	130.523	2.0	125.000	19.9895	88.4	58 - 124	7.36	20	
Lead	122.499	1.0	125.000	16.5164	84.8	35 - 129	45.5	20	R
Molybdenum	100.983	1.0	125.000	3.93469	77.6	57 - 108	10.9	20	
Nickel	122.353	1.0	125.000	28.2604	75.3	44 - 122	9.28	20	
Selenium	97.4687	1.0	125.000	1.50176	76.8	54 - 104	9.05	20	
Silver	106.075	1.0	125.000	ND	84.9	60 - 112	9.56	20	
Thallium	86.9832	1.0	125.000	ND	69.6	50 - 103	9.29	20	
Vanadium	167.992	1.0	125.000	55.2152	90.2	54 - 123	9.75	20	
Zinc	155.930	1.0	125.000	63.0510	74.3	29 - 132	7.06	20	
Batch B5C0062 - EPA 3010A_W									
Blank (B5C0062-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	0.010			NR				
...ic	ND	0.010			NR				
...um	ND	0.0030			NR				
Beryllium	ND	0.0030			NR				

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Blank (B5C0062-BLK1) - Continued					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Cadmium	ND	0.0030			NR				
Chromium	9.710E-4	0.0030			NR				J
Cobalt	ND	0.0030			NR				
Copper	0.001759	0.0090			NR				J
Lead	ND	0.0050			NR				
Molybdenum	ND	0.0050			NR				
Nickel	0.002058	0.0050			NR				J
Selenium	ND	0.010			NR				
Silver	ND	0.0030			NR				
Thallium	ND	0.015			NR				
Vanadium	ND	0.0030			NR				
Zinc	0.004252	0.025			NR				J
LCS (B5C0062-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	0.954611	0.010	1.00000		95.5	80 - 120			
Arsenic	0.881485	0.010	1.00000		88.1	80 - 120			
Barium	0.989988	0.0030	1.00000		99.0	80 - 120			
Beryllium	1.01634	0.0030	1.00000		102	80 - 120			
Cadmium	0.962915	0.0030	1.00000		96.3	80 - 120			
Chromium	0.989438	0.0030	1.00000		98.9	80 - 120			
Cobalt	0.989686	0.0030	1.00000		99.0	80 - 120			
Copper	0.973899	0.0090	1.00000		97.4	80 - 120			
Lead	0.990508	0.0050	1.00000		99.1	80 - 120			
Molybdenum	0.967244	0.0050	1.00000		96.7	80 - 120			
Nickel	0.967320	0.0050	1.00000		96.7	80 - 120			
Selenium	0.945843	0.010	1.00000		94.6	80 - 120			
Silver	0.985629	0.0030	1.00000		98.6	80 - 120			
Thallium	0.963374	0.015	1.00000		96.3	80 - 120			
Vanadium	1.02540	0.0030	1.00000		103	80 - 120			
Zinc	0.944978	0.025	1.00000		94.5	80 - 120			
Duplicate (B5C0062-DUP1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	ND	0.010		ND	NR			20	
Arsenic	ND	0.010		ND	NR			20	
Barium	0.000519	0.0030		0.000564	NR		8.15	20	J
Beryllium	ND	0.0030		ND	NR			20	
Cadmium	ND	0.0030		ND	NR			20	
Chromium	0.000928	0.0030		0.000903	NR		2.77	20	J
Cobalt	ND	0.0030		ND	NR			20	
Copper	0.001308	0.0090		0.001309	NR		0.126	20	J
Lead	ND	0.0050		ND	NR			20	
Molybdenum	ND	0.0050		0.000486	NR			20	
Nickel	ND	0.0050		ND	NR			20	
Selenium	ND	0.010		ND	NR			20	
Silver	ND	0.0030		0.000731	NR			20	
Thallium	ND	0.015		ND	NR			20	
Vanadium	ND	0.0030		ND	NR			20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0062 - EPA 3010A_W (continued)									
Duplicate (B5C0062-DUP1) - Continued		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Zinc	0.004721	0.025		4.0129E-3	NR		16.2	20	J
Matrix Spike (B5C0062-MS1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.42910	0.010	2.50000	ND	97.2	71 - 129			
Arsenic	2.26662	0.010	2.50000	ND	90.7	80 - 128			
Barium	2.48027	0.0030	2.50000	0.000564	99.2	77 - 124			
Beryllium	2.55852	0.0030	2.50000	ND	102	88 - 116			
Cadmium	2.43512	0.0030	2.50000	ND	97.4	83 - 116			
Chromium	2.49292	0.0030	2.50000	0.000903	99.7	86 - 116			
Cobalt	2.48154	0.0030	2.50000	ND	99.3	83 - 117			
Copper	2.50852	0.0090	2.50000	0.001309	100	87 - 121			
Lead	2.43611	0.0050	2.50000	ND	97.4	85 - 114			
Molybdenum	2.48584	0.0050	2.50000	0.000486	99.4	81 - 117			
Nickel	2.45526	0.0050	2.50000	ND	98.2	76 - 121			
Selenium	2.40789	0.010	2.50000	ND	96.3	77 - 125			
[illegible]	2.49917	0.0030	2.50000	0.000731	99.9	77 - 129			
[illegible]dium	2.44110	0.015	2.50000	ND	97.6	51 - 140			
Vanadium	2.61522	0.0030	2.50000	ND	105	86 - 120			
Zinc	2.41301	0.025	2.50000	4.0129E-3	96.4	75 - 123			
Matrix Spike Dup (B5C0062-MSD1)		**Source: 1500725-02**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
Antimony	2.43388	0.010	2.50000	ND	97.4	71 - 129	0.197	20	
Arsenic	2.27262	0.010	2.50000	ND	90.9	80 - 128	0.264	20	
Barium	2.47755	0.0030	2.50000	0.000564	99.1	77 - 124	0.110	20	
Beryllium	2.53160	0.0030	2.50000	ND	101	88 - 116	1.06	20	
Cadmium	2.43214	0.0030	2.50000	ND	97.3	83 - 116	0.123	20	
Chromium	2.49053	0.0030	2.50000	0.000903	99.6	86 - 116	0.0958	20	
Cobalt	2.47858	0.0030	2.50000	ND	99.1	83 - 117	0.120	20	
Copper	2.49966	0.0090	2.50000	0.001309	99.9	87 - 121	0.354	20	
Lead	2.42680	0.0050	2.50000	ND	97.1	85 - 114	0.383	20	
Molybdenum	2.48272	0.0050	2.50000	0.000486	99.3	81 - 117	0.125	20	
Nickel	2.45250	0.0050	2.50000	ND	98.1	76 - 121	0.113	20	
Selenium	2.41119	0.010	2.50000	ND	96.4	77 - 125	0.137	20	
Silver	2.49298	0.0030	2.50000	0.000731	99.7	77 - 129	0.248	20	
Thallium	2.45002	0.015	2.50000	ND	98.0	51 - 140	0.364	20	
Vanadium	2.61133	0.0030	2.50000	ND	104	86 - 120	0.149	20	
Zinc	2.41345	0.025	2.50000	4.0129E-3	96.4	75 - 123	0.0183	20	

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0058 - EPA 245.1/7470_W									
Blank (B5C0058-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20			NR				
LCS (B5C0058-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.6212	0.20	10.0000		106	80 - 120			
Duplicate (B5C0058-DUP1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.20		ND	NR			20	
Matrix Spike (B5C0058-MS1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.4453	0.20	10.0000	ND	104	70 - 130			
Matrix Spike Dup (B5C0058-MSD1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	10.7496	0.20	10.0000	ND	107	70 - 130	2.87	20	
Post Spike (B5C0058-PS1)		Source: 1500725-02			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	5.27241		5.00000	-0.012331	105	85 - 115			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0027 - EPA 7471_S									
Blank (B5C0027-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0027-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.845796	0.10	0.833333		101	80 - 120			
Duplicate (B5C0027-DUP1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.009586	0.10		0.011135	NR		15.0	20	J
Matrix Spike (B5C0027-MS1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.885656	0.10	0.833333	0.011135	105	70 - 130			
Matrix Spike Dup (B5C0027-MSD1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.887108	0.10	0.833333	0.011135	105	70 - 130	0.164	20	
Post Spike (B5C0027-PS1)		Source: 1500744-15			Prepared: 3/3/2015 Analyzed: 3/3/2015				
...cury	0.005918		5.00000E-3	0.000134	116	85 - 115			M1
...atch B5C0028 - EPA 7471_S									
Blank (B5C0028-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0028-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.793591	0.10	0.833333		95.2	80 - 120			
Duplicate (B5C0028-DUP1)		Source: 1500747-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.025170	0.10		0.028460	NR		12.3	20	J
Matrix Spike (B5C0028-MS1)		Source: 1500747-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.892837	0.10	0.833333	0.028460	104	70 - 130			
Matrix Spike Dup (B5C0028-MSD1)		Source: 1500747-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.880251	0.10	0.833333	0.028460	102	70 - 130	1.42	20	
Post Spike (B5C0028-PS1)		Source: 1500747-03			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.005908		5.00000E-3	0.000342	111	85 - 115			
Batch B5C0029 - EPA 7471_S									
Blank (B5C0029-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	ND	0.10			NR				
LCS (B5C0029-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.821243	0.10	0.833333		98.5	80 - 120			
Duplicate (B5C0029-DUP1)		Source: 1500747-17			Prepared: 3/3/2015 Analyzed: 3/3/2015				
...cury	0.058405	0.10		0.053117	NR		9.48	20	J
Matrix Spike (B5C0029-MS1)		Source: 1500747-17			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.899848	0.10	0.833333	0.053117	102	70 - 130			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0029 - EPA 7471_S (continued)									
Matrix Spike (B5C0029-MS1) - Continued		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Matrix Spike Dup (B5C0029-MSD1)		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.881508	0.10	0.833333	0.053117	99.4	70 - 130	2.06	20	
Post Spike (B5C0029-PS1)		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Mercury	0.006418		5.00000E-3	0.000637	116	85 - 115			M1

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0736 - GCVOA_W									
Blank (B5B0736-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	0.05			NR				
C4-C8	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09375*		*0.100000*		*93.8*	*70 - 130*			
LCS (B5B0736-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	1.02800	0.05	1.00000		103	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.09068*		*0.100000*		*90.7*	*70 - 130*			
LCS Dup (B5B0736-BSD1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	0.988000	0.05	1.00000		98.8	70 - 130	3.97	20	
Surrogate: 4-Bromofluorobenzene	*0.09850*		*0.100000*		*98.5*	*70 - 130*			
Duplicate (B5B0736-DUP1)		**Source: 1500744-16**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
Gasoline Range Organics	ND	0.05		ND	NR			20	
...gate: 4-Bromofluorobenzene	*0.09113*		*0.100000*		*91.1*	*70 - 130*			
Batch B5C0074 - GCVOA_S									
Blank (B5C0074-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.2148*		*0.200000*		*107*	*37 - 153*			
LCS (B5C0074-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	4.53400	1.0	5.00000		90.7	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2043*		*0.200000*		*102*	*37 - 153*			
Duplicate (B5C0074-DUP1)		**Source: 1500747-04**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2055*		*0.200000*		*103*	*37 - 153*			
Matrix Spike (B5C0074-MS1)		**Source: 1500747-04**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	4.39800	1.0	5.00000	ND	88.0	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2189*		*0.200000*		*109*	*37 - 153*			
Matrix Spike Dup (B5C0074-MSD1)		**Source: 1500747-04**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	4.09500	1.0	5.00000	ND	81.9	20 - 130	7.14	20	
Surrogate: 4-Bromofluorobenzene	*0.2115*		*0.200000*		*106*	*37 - 153*			
Batch B5C0085 - GCVOA_S									
Blank (B5C0085-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
...line Range Organics	ND	1.0			NR				
...-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.2130*		*0.200000*		*107*	*37 - 153*			

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Report To : Anne Perez/Kristy Edblad
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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0085 - GCVOA_S (continued)									
LCS (B5C0085-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	4.48500	1.0	5.00000		89.7	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2266*		*0.200000*		*113*	*37 - 153*			
Duplicate (B5C0085-DUP1)		**Source: 1500747-27**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2241*		*0.200000*		*112*	*37 - 153*			
Matrix Spike (B5C0085-MS1)		**Source: 1500747-27**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	3.92200	1.0	5.00000	ND	78.4	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2341*		*0.200000*		*117*	*37 - 153*			
Matrix Spike Dup (B5C0085-MSD1)		**Source: 1500747-27**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
Gasoline Range Organics	3.83500	1.0	5.00000	ND	76.7	20 - 130	2.24	20	
Surrogate: 4-Bromofluorobenzene	*0.2264*		*0.200000*		*113*	*37 - 153*			
Batch B5C0108 - GCVOA_S									
Blank (B5C0108-BLK1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1954*		*0.200000*		*97.7*	*37 - 153*			
LCS (B5C0108-BS1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Gasoline Range Organics	4.62200	1.0	5.00000		92.4	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2046*		*0.200000*		*102*	*37 - 153*			
Duplicate (B5C0108-DUP1)		**Source: 1500760-01**			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2297*		*0.200000*		*115*	*37 - 153*			
Matrix Spike (B5C0108-MS1)		**Source: 1500760-01**			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Gasoline Range Organics	4.50400	1.0	5.00000	ND	90.1	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2340*		*0.200000*		*117*	*37 - 153*			
Matrix Spike Dup (B5C0108-MSD1)		**Source: 1500760-01**			Prepared: 3/4/2015 Analyzed: 3/4/2015				
Gasoline Range Organics	4.36900	1.0	5.00000	ND	87.4	20 - 130	3.04	20	
Surrogate: 4-Bromofluorobenzene	*0.2333*		*0.200000*		*117*	*37 - 153*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0044 - GCSEMI_DRO_W									
Blank (B5C0044-BLK1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
C9-C22	ND	0.05			NR				
C23-C32	ND	0.05			NR				
Surrogate: p-Terphenyl	*0.05476*		*8.00000E-2*		*68.4*	*20 - 141*			
LCS (B5C0044-BS1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
DRO	0.681030	0.05	1.00000		68.1	29 - 135			
Surrogate: p-Terphenyl	*0.05266*		*8.00000E-2*		*65.8*	*20 - 141*			
LCS Dup (B5C0044-BSD1)					Prepared: 3/2/2015 Analyzed: 3/3/2015				
DRO	0.635440	0.05	1.00000		63.5	29 - 135	6.93	20	
Surrogate: p-Terphenyl	*0.04845*		*8.00000E-2*		*60.6*	*20 - 141*			
Batch B5C0070 - GCSEMI_DRO_LL_S									
Blank (B5C0070-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
...22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.305*		*2.66667*		*48.9*	*26 - 123*			
LCS (B5C0070-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	20.4183	1.0	33.3333		61.3	47 - 127			
Surrogate: p-Terphenyl	*1.435*		*2.66667*		*53.8*	*26 - 123*			
Duplicate (B5C0070-DUP1)		**Source: 1500747-05**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	2.02133	1.0		1.89300	NR		6.56	20	
Surrogate: p-Terphenyl	*2.047*		*2.66667*		*76.8*	*26 - 123*			
Matrix Spike (B5C0070-MS1)		**Source: 1500747-05**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	20.6610	1.0	33.3333	1.89300	56.3	16 - 123			
Surrogate: p-Terphenyl	*3.711*		*5.33333*		*69.6*	*26 - 123*			
Matrix Spike Dup (B5C0070-MSD1)		**Source: 1500747-05**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
DRO	19.4533	1.0	33.3333	1.89300	52.7	16 - 123	6.02	20	
Surrogate: p-Terphenyl	*4.017*		*5.33333*		*75.3*	*26 - 123*			
Batch B5C0081 - GCSEMI_DRO_LL_S									
Blank (B5C0081-BLK1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.479*		*2.66667*		*55.5*	*26 - 123*			
...(B5C0081-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
...	19.5603	1.0	33.3333		58.7	47 - 127			
Surrogate: p-Terphenyl	*1.615*		*2.66667*		*60.6*	*26 - 123*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0081 - GCSEMI_DRO_LL_S (continued)									
Duplicate (B5C0081-DUP1)		**Source: 1500747-15**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
DRO	1.58700	1.0		3.27267	NR		69.4	20	R2
Surrogate: p-Terphenyl	*2.043*		*2.66667*		*76.6*	*26 - 123*			
Matrix Spike (B5C0081-MS1)		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
DRO	21.5420	1.0	33.3333	3.55267	54.0	16 - 123			
Surrogate: p-Terphenyl	*1.868*		*2.66667*		*70.0*	*26 - 123*			
Matrix Spike Dup (B5C0081-MSD1)		**Source: 1500747-17**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
DRO	22.4257	1.0	33.3333	3.55267	56.6	16 - 123	4.02	20	
Surrogate: p-Terphenyl	*1.996*		*2.66667*		*74.8*	*26 - 123*			
Batch B5C0086 - GCSEMI_DRO_LL_S									
Blank (B5C0086-BLK1)					Prepared: 3/3/2015 Analyzed: 3/5/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.227*		*2.66667*		*83.5*	*26 - 123*			
LCS (B5C0086-BS1)					Prepared: 3/3/2015 Analyzed: 3/4/2015				
DRO	22.9203	1.0	33.3333		68.8	47 - 127			
Surrogate: p-Terphenyl	*1.432*		*2.66667*		*53.7*	*26 - 123*			
Duplicate (B5C0086-DUP1)		**Source: 1500747-26**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
DRO	9.43133	2.0		8.28067	NR		13.0	20	
Surrogate: p-Terphenyl	*2.192*		*2.66667*		*82.2*	*26 - 123*			
Matrix Spike (B5C0086-MS1)		**Source: 1500769-01**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
DRO	61.0760	1.0	33.3333	60.1673	2.73	16 - 123			M2
Surrogate: p-Terphenyl	*1.739*		*2.66667*		*65.2*	*26 - 123*			
Matrix Spike Dup (B5C0086-MSD1)		**Source: 1500769-01**			Prepared: 3/3/2015 Analyzed: 3/4/2015				
DRO	35.3770	1.0	33.3333	60.1673	-74.4	16 - 123	53.3	20	R2
Surrogate: p-Terphenyl	*2.202*		*2.66667*		*82.6*	*26 - 123*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W									
Blank (B5B0728-BLK1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
...ichloropropane	ND	0.50			NR				
...,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
...Acetate	ND	10			NR				
...yl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
Blank (B5B0728-BLK1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*21.41*		*25.0000*		*85.6*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*25.04*		*25.0000*		*100*	*65 - 132*			
Surrogate: Dibromofluoromethane	*22.76*		*25.0000*		*91.0*	*55 - 138*			
Surrogate: Toluene-d8	*21.13*		*25.0000*		*84.5*	*60 - 120*			
LCS (B5B0728-BS1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.8300	0.50	20.0000		104	61 - 136			
Benzene	41.0000	0.50	40.0000		102	72 - 127			
Chlorobenzene	20.9800	0.50	20.0000		105	78 - 125			
MTBE	17.3100	0.50	20.0000		86.6	60 - 132			
Toluene	44.0400	0.50	40.0000		110	59 - 140			
Trichloroethene	22.0600	0.50	20.0000		110	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	*18.99*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.35*		*25.0000*		*97.4*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.83*		*25.0000*		*79.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.47*		*25.0000*		*81.9*	*60 - 120*			
LCS Dup (B5B0728-BSD1)					Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	20.0700	0.50	20.0000		100	61 - 136	3.72	20	
Benzene	41.1200	0.50	40.0000		103	72 - 127	0.292	20	
Chlorobenzene	20.7400	0.50	20.0000		104	78 - 125	1.15	20	
MTBE	17.2100	0.50	20.0000		86.0	60 - 132	0.579	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5B0728 - MSVOA_LL_W (continued)									
LCS Dup (B5B0728-BSD1) - Continued					Prepared: 2/27/2015 Analyzed: 2/27/2015				
Toluene	42.6000	0.50	40.0000		106	59 - 140	3.32	20	
Trichloroethene	22.4700	0.50	20.0000		112	67 - 130	1.84	20	
Surrogate: 1,2-Dichloroethane-d4	*19.01*		*25.0000*		*76.0*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*24.16*		*25.0000*		*96.6*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.35*		*25.0000*		*77.4*	*55 - 138*			
Surrogate: Toluene-d8	*20.61*		*25.0000*		*82.4*	*60 - 120*			
Duplicate (B5B0728-DUP1)		**Source: 1500725-19**			Prepared: 2/27/2015 Analyzed: 2/27/2015				
1,1-Dichloroethene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
Trichloroethene	ND	0.50		ND	NR			20	
...gate: 1,2-Dichloroethane-d4	*21.88*		*25.0000*		*87.5*	*49 - 148*			
...gate: 4-Bromofluorobenzene	*24.37*		*25.0000*		*97.5*	*65 - 132*			
Surrogate: Dibromofluoromethane	*23.32*		*25.0000*		*93.3*	*55 - 138*			
Surrogate: Toluene-d8	*20.74*		*25.0000*		*83.0*	*60 - 120*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0002 - MSVOA_S									
Blank (B5C0002-BLK1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0002 - MSVOA_S (continued)									
Blank (B5C0002-BLK1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
...-Butylbenzene	ND	5.0			NR				
...chloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*47.20*		*50.0000*		*94.4*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*45.05*		*50.0000*		*90.1*	*20 - 173*			
Surrogate: Dibromofluoromethane	*51.62*		*50.0000*		*103*	*26 - 178*			
Surrogate: Toluene-d8	*48.25*		*50.0000*		*96.5*	*31 - 166*			
LCS (B5C0002-BS1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1-Dichloroethene	51.1400	5.0	50.0000		102	60 - 130			
Benzene	99.7900	5.0	100.000		99.8	73 - 116			
Chlorobenzene	50.9300	5.0	50.0000		102	82 - 114			
MTBE	53.5900	5.0	50.0000		107	61 - 124			
Toluene	102.960	5.0	100.000		103	75 - 119			
Trichloroethene	52.7100	5.0	50.0000		105	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*56.27*		*50.0000*		*113*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.86*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*53.73*		*50.0000*		*107*	*26 - 178*			
Surrogate: Toluene-d8	*52.74*		*50.0000*		*105*	*31 - 166*			
LCS Dup (B5C0002-BSD1)					Prepared: 3/2/2015 Analyzed: 3/2/2015				
1,1-Dichloroethene	45.2600	5.0	50.0000		90.5	60 - 130	12.2	20	
...nzene	100.980	5.0	100.000		101	73 - 116	1.19	20	
...robenzene	51.3000	5.0	50.0000		103	82 - 114	0.724	20	
...TBE	57.1300	5.0	50.0000		114	61 - 124	6.39	20	
Toluene	103.560	5.0	100.000		104	75 - 119	0.581	20	

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0002 - MSVOA_S (continued)									
LCS Dup (B5C0002-BSD1) - Continued					Prepared: 3/2/2015 Analyzed: 3/2/2015				
Trichloroethene	54.4200	5.0	50.0000		109	73 - 119	3.19	20	
Surrogate: 1,2-Dichloroethane-d4	*53.71*		*50.0000*		*107*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.81*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*57.27*		*50.0000*		*115*	*26 - 178*			
Surrogate: Toluene-d8	*52.77*		*50.0000*		*106*	*31 - 166*			
Batch B5C0045 - MSVOA_S									
Blank (B5C0045-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0045 - MSVOA_S (continued)									
Blank (B5C0045-BLK1) - Continued					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
...pylbenzene	ND	5.0			NR				
...phthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*52.47*		*50.0000*		*105*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*46.89*		*50.0000*		*93.8*	*20 - 173*			
Surrogate: Dibromofluoromethane	*53.83*		*50.0000*		*108*	*26 - 178*			
Surrogate: Toluene-d8	*51.46*		*50.0000*		*103*	*31 - 166*			
LCS (B5C0045-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1-Dichloroethene	50.5000	5.0	50.0000		101	60 - 130			
Benzene	100.370	5.0	100.000		100	73 - 116			
Chlorobenzene	48.6800	5.0	50.0000		97.4	82 - 114			
MTBE	53.9600	5.0	50.0000		108	61 - 124			
Toluene	102.680	5.0	100.000		103	75 - 119			
Trichloroethene	52.5800	5.0	50.0000		105	73 - 119			
...ate: 1,2-Dichloroethane-d4	*51.70*		*50.0000*		*103*	*20 - 189*			
...rogate: 4-Bromofluorobenzene	*50.89*		*50.0000*		*102*	*20 - 173*			
Surrogate: Dibromofluoromethane	*54.43*		*50.0000*		*109*	*26 - 178*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0045 - MSVOA_S (continued)									
LCS (B5C0045-BS1) - Continued					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Surrogate: Toluene-d8	*52.91*		*50.0000*		*106*	*31 - 166*			
LCS Dup (B5C0045-BSD1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1-Dichloroethene	46.2800	5.0	50.0000		92.6	60 - 130	8.72	20	
Benzene	98.3900	5.0	100.000		98.4	73 - 116	1.99	20	
Chlorobenzene	48.9900	5.0	50.0000		98.0	82 - 114	0.635	20	
MTBE	53.9200	5.0	50.0000		108	61 - 124	0.0742	20	
Toluene	101.420	5.0	100.000		101	75 - 119	1.23	20	
Trichloroethene	51.1600	5.0	50.0000		102	73 - 119	2.74	20	
Surrogate: 1,2-Dichloroethane-d4	*53.20*		*50.0000*		*106*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*52.36*		*50.0000*		*105*	*20 - 173*			
Surrogate: Dibromofluoromethane	*55.94*		*50.0000*		*112*	*26 - 178*			
Surrogate: Toluene-d8	*53.14*		*50.0000*		*106*	*31 - 166*			
Batch B5C0079 - MSVOA_S									
Blank (B5C0079-BLK1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0079 - MSVOA_S (continued)									
Blank (B5C0079-BLK1) - Continued					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
benzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*54.58*		*50.0000*		*109*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*44.73*		*50.0000*		*89.5*	*20 - 173*			
Surrogate: Dibromofluoromethane	*53.93*		*50.0000*		*108*	*26 - 178*			
Surrogate: Toluene-d8	*49.47*		*50.0000*		*98.9*	*31 - 166*			
(B5C0079-BS1)					Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1-Dichloroethene	39.0800	5.0	50.0000		78.2	60 - 130			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0079 - MSVOA_S (continued)									
LCS (B5C0079-BS1) - Continued					Prepared: 3/3/2015 Analyzed: 3/3/2015				
Benzene	96.7200	5.0	100.000		96.7	73 - 116			
Chlorobenzene	47.7600	5.0	50.0000		95.5	82 - 114			
MTBE	51.1100	5.0	50.0000		102	61 - 124			
Toluene	98.6100	5.0	100.000		98.6	75 - 119			
Trichloroethene	50.2600	5.0	50.0000		101	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*49.90*		*50.0000*		*99.8*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*49.85*		*50.0000*		*99.7*	*20 - 173*			
Surrogate: Dibromofluoromethane	*52.21*		*50.0000*		*104*	*26 - 178*			
Surrogate: Toluene-d8	*51.07*		*50.0000*		*102*	*31 - 166*			
Duplicate (B5C0079-DUP1)		**Source: 1500760-01**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1-Dichloroethene	ND	5.0		ND	NR			20	
Benzene	ND	5.0		ND	NR			20	
Chlorobenzene	ND	5.0		ND	NR			20	
MTBE	ND	5.0		ND	NR			20	
Toluene	ND	5.0		ND	NR			20	
Trichloroethene	ND	5.0		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*56.86*		*50.0000*		*114*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*45.44*		*50.0000*		*90.9*	*20 - 173*			
Surrogate: Dibromofluoromethane	*58.00*		*50.0000*		*116*	*26 - 178*			
Surrogate: Toluene-d8	*49.11*		*50.0000*		*98.2*	*31 - 166*			
Matrix Spike (B5C0079-MS1)		**Source: 1500760-01**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1-Dichloroethene	45.2000	5.0	50.0000	ND	90.4	42 - 130			
Benzene	83.9700	5.0	100.000	ND	84.0	51 - 117			
Chlorobenzene	40.4600	5.0	50.0000	ND	80.9	46 - 123			
MTBE	44.8100	5.0	50.0000	ND	89.6	46 - 125			
Toluene	86.3600	5.0	100.000	ND	86.4	49 - 124			
Trichloroethene	43.1100	5.0	50.0000	ND	86.2	38 - 139			
Surrogate: 1,2-Dichloroethane-d4	*57.80*		*50.0000*		*116*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*52.73*		*50.0000*		*105*	*20 - 173*			
Surrogate: Dibromofluoromethane	*55.22*		*50.0000*		*110*	*26 - 178*			
Surrogate: Toluene-d8	*52.96*		*50.0000*		*106*	*31 - 166*			
Matrix Spike Dup (B5C0079-MSD1)		**Source: 1500760-01**			Prepared: 3/3/2015 Analyzed: 3/3/2015				
1,1-Dichloroethene	36.6500	5.0	50.0000	ND	73.3	42 - 130	20.9	20	R
Benzene	82.3100	5.0	100.000	ND	82.3	51 - 117	2.00	20	
Chlorobenzene	39.2000	5.0	50.0000	ND	78.4	46 - 123	3.16	20	
MTBE	47.2400	5.0	50.0000	ND	94.5	46 - 125	5.28	20	
Toluene	82.3800	5.0	100.000	ND	82.4	49 - 124	4.72	20	
Trichloroethene	42.7700	5.0	50.0000	ND	85.5	38 - 139	0.792	20	
Surrogate: 1,2-Dichloroethane-d4	*52.57*		*50.0000*		*105*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*50.72*		*50.0000*		*101*	*20 - 173*			
Surrogate: Dibromofluoromethane	*54.76*		*50.0000*		*110*	*26 - 178*			
Surrogate: Toluene-d8	*51.20*		*50.0000*		*102*	*31 - 166*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0091 - MSVOA_S									
Blank (B5C0091-BLK1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
...ichloropropane	ND	5.0			NR				
...-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
... Ether	ND	50			NR				
... tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				

Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0091 - MSVOA_S (continued)									
Blank (B5C0091-BLK1) - Continued					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*50.09*		*50.0000*		*100*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*44.13*		*50.0000*		*88.3*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.81*		*50.0000*		*99.6*	*26 - 178*			
Surrogate: Toluene-d8	*47.19*		*50.0000*		*94.4*	*31 - 166*			
LCS (B5C0091-BS1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
1,1-Dichloroethene	42.7700	5.0	50.0000		85.5	60 - 130			
Benzene	105.950	5.0	100.000		106	73 - 116			
Chlorobenzene	52.8800	5.0	50.0000		106	82 - 114			
MTBE	53.4600	5.0	50.0000		107	61 - 124			
Toluene	108.530	5.0	100.000		109	75 - 119			
Trichloroethene	56.3700	5.0	50.0000		113	73 - 119			
Surrogate: 1,2-Dichloroethane-d4	*48.99*		*50.0000*		*98.0*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.90*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*51.70*		*50.0000*		*103*	*26 - 178*			
Surrogate: Toluene-d8	*51.98*		*50.0000*		*104*	*31 - 166*			
LCS Dup (B5C0091-BSD1)					Prepared: 3/4/2015 Analyzed: 3/4/2015				
1,1-Dichloroethene	40.8000	5.0	50.0000		81.6	60 - 130	4.71	20	
Benzene	103.710	5.0	100.000		104	73 - 116	2.14	20	
Chlorobenzene	51.9700	5.0	50.0000		104	82 - 114	1.74	20	
MTBE	51.1900	5.0	50.0000		102	61 - 124	4.34	20	
Toluene	107.030	5.0	100.000		107	75 - 119	1.39	20	
Trichloroethene	54.1900	5.0	50.0000		108	73 - 119	3.94	20	

...itec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/06/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0091 - MSVOA_S (continued)									
LCS Dup (B5C0091-BSD1) - Continued					Prepared: 3/4/2015 Analyzed: 3/4/2015				
Surrogate: 1,2-Dichloroethane-d4	*48.24*		*50.0000*		*96.5*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*51.06*		*50.0000*		*102*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.88*		*50.0000*		*99.8*	*26 - 178*			
Surrogate: Toluene-d8	*52.54*		*50.0000*		*105*	*31 - 166*			

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/06/2015

Notes and Definitions

S4	Surrogate was diluted out.
R2	RPD value outside acceptance criteria due to possible matrix interference.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

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Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attention: Rachelle Arada

Number of Pages	7
Date Received	02/27/2015
Date Reported	03/06/2015

Job Number	Order Date	Client
76138	02/27/2015	ATL

Project ID: 1500747
Project Name: PO# SC09383

Enclosed please find results of analyses of 3 water and 2 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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Telephone: (562)989-4045
Attention: Rachelle Arada

Project ID: 1500747
Date Received 02/27/2015
Date Reported 03/06/2015

Job Number	Order Date	Client
76138	02/27/2015	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 5 samples with the following specification on 02/27/2015.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76138.03	1500747-29	02/25/2015	Aqueous	1
76138.04	1500747-30	02/25/2015	Aqueous	1
76138.05	1500747-31	02/25/2015	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
8151A	03/06/2015	2	Normal	ug/L

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76138.01	1500747-01	02/25/2015	Soil	1
76138.02	1500747-17	02/25/2015	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8151A)	03/06/2015	2	Normal	ug/Kg

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
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Telephone: (562)989-4045
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Page: 2

Project ID: 1500747
Project Name: PO# SC09383

AETL Job Number	Submitted	Client
76138	02/27/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030415

Our Lab I.D.			Method Blank	76138.01			
Client Sample I.D.				1500747-01			
Date Sampled				02/25/2015			
Date Prepared			03/04/2015	03/04/2015			
Preparation Method			3550B	3550B			
Date Analyzed			03/05/2015	03/05/2015			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	20	20	ND	ND			
Bentazon	10	10	ND	ND			
Chloramben	10	10	ND	ND			
2,4-D	10	10	ND	ND			
Dalapon	20	20	ND	ND			
2,4-DB	10	10	ND	ND			
DCPA diacid	20	20	ND	ND			
Dicamba	10	10	ND	ND			
3,5-Dichlorobenzoic acid	10	10	ND	ND			
Dichloroprop	10	10	ND	ND			
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND			
MCPA	2000	2000	ND	ND			
MCPP	2000	2000	ND	ND			
4-Nitrophenol	10	10	ND	ND			
Pentachlorophenol (PCP)	10	10	ND	ND			
Picloram	10	10	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND			
2,4,5-TP	10	10	ND	ND			
Our Lab I.D.			Method Blank	76138.01			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		55.7	57.3			

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ANALYTICAL RESULTS

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Page: 3

Project ID: 1500747
Project Name: PO# SC09383

AETL Job Number	Submitted	Client
76138	02/27/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215

Our Lab I.D.			Method Blank	76138.02			
Client Sample I.D.				1500747-17			
Date Sampled				02/25/2015			
Date Prepared			03/02/2015	03/02/2015			
Preparation Method			3550B	3550B			
Date Analyzed			03/04/2015	03/04/2015			
Matrix			Soil	Soil			
Units			ug/Kg	ug/Kg			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	20	20	ND	ND			
Bentazon	10	10	ND	ND			
Chloramben	10	10	ND	ND			
2,4-D	10	10	ND	ND			
Dalapon	20	20	ND	ND			
2,4-DB	10	10	ND	ND			
DCPA diacid	20	20	ND	ND			
Dicamba	10	10	ND	ND			
3,5-Dichlorobenzoic acid	10	10	ND	ND			
Dichloroprop	10	10	ND	ND			
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND			
MCPA	2000	2000	ND	ND			
MCPP	2000	2000	ND	ND			
4-Nitrophenol	10	10	ND	ND			
Pentachlorophenol (PCP)	10	10	ND	ND			
Picloram	10	10	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND			
2,4,5-TP	10	10	ND	ND			
Our Lab I.D.			Method Blank	76138.02			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		64.4	58.2			

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ANALYTICAL RESULTS

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Page: 4

Project ID: 1500747
Project Name: PO# SC09383

AETL Job Number	Submitted	Client
76138	02/27/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315

Our Lab I.D.			Method Blank	76138.03	76138.04	76138.05	
Client Sample I.D.				1500747-29	1500747-30	1500747-31	
Date Sampled				02/25/2015	02/25/2015	02/25/2015	
Date Prepared			03/03/2015	03/03/2015	03/03/2015	03/03/2015	
Preparation Method			3510C	3510C	3510C	3510C	
Date Analyzed			03/04/2015	03/04/2015	03/04/2015	03/04/2015	
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	
Units			ug/L	ug/L	ug/L	ug/L	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
Acifluorfen	1.0	1.0	ND	ND	ND	ND	
Bentazon	0.5	0.5	ND	ND	ND	ND	
Chloramben	0.5	0.5	ND	ND	ND	ND	
2,4-D	0.5	0.5	ND	ND	ND	ND	
Dalapon	1.0	1.0	ND	ND	ND	ND	
2,4-DB	0.5	0.5	ND	ND	ND	ND	
DCPA diacid	1.0	1.0	ND	ND	ND	ND	
Dicamba	0.5	0.5	ND	ND	ND	ND	
3,5-Dichlorobenzoic acid	0.5	0.5	ND	ND	ND	ND	
Dichloroprop	0.5	0.5	ND	ND	ND	ND	
Dinoseb	0.5	0.5	ND	ND	ND	ND	
MCPA	100	100	ND	ND	ND	ND	
MCPP	100	100	ND	ND	ND	ND	
4-Nitrophenol	0.5	0.5	ND	ND	ND	ND	
Pentachlorophenol (PCP)	0.5	0.5	ND	ND	ND	ND	
Picloram	0.5	0.5	ND	ND	ND	ND	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.5	0.5	ND	ND	ND	ND	
2,4,5-TP	0.5	0.5	ND	ND	ND	ND	
Our Lab I.D.			Method Blank	76138.03	76138.04	76138.05	
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**	**% Rec.**	
DCAA	50-150		65.6	66.8	75.7	80.0	

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 5

Project ID: 1500747
Project Name: PO# SC09383

AETL Job Number	Submitted	Client
76138	02/27/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315; LCS: Clean Water; LCS Prepared: 03/03/2015; LCS Analyzed: 03/04/2015; Units: ug/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	72.0	144	50.0	72.5	145	<1	50-150	<50	
Dalapon	50.0	54.5	109	50.0	36.3	72.6	40.1	50-150	<50	
2,4-DB	50.0	43.1	86.2	50.0	26.9	53.8	46.3	50-150	<50	
Dicamba	50.0	56.5	113	50.0	43.4	86.8	26.2	50-150	<50	
Dinoseb	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<50	
MCPA	5,000	4,280	85.6	5,000	5,850	117	31.0	50-150	<50	
MCPP	5,000	5,900	118	5,000	2,540	50.8	79.6	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	42.8	85.6	50.0	29.9	59.8	35.5	50-150	<50	
2,4,5-TP	50.0	27.0	53.9	50.0	46.4	92.8	53.0	50-150	<50	
Surrogates										
DCAA	100	65.6	65.6	100	57.9	57.9	12.5	50-150	<20	

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QUALITY CONTROL RESULTS

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Page: 6

Project ID: 1500747
Project Name: PO# SC09383

AETL Job Number	Submitted	Client
76138	02/27/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215; Dup or Spiked Sample: B030215; LCS: Clean Sand; LCS Prepared: 03/02/2015; LCS Analyzed: 03/03/2015; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	29.3	58.6	50.0	26.0	52.0	11.9	50-150	<40	
Dalapon	50.0	57.0	114	50.0	34.4	68.8	49.5	50-150	<40	
2,4-DB	50.0	35.7	71.4	50.0	33.8	67.6	5.5	50-150	<40	
Dicamba	50.0	30.1	60.2	50.0	27.2	54.4	10.1	50-150	<40	
Dichloroprop	50.0	28.3	56.6	50.0	28.7	57.4	1.4	50-150	<40	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	26.7	53.4	50.0	31.0	62.0	14.9	50-150	<40	
MCPA	5,000	5,000	100	5,000	2,550	51.0	64.9	50-150	<40	
MCPP	5,000	3,680	73.6	5,000	3,610	72.2	1.9	50-150	<40	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	29.2	58.4	50.0	33.6	67.2	14.0	50-150	<40	
2,4,5-TP	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<40	
Surrogates										
DCAA	100	76.4	76.4	100	75.4	75.4	1.3	50-150	<40	

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QUALITY CONTROL RESULTS

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Page: 7

Project ID: 1500747
Project Name: PO# SC09383

AETL Job Number	Submitted	Client
76138	02/27/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030415; Dup or Spiked Sample: 75144.02; LCS: Clean Sand; QC Prepared: 03/04/2015; QC Analyzed: 03/05/2015; Units: ug/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
2,4-D	0.00	50.0	26.6	53.2	50.0	26.9	53.8	1.1	50-150	<40
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	0.00	50.0	28.6	57.2	50.0	30.8	61.6	7.4	50-150	<40
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.00	50.0	26.1	52.2	50.0	28.4	56.8	8.4	50-150	<40
Surrogates										
DCAA	0.00	100	75.0	75.0	100	80.0	80.0	6.5	50-150	<40

QC Batch No: 030415; Dup or Spiked Sample: 75144.02; LCS: Clean Sand; QC Prepared: 03/04/2015; QC Analyzed: 03/05/2015; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	33.5	67.0	50.0	27.0	54.0	21.5	50-150	<40	
Dalapon	50.0	31.1	62.2	50.0	28.3	56.6	9.4	50-150	<40	
2,4-DB	50.0	25.9	51.8	50.0	27.7	55.3	6.5	50-150	<40	
Dicamba	50.0	25.9	51.7	50.0	25.4	50.8	1.8	50-150	<40	
Dichloroprop	50.0	29.7	59.4	50.0	27.5	55.0	7.7	50-150	<40	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	27.5	55.0	50.0	28.3	56.6	2.9	50-150	<40	
MCPA	5,000	2,680	53.5	5,000	2,720	54.4	1.7	50-150	<40	
MCPP	5,000	3,220	64.4	5,000	4,300	85.9	28.6	50-150	<40	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	25.5	51.0	50.0	26.2	52.4	2.7	50-150	<40	
2,4,5-TP	50.0	25.1	50.2	50.0	25.2	50.4	<1	50-150	<40	
Surrogates										
DCAA	100	67.9	67.9	100	57.7	57.7	16.2	50-150	<40	

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6;	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500747 76138

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09383- STANDARD TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500747-01 / 1278-120-0		**Soil**	**02/25/15 14:32**	76138.01
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	**03/06/15 17:00**	03/11/15 14:32		
ATL Lab#: 1500747-17 / 1278-145-0		**Soil**	**02/25/15 10:10**	76138-02
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	**03/06/15 17:00**	03/11/15 10:10		
ATL Lab#: 1500747-29 / EBA-1-022515		**Water**	**02/25/15 09:34**	76138.03
8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	**03/06/15 17:00**	03/04/15 09:34		
ATL Lab#: 1500747-30 / EBA-2-022515		**Water**	**02/25/15 11:47**	76138.04
8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	**03/06/15 17:00**	03/04/15 11:47		
ATL Lab#: 1500747-31 / EBA-3-022515		**Water**	**02/25/15 15:06**	76138.05
8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	**03/06/15 17:00**	03/04/15 15:06		

Released By	Date	Received By	Date
	2/27/15 1337		2/27/15 1337
Released By	Date	Received By	Date
	2/27/15 1705		2/27/15 1705

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 1 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec 290 Conejo Ridge Avenue Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides- 8151A		REMARKS/ PRECAUTIONS
1278-120-0	02-25-15	1432	SO	multi	multi	5	X	X			X			X		
1278-121-0		1401				4	X	X			X					
1278-121-1.5		1416				4	X	X			X					
1278-140-0		1252				4	X	X			X					
1278-140-1.5		1306				4	X	X			X					
1278-140-3.5		1313				4	X	X			X					HOLD
1278-141-0		1225				4	X	X			X					
1278-141-1.5		1229				4	X	X			X					
1278-141-3.5		1230				4	X	X			X					HOLD
1278-142-0		1117				4	X	X			X					
1278-142-1.5	↓	1122	↓	↓	↓	4	X	X			X					

ANALYSES / METHOD REQUEST

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts *Shipment Method:* Lab pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a)	*Relinquished by:* [signature]	Stephannie Roberts	Stantec	02/25/15	
1(b)	*Received by:* [signature]	Edward Rodriguez	ATL	2-26-15	1420
2(a)	*Relinquished by:* [signature]	Edward Rodriguez	ATL	2-26-15	1910
2(b)	*Received by:* [signature]	FPDHL	ATL	2/26/15	1910
3(a)	*Relinquished by:*				
3(b)	*Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 2 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides- 8151A	REMARKS/ PRECAUTIONS
1278-142-3.5	2/25/15	1130	SO	multi	multi	4	X	X			X				HOLD
1278-143-0		1054				4	X	X			X				
1278-144-0		1033				4	X	X			X				
1278-144-1.5		1037				4	X	X			X				
1278-144-3.5		1043				4	X	X			X				HOLD
1278-145-0		1010				5	X	X			X			X	
1278-145-1.5		1015				4	X	X			X				
1278-145-3.5		1021				4	X	X			X				HOLD
1278-146-0		0843				4	X	X			X				
1278-146-1.5		0853				4	X	X			X				
1278-146-3.5	↓	0904	↓	↓	↓	4	X	X			X				HOLD

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S. Roberts *Shipment Method:* Lab pick up *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a) *Relinquished by:*	S Roberts	Stephanie Roberts	S Roberts	02/25/15	
1(b) *Received by:*		Edward Rodriguez	ATL	2-26-15	14:20
2(a) *Relinquished by:*		Edward Rodriguez	ATL	2-26-15	18:10
2(b) *Received by:*		FPDura	ATL	2/26/15	1810
3(a) *Relinquished by:*					
3(b) *Received by:*					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____
Page 3 of 3

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1278-147-0	02.25.15	0814	SO	multi	multi	4	X	X			X					
1278-147-1.5	↓	0820	↓	↓	↓	4	X	X			X					
1278-147-3.5	↓	0830	↓	↓	↓	4	X	X			X					HOLD
1278-148-0	↓	0749	↓	↓	↓	4	X	X			X					
1278-148-1.5	↓	0754	↓	↓	↓	4	X	X			X					
1278-148-3.5	↓	0802	↓	↓	↓	4	X	X			X					HOLD
EBA-1-022515	↓	0934	W	↓	↓	9	X	X			X			X		
EBA-2-022515	↓	1147	↓	↓	↓	9	X	X			X			X		
EBA-3-022515	↓	1506	↓	↓	↓	9	X	X			X			X		

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: S Roberts *Shipment Method:* *Airbill Number:*

Signature	Print Name	Company	Date	Time
1(a) *Relinquished by:* S Roberts	Steph Annie Roberts	Stantec	02/25/15	
1(b) *Received by:* [signature]	Edward Rodriguez	ATL	2-26-15	14:20
2(a) *Relinquished by:* [signature]	Edward Rodriguez	ATL	2-26-15	1810
2(b) *Received by:* [signature]	FP [illegible]	ATL	2/26/15	1810
3(a) *Relinquished by:*				
3(b) *Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500747

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Report To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone: (805) 230-1266
Fax: (805) 230-1277

Invoice To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone :(805) 230-1266
Fax: (805) 230-1277

Date Due:	03/05/15 17:00 (5 day TAT)	Date Received:	02/26/15 14:20
Received By:	Ron Diwa	Date Logged In:	02/26/15 16:45
Logged In By:	Carmen Aguila	Shipped by:	ATL

Please review the checklist below. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues. If you have any questions or further instructions, please contact your Project Manager at (526) 989-4045.

Sample(s) received on ice?	Yes	☐	No	☑
Sample(s) received on blue ice?	Yes	☑	No	☐
Cooler temperature within acceptance limit?	Yes	☑	No	☐
Shipping container received in good condition?	Not Applicable			
Custody seals present on shipping container?	Yes	☐	No	☑
Custody seals intact on shipping container?	Not Applicable			
Custody seals present on sample bottles?	Yes	☐	No	☑
Custody seals intact on sample bottles?	Not Applicable			
Chain of Custody (COC) present?	Yes	☑	No	☐
Sampler name present in COC?	Yes	☑	No	☐
COC signed when relinquished and received?	Yes	☑	No	☐
COC agrees with sample labels?	Yes	☐	No	☑
Samples in proper container/bottle?	Yes	☑	No	☐
Sample containers intact?	Yes	☑	No	☐
Sufficient sample amount for indicated tests?	Yes	☑	No	☐
All samples received within holding time?	Yes	☑	No	☐
Water for VOC – Were VOA vials submitted?	Yes	☑	No	☐
Water samples submitted?	Yes	☑	No	☐
VOA vials for VOC meet headspace criteria?	Yes	☑	No	☐
Water samples meet preservation criteria?	Yes	☑	No	☐

cooler#1	Temp: 5.3 °C
cooler#2	Temp: 5.2 °C

Sample Receipt Comments:

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500747

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Water sample for metals- filter and preserve per client's instruction.
All sample containers for 1278-121-0 indicate time as 1402. One vial with NaHSO4 for 1278-121-0 labeled as 1278-140-0, taken on the same ziplock bag with the other samples labeled 1278-121-0 @ 1402.
The sample ID with collection time of 0754 listed on the coc as 1278-148-1.5, but the samples received with the same time of collection labeled as 1278-149-1.5

ADVANCED TECHNOLOGY
LABORATORIES

March 20, 2015

Anne Perez/Kristy Edblad
Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Tel: (805) 230-1266
Fax:(805) 230-1277

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500855
Client Reference : 185832023, 200.0003, Caltrans 07A3322-23

Enclosed are the results for sample(s) received on March 06, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1278-127-0	1500855-01	Soil	3/05/15 9:46	3/06/15 13:35
1278-127-1.5	1500855-02	Soil	3/05/15 9:54	3/06/15 13:35
1278-128-0	1500855-04	Soil	3/05/15 10:13	3/06/15 13:35
1278-131-0	1500855-05	Soil	3/05/15 10:44	3/06/15 13:35
1278-131-1.5	1500855-06	Soil	3/05/15 10:50	3/06/15 13:35
1278-132-0	1500855-07	Soil	3/05/15 11:14	3/06/15 13:35
1278-132-1.5	1500855-08	Soil	3/05/15 11:30	3/06/15 13:35
EB-1-030515	1500855-10	Aqueous	3/05/15 13:09	3/06/15 13:35
1278-133-0	1500855-11	Soil	3/05/15 13:34	3/06/15 13:35
1278-133-1.5	1500855-12	Soil	3/05/15 13:42	3/06/15 13:35
1278-134-0	1500855-14	Soil	3/05/15 14:10	3/06/15 13:35
1278-134-1.5	1500855-15	Soil	3/05/15 14:17	3/06/15 13:35
EB-2-030515	1500855-17	Aqueous	3/05/15 15:00	3/06/15 13:35

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

CASE NARRATIVE

The samples for EPA 8151 (Chlorinated Herbicides) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

EPA 8260 analysis was performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

One 5035 vial preserved with sodium bisulfate was received empty for sample 1278-134-0. Client was notified that we need another vial for reanalysis. Client submitted new sample on 03/11/15. The original 8260 analysis is cancelled and moved to the new ATL work order 1500894.

Results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to ...urately quantitate the analyte near the MDL.

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury **Analyst: VV**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500855-10	EB-1-030515	ND	ug/L	0.20	0.11	1	B5C0279	03/11/2015	03/12/15 10:41	
1500855-17	EB-2-030515	ND	ug/L	0.20	0.11	1	B5C0279	03/11/2015	03/12/15 10:52	

Mercury by AA (Cold Vapor) EPA 7471A

Analyte: Mercury **Analyst: VV**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500855-01	1278-127-0	0.01	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 10:38	J
1500855-02	1278-127-1.5	0.01	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 10:48	J
1500855-04	1278-128-0	0.04	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 10:50	J
1500855-05	1278-131-0	0.01	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 10:52	J
1500855-06	1278-131-1.5	ND	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 10:58	
1500855-07	1278-132-0	0.04	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 11:00	J
1500855-08	1278-132-1.5	ND	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 11:02	
1500855-11	1278-133-0	0.02	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 11:04	J
1500855-12	1278-133-1.5	0.01	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 11:06	J
1500855-14	1278-134-0	0.01	mg/kg	0.10	0.009	1	B5C0272	03/11/2015	03/12/15 11:08	J
1500855-15	1278-134-1.5	0.01	mg/kg	0.10	0.009	1	B5C0273	03/11/2015	03/12/15 11:14	J

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-127-0
Lab ID: 1500855-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:02	
Arsenic	**6.1**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:02	
Barium	**40**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:01	
Beryllium	**0.69**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:01	J
Cadmium	**0.88**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:02	J
Chromium	**14**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:01	
Cobalt	**12**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:02	
Copper	**19**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:01	
Lead	**28**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:02	
Molybdenum	ND	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:01	
Nickel	**38**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:01	
...nium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:02	
...ilver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:01	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:02	
Vanadium	**22**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:01	
Zinc	**80**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:01	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 14:06	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 14:06	
Surrogate: 4-Bromofluorobenzene	*107 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 14:06*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**2.9**	1.0	1.0	1	B5C0246	03/10/2015	03/10/15 16:50	
C23-C32	**5.3**	1.0	1.0	1	B5C0246	03/10/2015	03/10/15 16:50	
Surrogate: p-Terphenyl	*39.2 %*	*26 - 123*			B5C0246	03/10/2015	*03/10/15 16:50*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
...-Trichloroethane	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
1,1,2,2-Tetrachloroethane	ND	4.9	1.9	1	B5C0203	03/09/2015	03/09/15 17:56	
1,1,2-Trichloroethane	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-127-0

Lab ID: 1500855-01

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	4.9	0.96	1	B5C0203	03/09/2015	03/09/15 17:56	
1,1-Dichloroethene	ND	4.9	1.1	1	B5C0203	03/09/2015	03/09/15 17:56	
1,1-Dichloropropene	ND	4.9	1.5	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2,3-Trichloropropane	ND	4.9	1.8	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2,3-Trichlorobenzene	ND	4.9	2.7	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2,4-Trichlorobenzene	ND	4.9	2.0	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2,4-Trimethylbenzene	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2-Dibromo-3-chloropropane	ND	9.8	2.1	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2-Dibromoethane	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2-Dichlorobenzene	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2-Dichloroethane	ND	4.9	0.85	1	B5C0203	03/09/2015	03/09/15 17:56	
1,2-Dichloropropane	ND	4.9	3.3	1	B5C0203	03/09/2015	03/09/15 17:56	
1,3,5-Trimethylbenzene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
1,3-Dichlorobenzene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
1,3-Dichloropropane	ND	4.9	1.1	1	B5C0203	03/09/2015	03/09/15 17:56	
1,4-Dichlorobenzene	ND	4.9	1.7	1	B5C0203	03/09/2015	03/09/15 17:56	
2,2-Dichloropropane	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
2-Chlorotoluene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
4-Chlorotoluene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
4-Isopropyltoluene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
Benzene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Bromobenzene	ND	4.9	1.6	1	B5C0203	03/09/2015	03/09/15 17:56	
Bromochloromethane	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
Bromodichloromethane	ND	4.9	1.5	1	B5C0203	03/09/2015	03/09/15 17:56	
Bromoform	ND	4.9	1.5	1	B5C0203	03/09/2015	03/09/15 17:56	
Bromomethane	ND	4.9	2.6	1	B5C0203	03/09/2015	03/09/15 17:56	
Carbon disulfide	ND	4.9	2.3	1	B5C0203	03/09/2015	03/09/15 17:56	
Carbon tetrachloride	ND	4.9	1.5	1	B5C0203	03/09/2015	03/09/15 17:56	
Chlorobenzene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Chloroethane	ND	4.9	4.9	1	B5C0203	03/09/2015	03/09/15 17:56	
Chloroform	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
Chloromethane	ND	4.9	0.73	1	B5C0203	03/09/2015	03/09/15 17:56	
cis-1,2-Dichloroethene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
cis-1,3-Dichloropropene	ND	4.9	2.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Di-isopropyl ether	ND	4.9	0.99	1	B5C0203	03/09/2015	03/09/15 17:56	
Dibromochloromethane	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Dibromomethane	ND	4.9	1.9	1	B5C0203	03/09/2015	03/09/15 17:56	
Dichlorodifluoromethane	ND	4.9	0.72	1	B5C0203	03/09/2015	03/09/15 17:56	
Ethyl Acetate	ND	49	13	1	B5C0203	03/09/2015	03/09/15 17:56	
Ethyl Ether	ND	49	12	1	B5C0203	03/09/2015	03/09/15 17:56	
Ethyl tert-butyl ether	ND	4.9	1.1	1	B5C0203	03/09/2015	03/09/15 17:56	

...tec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-127-0

Lab ID: 1500855-01

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	4.9	1.1	1	B5C0203	03/09/2015	03/09/15 17:56	
Freon-113	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
Hexachlorobutadiene	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
Isopropylbenzene	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
m,p-Xylene	ND	9.8	2.4	1	B5C0203	03/09/2015	03/09/15 17:56	
Methylene chloride	ND	4.9	4.9	1	B5C0203	03/09/2015	03/09/15 17:56	
MTBE	ND	4.9	0.88	1	B5C0203	03/09/2015	03/09/15 17:56	
n-Butylbenzene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
n-Propylbenzene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Naphthalene	ND	4.9	3.1	1	B5C0203	03/09/2015	03/09/15 17:56	
o-Xylene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
...Butylbenzene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
...rene	ND	4.9	1.3	1	B5C0203	03/09/2015	03/09/15 17:56	
tert-Amyl methyl ether	ND	4.9	1.0	1	B5C0203	03/09/2015	03/09/15 17:56	
tert-Butanol	ND	98	20	1	B5C0203	03/09/2015	03/09/15 17:56	
tert-Butylbenzene	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
Tetrachloroethene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Toluene	ND	4.9	0.87	1	B5C0203	03/09/2015	03/09/15 17:56	
trans-1,2-Dichloroethene	ND	4.9	1.4	1	B5C0203	03/09/2015	03/09/15 17:56	
trans-1,3-Dichloropropene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Trichloroethene	ND	4.9	1.2	1	B5C0203	03/09/2015	03/09/15 17:56	
Trichlorofluoromethane	ND	4.9	1.8	1	B5C0203	03/09/2015	03/09/15 17:56	
Vinyl acetate	ND	49	10	1	B5C0203	03/09/2015	03/09/15 17:56	
Vinyl chloride	ND	4.9	1.0	1	B5C0203	03/09/2015	03/09/15 17:56	
Surrogate: 1,2-Dichloroethane-d4	*135 %*	*20 - 189*			B5C0203	03/09/2015	*03/09/15 17:56*	
Surrogate: 4-Bromofluorobenzene	*88.2 %*	*20 - 173*			B5C0203	03/09/2015	*03/09/15 17:56*	
Surrogate: Dibromofluoromethane	*124 %*	*26 - 178*			B5C0203	03/09/2015	*03/09/15 17:56*	
Surrogate: Toluene-d8	*99.9 %*	*31 - 166*			B5C0203	03/09/2015	*03/09/15 17:56*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-127-1.5
Lab ID: 1500855-02

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:15	
Arsenic	**3.7**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:15	
Barium	**68**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:14	
Beryllium	**0.61**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:14	J
Cadmium	**0.53**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:15	J
Chromium	**7.8**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:14	
Cobalt	**4.7**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:15	
Copper	**9.2**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:14	
Lead	**8.2**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:15	
Molybdenum	ND	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:14	
Nickel	**11**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:14	
Selenium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:15	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:14	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:15	
Vanadium	**16**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:14	
Zinc	**45**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:14	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 14:22	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 14:22	
Surrogate: 4-Bromofluorobenzene	*109 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 14:22*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	1.9	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 20:48	
C23-C32	3.5	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 20:48	
Surrogate: p-Terphenyl	*51.6 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 20:48*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
1,1,1-Trichloroethane	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5C0218	03/09/2015	03/09/15 19:10	
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-127-1.5
Lab ID: 1500855-02

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	4.4	0.85	1	B5C0218	03/09/2015	03/09/15 19:10	
1,1-Dichloroethene	ND	4.4	0.99	1	B5C0218	03/09/2015	03/09/15 19:10	
1,1-Dichloropropene	ND	4.4	1.3	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2-Dibromo-3-chloropropane	ND	8.7	1.9	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2-Dibromoethane	ND	4.4	1.3	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2-Dichlorobenzene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
1,2-Dichloroethane	ND	4.4	0.76	1	B5C0218	03/09/2015	03/09/15 19:10	
Dichloropropane	ND	4.4	3.0	1	B5C0218	03/09/2015	03/09/15 19:10	
...,5-Trimethylbenzene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
1,3-Dichloropropane	ND	4.4	0.96	1	B5C0218	03/09/2015	03/09/15 19:10	
1,4-Dichlorobenzene	ND	4.4	1.5	1	B5C0218	03/09/2015	03/09/15 19:10	
2,2-Dichloropropane	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
2-Chlorotoluene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
4-Chlorotoluene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
4-Isopropyltoluene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Benzene	ND	4.4	1.0	1	B5C0218	03/09/2015	03/09/15 19:10	
Bromobenzene	ND	4.4	1.4	1	B5C0218	03/09/2015	03/09/15 19:10	
Bromochloromethane	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
Bromodichloromethane	ND	4.4	1.4	1	B5C0218	03/09/2015	03/09/15 19:10	
Bromoform	ND	4.4	1.3	1	B5C0218	03/09/2015	03/09/15 19:10	
Bromomethane	ND	4.4	2.3	1	B5C0218	03/09/2015	03/09/15 19:10	
Carbon disulfide	ND	4.4	2.0	1	B5C0218	03/09/2015	03/09/15 19:10	
Carbon tetrachloride	ND	4.4	1.3	1	B5C0218	03/09/2015	03/09/15 19:10	
Chlorobenzene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Chloroethane	ND	4.4	4.3	1	B5C0218	03/09/2015	03/09/15 19:10	
Chloroform	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
Chloromethane	ND	4.4	0.65	1	B5C0218	03/09/2015	03/09/15 19:10	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5C0218	03/09/2015	03/09/15 19:10	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5C0218	03/09/2015	03/09/15 19:10	
Di-isopropyl ether	ND	4.4	0.88	1	B5C0218	03/09/2015	03/09/15 19:10	
Dibromochloromethane	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Dibromomethane	ND	4.4	1.7	1	B5C0218	03/09/2015	03/09/15 19:10	
...hlorodifluoromethane	ND	4.4	0.64	1	B5C0218	03/09/2015	03/09/15 19:10	
...yl Acetate	ND	44	12	1	B5C0218	03/09/2015	03/09/15 19:10	
Ethyl Ether	ND	44	10	1	B5C0218	03/09/2015	03/09/15 19:10	
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5C0218	03/09/2015	03/09/15 19:10	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-127-1.5
Lab ID: 1500855-02

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	4.4	0.97	1	B5C0218	03/09/2015	03/09/15 19:10	
Freon-113	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Hexachlorobutadiene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
Isopropylbenzene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
m,p-Xylene	ND	8.7	2.2	1	B5C0218	03/09/2015	03/09/15 19:10	
Methylene chloride	ND	4.4	4.4	1	B5C0218	03/09/2015	03/09/15 19:10	
MTBE	ND	4.4	0.79	1	B5C0218	03/09/2015	03/09/15 19:10	
n-Butylbenzene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
n-Propylbenzene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Naphthalene	ND	4.4	2.8	1	B5C0218	03/09/2015	03/09/15 19:10	
o-Xylene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
sec-Butylbenzene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Styrene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
tert-Amyl methyl ether	ND	4.4	0.89	1	B5C0218	03/09/2015	03/09/15 19:10	
tert-Butanol	ND	87	17	1	B5C0218	03/09/2015	03/09/15 19:10	
tert-Butylbenzene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
Tetrachloroethene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Toluene	ND	4.4	0.77	1	B5C0218	03/09/2015	03/09/15 19:10	
trans-1,2-Dichloroethene	ND	4.4	1.2	1	B5C0218	03/09/2015	03/09/15 19:10	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5C0218	03/09/2015	03/09/15 19:10	
Trichloroethene	ND	4.4	1.1	1	B5C0218	03/09/2015	03/09/15 19:10	
Trichlorofluoromethane	ND	4.4	1.6	1	B5C0218	03/09/2015	03/09/15 19:10	
Vinyl acetate	ND	44	9.3	1	B5C0218	03/09/2015	03/09/15 19:10	
Vinyl chloride	ND	4.4	0.89	1	B5C0218	03/09/2015	03/09/15 19:10	
Surrogate: 1,2-Dichloroethane-d4	*141 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 19:10*	
Surrogate: 4-Bromofluorobenzene	*89.6 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 19:10*	
Surrogate: Dibromofluoromethane	*124 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 19:10*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 19:10*	

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-128-0

Lab ID: 1500855-04

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:18	
Arsenic	**7.5**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:18	
Barium	**54**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:18	
Beryllium	**0.71**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:17	J
Cadmium	**0.89**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:18	J
Chromium	**9.0**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:18	
Cobalt	**4.3**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:18	
Copper	**14**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:18	
Lead	**74**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:18	
Molybdenum	**1.1**	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:18	
...ckel	**14**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:18	
...nium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:18	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:18	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:18	
Vanadium	**22**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:18	
Zinc	**59**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:18	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.56**	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 14:37	J
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 14:37	
Surrogate: 4-Bromofluorobenzene	*102 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 14:37*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**10**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 22:09	
C23-C32	**26**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 22:09	
Surrogate: p-Terphenyl	*52.7 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 22:09*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
...1-Trichloroethane	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
1,1,2,2-Tetrachloroethane	ND	6.8	2.6	1	B5C0218	03/09/2015	03/09/15 19:29	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-128-0
Lab ID: 1500855-04

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	6.8	1.7	1	B5C0218	03/09/2015	03/09/15 19:29	
1,1-Dichloroethane	ND	6.8	1.3	1	B5C0218	03/09/2015	03/09/15 19:29	
1,1-Dichloroethene	ND	6.8	1.5	1	B5C0218	03/09/2015	03/09/15 19:29	
1,1-Dichloropropene	ND	6.8	2.1	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2,3-Trichloropropane	ND	6.8	2.5	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2,3-Trichlorobenzene	ND	6.8	3.7	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2,4-Trichlorobenzene	ND	6.8	2.8	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2,4-Trimethylbenzene	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2-Dibromo-3-chloropropane	ND	14	2.9	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2-Dibromoethane	ND	6.8	2.0	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2-Dichlorobenzene	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2-Dichloroethane	ND	6.8	1.2	1	B5C0218	03/09/2015	03/09/15 19:29	
1,2-Dichloropropane	ND	6.8	4.6	1	B5C0218	03/09/2015	03/09/15 19:29	
1,3,5-Trimethylbenzene	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
1,3-Dichlorobenzene	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
1,3-Dichloropropane	ND	6.8	1.5	1	B5C0218	03/09/2015	03/09/15 19:29	
1,4-Dichlorobenzene	ND	6.8	2.4	1	B5C0218	03/09/2015	03/09/15 19:29	
2,2-Dichloropropane	ND	6.8	1.7	1	B5C0218	03/09/2015	03/09/15 19:29	
2-Chlorotoluene	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
4-Chlorotoluene	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
4-Isopropyltoluene	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
Benzene	ND	6.8	1.6	1	B5C0218	03/09/2015	03/09/15 19:29	
Bromobenzene	ND	6.8	2.2	1	B5C0218	03/09/2015	03/09/15 19:29	
Bromochloromethane	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
Bromodichloromethane	ND	6.8	2.1	1	B5C0218	03/09/2015	03/09/15 19:29	
Bromoform	ND	6.8	2.0	1	B5C0218	03/09/2015	03/09/15 19:29	
Bromomethane	ND	6.8	3.6	1	B5C0218	03/09/2015	03/09/15 19:29	
Carbon disulfide	ND	6.8	3.2	1	B5C0218	03/09/2015	03/09/15 19:29	
Carbon tetrachloride	ND	6.8	2.0	1	B5C0218	03/09/2015	03/09/15 19:29	
Chlorobenzene	ND	6.8	1.6	1	B5C0218	03/09/2015	03/09/15 19:29	
Chloroethane	ND	6.8	6.7	1	B5C0218	03/09/2015	03/09/15 19:29	
Chloroform	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
Chloromethane	ND	6.8	1.0	1	B5C0218	03/09/2015	03/09/15 19:29	
cis-1,2-Dichloroethene	ND	6.8	1.6	1	B5C0218	03/09/2015	03/09/15 19:29	
cis-1,3-Dichloropropene	ND	6.8	3.1	1	B5C0218	03/09/2015	03/09/15 19:29	
Di-isopropyl ether	ND	6.8	1.4	1	B5C0218	03/09/2015	03/09/15 19:29	
Dibromochloromethane	ND	6.8	1.7	1	B5C0218	03/09/2015	03/09/15 19:29	
Dibromomethane	ND	6.8	2.7	1	B5C0218	03/09/2015	03/09/15 19:29	
Dichlorodifluoromethane	ND	6.8	1.0	1	B5C0218	03/09/2015	03/09/15 19:29	
Ethyl Acetate	ND	68	18	1	B5C0218	03/09/2015	03/09/15 19:29	
Ethyl Ether	ND	68	16	1	B5C0218	03/09/2015	03/09/15 19:29	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-128-0
Lab ID: 1500855-04

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	6.8	1.6	1	B5C0218	03/09/2015	03/09/15 19:29	
Ethylbenzene	ND	6.8	1.5	1	B5C0218	03/09/2015	03/09/15 19:29	
Freon-113	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
Hexachlorobutadiene	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
Isopropylbenzene	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
m,p-Xylene	ND	14	3.4	1	B5C0218	03/09/2015	03/09/15 19:29	
Methylene chloride	ND	6.8	6.8	1	B5C0218	03/09/2015	03/09/15 19:29	
MTBE	ND	6.8	1.2	1	B5C0218	03/09/2015	03/09/15 19:29	
n-Butylbenzene	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
n-Propylbenzene	ND	6.8	1.7	1	B5C0218	03/09/2015	03/09/15 19:29	
Naphthalene	ND	6.8	4.3	1	B5C0218	03/09/2015	03/09/15 19:29	
..ylene	ND	6.8	1.7	1	B5C0218	03/09/2015	03/09/15 19:29	
..Butylbenzene	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
Styrene	ND	6.8	1.8	1	B5C0218	03/09/2015	03/09/15 19:29	
tert-Amyl methyl ether	ND	6.8	1.4	1	B5C0218	03/09/2015	03/09/15 19:29	
tert-Butanol	ND	140	27	1	B5C0218	03/09/2015	03/09/15 19:29	
tert-Butylbenzene	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
Tetrachloroethene	ND	6.8	1.7	1	B5C0218	03/09/2015	03/09/15 19:29	
Toluene	ND	6.8	1.2	1	B5C0218	03/09/2015	03/09/15 19:29	
trans-1,2-Dichloroethene	ND	6.8	1.9	1	B5C0218	03/09/2015	03/09/15 19:29	
trans-1,3-Dichloropropene	ND	6.8	1.6	1	B5C0218	03/09/2015	03/09/15 19:29	
Trichloroethene	ND	6.8	1.7	1	B5C0218	03/09/2015	03/09/15 19:29	
Trichlorofluoromethane	ND	6.8	2.4	1	B5C0218	03/09/2015	03/09/15 19:29	
Vinyl acetate	ND	68	15	1	B5C0218	03/09/2015	03/09/15 19:29	
Vinyl chloride	ND	6.8	1.4	1	B5C0218	03/09/2015	03/09/15 19:29	
Surrogate: 1,2-Dichloroethane-d4	*133 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 19:29*	
Surrogate: 4-Bromofluorobenzene	*92.4 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 19:29*	
Surrogate: Dibromofluoromethane	*124 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 19:29*	
Surrogate: Toluene-d8	*109 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 19:29*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-131-0
Lab ID: 1500855-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:21	
Arsenic	**5.2**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:21	
Barium	**53**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:21	
Beryllium	**0.60**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:20	J
Cadmium	**0.92**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:21	J
Chromium	**11**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:21	
Cobalt	**6.0**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:21	
Copper	**14**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:21	
Lead	**51**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:21	
Molybdenum	**0.62**	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:21	J
Nickel	**19**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:21	
Selenium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:21	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:21	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:21	
Vanadium	**22**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:21	
Zinc	**49**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:21	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 13:51	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 13:51	
Surrogate: 4-Bromofluorobenzene	*110 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 13:51*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**2.3**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:20	
C23-C32	**5.7**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:20	
Surrogate: p-Terphenyl	*51.5 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 21:20*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
1,1,1-Trichloroethane	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
1,1,2,2-Tetrachloroethane	ND	5.2	2.0	1	B5C0218	03/09/2015	03/09/15 19:47	
1,1,2-Trichloroethane	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-131-0

Lab ID: 1500855-05

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.2	1.0	1	B5C0218	03/09/2015	03/09/15 19:47	
1,1-Dichloroethene	ND	5.2	1.2	1	B5C0218	03/09/2015	03/09/15 19:47	
1,1-Dichloropropene	ND	5.2	1.6	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2,3-Trichloropropane	ND	5.2	1.9	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2,3-Trichlorobenzene	ND	5.2	2.8	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2,4-Trichlorobenzene	ND	5.2	2.1	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2,4-Trimethylbenzene	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2-Dibromoethane	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2-Dichlorobenzene	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
1,2-Dichloroethane	ND	5.2	0.91	1	B5C0218	03/09/2015	03/09/15 19:47	
...Dichloropropane	ND	5.2	3.6	1	B5C0218	03/09/2015	03/09/15 19:47	
...5-Trimethylbenzene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
1,3-Dichlorobenzene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
1,3-Dichloropropane	ND	5.2	1.2	1	B5C0218	03/09/2015	03/09/15 19:47	
1,4-Dichlorobenzene	ND	5.2	1.9	1	B5C0218	03/09/2015	03/09/15 19:47	
2,2-Dichloropropane	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
2-Chlorotoluene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
4-Chlorotoluene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
4-Isopropyltoluene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
Benzene	ND	5.2	1.2	1	B5C0218	03/09/2015	03/09/15 19:47	
Bromobenzene	ND	5.2	1.7	1	B5C0218	03/09/2015	03/09/15 19:47	
Bromochloromethane	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
Bromodichloromethane	ND	5.2	1.6	1	B5C0218	03/09/2015	03/09/15 19:47	
Bromoform	ND	5.2	1.6	1	B5C0218	03/09/2015	03/09/15 19:47	
Bromomethane	ND	5.2	2.7	1	B5C0218	03/09/2015	03/09/15 19:47	
Carbon disulfide	ND	5.2	2.4	1	B5C0218	03/09/2015	03/09/15 19:47	
Carbon tetrachloride	ND	5.2	1.6	1	B5C0218	03/09/2015	03/09/15 19:47	
Chlorobenzene	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
Chloroethane	ND	5.2	5.2	1	B5C0218	03/09/2015	03/09/15 19:47	
Chloroform	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
Chloromethane	ND	5.2	0.78	1	B5C0218	03/09/2015	03/09/15 19:47	
cis-1,2-Dichloroethene	ND	5.2	1.2	1	B5C0218	03/09/2015	03/09/15 19:47	
cis-1,3-Dichloropropene	ND	5.2	2.4	1	B5C0218	03/09/2015	03/09/15 19:47	
Di-isopropyl ether	ND	5.2	1.1	1	B5C0218	03/09/2015	03/09/15 19:47	
Dibromochloromethane	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
Dibromomethane	ND	5.2	2.1	1	B5C0218	03/09/2015	03/09/15 19:47	
...hlorodifluoromethane	ND	5.2	0.77	1	B5C0218	03/09/2015	03/09/15 19:47	
...l Acetate	ND	52	14	1	B5C0218	03/09/2015	03/09/15 19:47	
Ethyl Ether	ND	52	13	1	B5C0218	03/09/2015	03/09/15 19:47	
Ethyl tert-butyl ether	ND	5.2	1.2	1	B5C0218	03/09/2015	03/09/15 19:47	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-131-0

Lab ID: 1500855-05

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.2	1.2	1	B5C0218	03/09/2015	03/09/15 19:47	
Freon-113	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
Hexachlorobutadiene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
Isopropylbenzene	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
m,p-Xylene	ND	10	2.6	1	B5C0218	03/09/2015	03/09/15 19:47	
Methylene chloride	ND	5.2	5.2	1	B5C0218	03/09/2015	03/09/15 19:47	
MTBE	ND	5.2	0.94	1	B5C0218	03/09/2015	03/09/15 19:47	
n-Butylbenzene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
n-Propylbenzene	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
Naphthalene	ND	5.2	3.3	1	B5C0218	03/09/2015	03/09/15 19:47	
o-Xylene	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
sec-Butylbenzene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
Styrene	ND	5.2	1.4	1	B5C0218	03/09/2015	03/09/15 19:47	
tert-Amyl methyl ether	ND	5.2	1.1	1	B5C0218	03/09/2015	03/09/15 19:47	
tert-Butanol	ND	100	21	1	B5C0218	03/09/2015	03/09/15 19:47	
tert-Butylbenzene	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
Tetrachloroethene	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
Toluene	ND	5.2	0.92	1	B5C0218	03/09/2015	03/09/15 19:47	
trans-1,2-Dichloroethene	ND	5.2	1.5	1	B5C0218	03/09/2015	03/09/15 19:47	
trans-1,3-Dichloropropene	ND	5.2	1.2	1	B5C0218	03/09/2015	03/09/15 19:47	
Trichloroethene	ND	5.2	1.3	1	B5C0218	03/09/2015	03/09/15 19:47	
Trichlorofluoromethane	ND	5.2	1.9	1	B5C0218	03/09/2015	03/09/15 19:47	
Vinyl acetate	ND	52	11	1	B5C0218	03/09/2015	03/09/15 19:47	
Vinyl chloride	ND	5.2	1.1	1	B5C0218	03/09/2015	03/09/15 19:47	
Surrogate: 1,2-Dichloroethane-d4	*136 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 19:47*	
Surrogate: 4-Bromofluorobenzene	*92.5 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 19:47*	
Surrogate: Dibromofluoromethane	*124 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 19:47*	
Surrogate: Toluene-d8	*108 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 19:47*	

Certificate of Analysis

...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-131-1.5
Lab ID: 1500855-06

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:25	
Arsenic	**4.8**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:25	
Barium	**46**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:24	
Beryllium	**0.62**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:24	J
Cadmium	**0.71**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:25	J
Chromium	**11**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:24	
Cobalt	**5.7**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:25	
Copper	**10**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:24	
Lead	**11**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:25	
Molybdenum	**0.21**	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:24	J
Nickel	**16**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:24	
...nium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:25	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:24	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:25	
Vanadium	**20**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:24	
Zinc	**45**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:24	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0208	03/05/2015	03/10/15 12:48	
C4-C8	ND	1.0	0.20	1	B5C0208	03/05/2015	03/10/15 12:48	
Surrogate: 4-Bromofluorobenzene	*107 %*	*37 - 153*			B5C0208	03/05/2015	*03/10/15 12:48*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**1.1**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 19:11	
C23-C32	**2.5**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 19:11	
Surrogate: p-Terphenyl	*67.3 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 19:11*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
...,1-Trichloroethane	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
1,1,2,2-Tetrachloroethane	ND	5.3	2.1	1	B5C0218	03/09/2015	03/09/15 20:06	
1,1,2-Trichloroethane	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-131-1.5
Lab ID: 1500855-06

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.3	1.0	1	B5C0218	03/09/2015	03/09/15 20:06	
1,1-Dichloroethene	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 20:06	
1,1-Dichloropropene	ND	5.3	1.6	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2,3-Trichloropropane	ND	5.3	1.9	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2,3-Trichlorobenzene	ND	5.3	2.9	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2,4-Trichlorobenzene	ND	5.3	2.2	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2,4-Trimethylbenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2-Dibromoethane	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2-Dichlorobenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2-Dichloroethane	ND	5.3	0.93	1	B5C0218	03/09/2015	03/09/15 20:06	
1,2-Dichloropropane	ND	5.3	3.6	1	B5C0218	03/09/2015	03/09/15 20:06	
1,3,5-Trimethylbenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
1,3-Dichlorobenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
1,3-Dichloropropane	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 20:06	
1,4-Dichlorobenzene	ND	5.3	1.9	1	B5C0218	03/09/2015	03/09/15 20:06	
2,2-Dichloropropane	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
2-Chlorotoluene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
4-Chlorotoluene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
4-Isopropyltoluene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
Benzene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Bromobenzene	ND	5.3	1.7	1	B5C0218	03/09/2015	03/09/15 20:06	
Bromochloromethane	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
Bromodichloromethane	ND	5.3	1.7	1	B5C0218	03/09/2015	03/09/15 20:06	
Bromoform	ND	5.3	1.6	1	B5C0218	03/09/2015	03/09/15 20:06	
Bromomethane	ND	5.3	2.8	1	B5C0218	03/09/2015	03/09/15 20:06	
Carbon disulfide	ND	5.3	2.5	1	B5C0218	03/09/2015	03/09/15 20:06	
Carbon tetrachloride	ND	5.3	1.6	1	B5C0218	03/09/2015	03/09/15 20:06	
Chlorobenzene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Chloroethane	ND	5.3	5.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Chloroform	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
Chloromethane	ND	5.3	0.79	1	B5C0218	03/09/2015	03/09/15 20:06	
cis-1,2-Dichloroethene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
cis-1,3-Dichloropropene	ND	5.3	2.4	1	B5C0218	03/09/2015	03/09/15 20:06	
Di-isopropyl ether	ND	5.3	1.1	1	B5C0218	03/09/2015	03/09/15 20:06	
Dibromochloromethane	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Dibromomethane	ND	5.3	2.1	1	B5C0218	03/09/2015	03/09/15 20:06	
Dichlorodifluoromethane	ND	5.3	0.79	1	B5C0218	03/09/2015	03/09/15 20:06	
Ethyl Acetate	ND	53	14	1	B5C0218	03/09/2015	03/09/15 20:06	
Ethyl Ether	ND	53	13	1	B5C0218	03/09/2015	03/09/15 20:06	
Ethyl tert-butyl ether	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 20:06	

...ntec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-131-1.5
Lab ID: 1500855-06

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 20:06	
Freon-113	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
Hexachlorobutadiene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
Isopropylbenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
m,p-Xylene	ND	11	2.7	1	B5C0218	03/09/2015	03/09/15 20:06	
Methylene chloride	ND	5.3	5.3	1	B5C0218	03/09/2015	03/09/15 20:06	
MTBE	ND	5.3	0.96	1	B5C0218	03/09/2015	03/09/15 20:06	
n-Butylbenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
n-Propylbenzene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Naphthalene	ND	5.3	3.4	1	B5C0218	03/09/2015	03/09/15 20:06	
o-Xylene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
...Butylbenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
...rene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 20:06	
tert-Amyl methyl ether	ND	5.3	1.1	1	B5C0218	03/09/2015	03/09/15 20:06	
tert-Butanol	ND	110	21	1	B5C0218	03/09/2015	03/09/15 20:06	
tert-Butylbenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
Tetrachloroethene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Toluene	ND	5.3	0.94	1	B5C0218	03/09/2015	03/09/15 20:06	
trans-1,2-Dichloroethene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 20:06	
trans-1,3-Dichloropropene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Trichloroethene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 20:06	
Trichlorofluoromethane	ND	5.3	1.9	1	B5C0218	03/09/2015	03/09/15 20:06	
Vinyl acetate	ND	53	11	1	B5C0218	03/09/2015	03/09/15 20:06	
Vinyl chloride	ND	5.3	1.1	1	B5C0218	03/09/2015	03/09/15 20:06	
Surrogate: 1,2-Dichloroethane-d4	*128 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 20:06*	
Surrogate: 4-Bromofluorobenzene	*89.7 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 20:06*	
Surrogate: Dibromofluoromethane	*118 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 20:06*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 20:06*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-132-0
Lab ID: 1500855-07

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:35	
Arsenic	**3.5**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:35	
Barium	**48**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:35	
Beryllium	**0.67**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:34	J
Cadmium	**1.3**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:35	
Chromium	**10**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:35	
Cobalt	**4.1**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:35	
Copper	**12**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:35	
Lead	**53**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:35	
Molybdenum	**2.0**	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:35	
Nickel	**15**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:35	
Selenium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:35	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:35	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:35	
Vanadium	**25**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:35	
Zinc	45	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:35	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 15:44	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 15:44	
Surrogate: 4-Bromofluorobenzene	*106 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 15:44*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**4.5**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:36	
C23-C32	**7.0**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:36	
Surrogate: p-Terphenyl	*46.1 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 21:36*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
1,1,1-Trichloroethane	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
1,1,2,2-Tetrachloroethane	ND	5.4	2.1	1	B5C0218	03/09/2015	03/09/15 20:25	
1,1,2-Trichloroethane	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-132-0

Lab ID: 1500855-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.4	1.1	1	B5C0218	03/09/2015	03/09/15 20:25	
1,1-Dichloroethene	ND	5.4	1.2	1	B5C0218	03/09/2015	03/09/15 20:25	
1,1-Dichloropropene	ND	5.4	1.7	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2,3-Trichloropropane	ND	5.4	2.0	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2,3-Trichlorobenzene	ND	5.4	2.9	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2,4-Trichlorobenzene	ND	5.4	2.2	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2,4-Trimethylbenzene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2-Dibromoethane	ND	5.4	1.6	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2-Dichlorobenzene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
1,2-Dichloroethane	ND	5.4	0.94	1	B5C0218	03/09/2015	03/09/15 20:25	
...Dichloropropane	ND	5.4	3.7	1	B5C0218	03/09/2015	03/09/15 20:25	
...5-Trimethylbenzene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
1,3-Dichlorobenzene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
1,3-Dichloropropane	ND	5.4	1.2	1	B5C0218	03/09/2015	03/09/15 20:25	
1,4-Dichlorobenzene	ND	5.4	1.9	1	B5C0218	03/09/2015	03/09/15 20:25	
2,2-Dichloropropane	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
2-Chlorotoluene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
4-Chlorotoluene	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
4-Isopropyltoluene	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
Benzene	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
Bromobenzene	ND	5.4	1.8	1	B5C0218	03/09/2015	03/09/15 20:25	
Bromochloromethane	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
Bromodichloromethane	ND	5.4	1.7	1	B5C0218	03/09/2015	03/09/15 20:25	
Bromoform	ND	5.4	1.6	1	B5C0218	03/09/2015	03/09/15 20:25	
Bromomethane	ND	5.4	2.8	1	B5C0218	03/09/2015	03/09/15 20:25	
Carbon disulfide	ND	5.4	2.5	1	B5C0218	03/09/2015	03/09/15 20:25	
Carbon tetrachloride	ND	5.4	1.6	1	B5C0218	03/09/2015	03/09/15 20:25	
Chlorobenzene	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
Chloroethane	ND	5.4	5.4	1	B5C0218	03/09/2015	03/09/15 20:25	
Chloroform	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
Chloromethane	ND	5.4	0.80	1	B5C0218	03/09/2015	03/09/15 20:25	
cis-1,2-Dichloroethene	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
cis-1,3-Dichloropropene	ND	5.4	2.5	1	B5C0218	03/09/2015	03/09/15 20:25	
Di-isopropyl ether	ND	5.4	1.1	1	B5C0218	03/09/2015	03/09/15 20:25	
Dibromochloromethane	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
Dibromomethane	ND	5.4	2.1	1	B5C0218	03/09/2015	03/09/15 20:25	
...hlorodifluoromethane	ND	5.4	0.80	1	B5C0218	03/09/2015	03/09/15 20:25	
...l Acetate	ND	54	14	1	B5C0218	03/09/2015	03/09/15 20:25	
Ethyl Ether	ND	54	13	1	B5C0218	03/09/2015	03/09/15 20:25	
Ethyl tert-butyl ether	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-132-0
Lab ID: 1500855-07

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.4	1.2	1	B5C0218	03/09/2015	03/09/15 20:25	
Freon-113	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
Hexachlorobutadiene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
Isopropylbenzene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
m,p-Xylene	ND	11	2.7	1	B5C0218	03/09/2015	03/09/15 20:25	
Methylene chloride	ND	5.4	5.4	1	B5C0218	03/09/2015	03/09/15 20:25	
MTBE	ND	5.4	0.98	1	B5C0218	03/09/2015	03/09/15 20:25	
n-Butylbenzene	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
n-Propylbenzene	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
Naphthalene	ND	5.4	3.4	1	B5C0218	03/09/2015	03/09/15 20:25	
o-Xylene	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
sec-Butylbenzene	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
Styrene	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
tert-Amyl methyl ether	ND	5.4	1.1	1	B5C0218	03/09/2015	03/09/15 20:25	
tert-Butanol	ND	110	22	1	B5C0218	03/09/2015	03/09/15 20:25	
tert-Butylbenzene	ND	5.4	1.5	1	B5C0218	03/09/2015	03/09/15 20:25	
Tetrachloroethene	ND	5.4	1.4	1	B5C0218	03/09/2015	03/09/15 20:25	
Toluene	ND	5.4	0.96	1	B5C0218	03/09/2015	03/09/15 20:25	
trans-1,2-Dichloroethene	ND	5.4	1.6	1	B5C0218	03/09/2015	03/09/15 20:25	
trans-1,3-Dichloropropene	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
Trichloroethene	ND	5.4	1.3	1	B5C0218	03/09/2015	03/09/15 20:25	
Trichlorofluoromethane	ND	5.4	1.9	1	B5C0218	03/09/2015	03/09/15 20:25	
Vinyl acetate	ND	54	12	1	B5C0218	03/09/2015	03/09/15 20:25	
Vinyl chloride	ND	5.4	1.1	1	B5C0218	03/09/2015	03/09/15 20:25	
Surrogate: 1,2-Dichloroethane-d4	*131 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 20:25*	
Surrogate: 4-Bromofluorobenzene	*94.2 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 20:25*	
Surrogate: Dibromofluoromethane	*124 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 20:25*	
Surrogate: Toluene-d8	*107 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 20:25*	

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-132-1.5
Lab ID: 1500855-08

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:39	
Arsenic	**4.7**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:39	
Barium	**42**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:38	
Beryllium	**0.75**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:37	J
Cadmium	**0.81**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:39	J
Chromium	**9.6**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:38	
Cobalt	**7.2**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:39	
Copper	**11**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:38	
Lead	**8.6**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:39	
Molybdenum	**0.48**	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:38	J
...ckel	**21**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:38	
...nium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:39	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:38	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:39	
Vanadium	**19**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:38	
Zinc	**45**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:38	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 15:59	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 15:59	
Surrogate: 4-Bromofluorobenzene	*112 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 15:59*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 18:55	
C23-C32	**1.0**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 18:55	
Surrogate: p-Terphenyl	*41.1 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 18:55*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
,1-Trichloroethane	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
1,1,2,2-Tetrachloroethane	ND	6.7	2.6	1	B5C0218	03/09/2015	03/09/15 20:43	
1,1,2-Trichloroethane	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-132-1.5
Lab ID: 1500855-08

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	6.7	1.3	1	B5C0218	03/09/2015	03/09/15 20:43	
1,1-Dichloroethene	ND	6.7	1.5	1	B5C0218	03/09/2015	03/09/15 20:43	
1,1-Dichloropropene	ND	6.7	2.0	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2,3-Trichloropropane	ND	6.7	2.4	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2,3-Trichlorobenzene	ND	6.7	3.6	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2,4-Trichlorobenzene	ND	6.7	2.7	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2,4-Trimethylbenzene	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2-Dibromo-3-chloropropane	ND	13	2.8	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2-Dibromoethane	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2-Dichlorobenzene	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2-Dichloroethane	ND	6.7	1.2	1	B5C0218	03/09/2015	03/09/15 20:43	
1,2-Dichloropropane	ND	6.7	4.5	1	B5C0218	03/09/2015	03/09/15 20:43	
1,3,5-Trimethylbenzene	ND	6.7	1.8	1	B5C0218	03/09/2015	03/09/15 20:43	
1,3-Dichlorobenzene	ND	6.7	1.8	1	B5C0218	03/09/2015	03/09/15 20:43	
1,3-Dichloropropane	ND	6.7	1.5	1	B5C0218	03/09/2015	03/09/15 20:43	
1,4-Dichlorobenzene	ND	6.7	2.4	1	B5C0218	03/09/2015	03/09/15 20:43	
2,2-Dichloropropane	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
2-Chlorotoluene	ND	6.7	1.8	1	B5C0218	03/09/2015	03/09/15 20:43	
4-Chlorotoluene	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
4-Isopropyltoluene	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
Benzene	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Bromobenzene	ND	6.7	2.2	1	B5C0218	03/09/2015	03/09/15 20:43	
Bromochloromethane	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
Bromodichloromethane	ND	6.7	2.1	1	B5C0218	03/09/2015	03/09/15 20:43	
Bromoform	ND	6.7	2.0	1	B5C0218	03/09/2015	03/09/15 20:43	
Bromomethane	ND	6.7	3.5	1	B5C0218	03/09/2015	03/09/15 20:43	
Carbon disulfide	ND	6.7	3.1	1	B5C0218	03/09/2015	03/09/15 20:43	
Carbon tetrachloride	ND	6.7	2.0	1	B5C0218	03/09/2015	03/09/15 20:43	
Chlorobenzene	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Chloroethane	ND	6.7	6.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Chloroform	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
Chloromethane	ND	6.7	0.99	1	B5C0218	03/09/2015	03/09/15 20:43	
cis-1,2-Dichloroethene	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
cis-1,3-Dichloropropene	ND	6.7	3.1	1	B5C0218	03/09/2015	03/09/15 20:43	
Di-isopropyl ether	ND	6.7	1.3	1	B5C0218	03/09/2015	03/09/15 20:43	
Dibromochloromethane	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Dibromomethane	ND	6.7	2.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Dichlorodifluoromethane	ND	6.7	0.99	1	B5C0218	03/09/2015	03/09/15 20:43	
Ethyl Acetate	ND	67	18	1	B5C0218	03/09/2015	03/09/15 20:43	
Ethyl Ether	ND	67	16	1	B5C0218	03/09/2015	03/09/15 20:43	
Ethyl tert-butyl ether	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	

Certificate of Analysis

...ltec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-132-1.5
Lab ID: 1500855-08

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	6.7	1.5	1	B5C0218	03/09/2015	03/09/15 20:43	
Freon-113	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
Hexachlorobutadiene	ND	6.7	1.8	1	B5C0218	03/09/2015	03/09/15 20:43	
Isopropylbenzene	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
m,p-Xylene	ND	13	3.3	1	B5C0218	03/09/2015	03/09/15 20:43	
Methylene chloride	ND	6.7	6.7	1	B5C0218	03/09/2015	03/09/15 20:43	
MTBE	ND	6.7	1.2	1	B5C0218	03/09/2015	03/09/15 20:43	
n-Butylbenzene	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
n-Propylbenzene	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Naphthalene	ND	6.7	4.2	1	B5C0218	03/09/2015	03/09/15 20:43	
o-Xylene	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
...Butylbenzene	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
...ene	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
tert-Amyl methyl ether	ND	6.7	1.4	1	B5C0218	03/09/2015	03/09/15 20:43	
tert-Butanol	ND	130	27	1	B5C0218	03/09/2015	03/09/15 20:43	
tert-Butylbenzene	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
Tetrachloroethene	ND	6.7	1.7	1	B5C0218	03/09/2015	03/09/15 20:43	
Toluene	ND	6.7	1.2	1	B5C0218	03/09/2015	03/09/15 20:43	
trans-1,2-Dichloroethene	ND	6.7	1.9	1	B5C0218	03/09/2015	03/09/15 20:43	
trans-1,3-Dichloropropene	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Trichloroethene	ND	6.7	1.6	1	B5C0218	03/09/2015	03/09/15 20:43	
Trichlorofluoromethane	ND	6.7	2.4	1	B5C0218	03/09/2015	03/09/15 20:43	
Vinyl acetate	ND	67	14	1	B5C0218	03/09/2015	03/09/15 20:43	
Vinyl chloride	ND	6.7	1.4	1	B5C0218	03/09/2015	03/09/15 20:43	
Surrogate: 1,2-Dichloroethane-d4	*126 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 20:43*	
Surrogate: 4-Bromofluorobenzene	*93.3 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 20:43*	
Surrogate: Dibromofluoromethane	*119 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 20:43*	
Surrogate: Toluene-d8	*106 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 20:43*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-1-030515
Lab ID: 1500855-10

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0278	03/11/2015	03/12/15 12:02	
Arsenic	ND	0.010	0.0024	1	B5C0278	03/11/2015	03/12/15 12:02	
Barium	**0.0004**	0.0030	0.0004	1	B5C0278	03/11/2015	03/12/15 12:02	J
Beryllium	ND	0.0030	0.0002	1	B5C0278	03/11/2015	03/12/15 12:01	
Cadmium	ND	0.0030	0.0001	1	B5C0278	03/11/2015	03/12/15 12:02	
Chromium	**0.0008**	0.0030	0.0003	1	B5C0278	03/11/2015	03/12/15 12:02	J
Cobalt	ND	0.0030	0.0004	1	B5C0278	03/11/2015	03/12/15 12:02	
Copper	ND	0.0090	0.0009	1	B5C0278	03/11/2015	03/12/15 12:02	
Lead	ND	0.0050	0.0014	1	B5C0278	03/11/2015	03/12/15 12:02	
Molybdenum	ND	0.0050	0.0005	1	B5C0278	03/11/2015	03/12/15 12:02	
Nickel	ND	0.0050	0.0004	1	B5C0278	03/11/2015	03/12/15 12:02	
Selenium	ND	0.010	0.0040	1	B5C0278	03/11/2015	03/12/15 12:02	
Silver	ND	0.0030	0.0006	1	B5C0278	03/11/2015	03/12/15 12:02	
Thallium	ND	0.015	0.0026	1	B5C0278	03/11/2015	03/12/15 12:02	
Vanadium	ND	0.0030	0.0013	1	B5C0278	03/11/2015	03/12/15 12:02	
Zinc	**0.0041**	0.025	0.0017	1	B5C0278	03/11/2015	03/12/15 12:02	J

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5C0209	03/09/2015	03/09/15 11:47	
C4-C8	ND	0.05	0.05	1	B5C0209	03/09/2015	03/09/15 11:47	
Surrogate: 4-Bromofluorobenzene	*88.6 %*	*70 - 130*			B5C0209	03/09/2015	*03/09/15 11:47*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5C0230	03/10/2015	03/11/15 02:05	
C23-C32	ND	0.05	0.05	1	B5C0230	03/10/2015	03/11/15 02:05	
Surrogate: p-Terphenyl	*64.5 %*	*20 - 141*			B5C0230	03/10/2015	*03/11/15 02:05*	

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0229	03/10/2015	03/10/15 12:16	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5C0229	03/10/2015	03/10/15 12:16	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0229	03/10/2015	03/10/15 12:16	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5C0229	03/10/2015	03/10/15 12:16	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-1-030515
Lab ID: 1500855-10

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 12:16	
1,1-Dichloroethene	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 12:16	
1,1-Dichloropropene	ND	0.50	0.21	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2-Dibromoethane	ND	0.50	0.24	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5C0229	03/10/2015	03/10/15 12:16	
1,2-Dichloroethane	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 12:16	
...Dichloropropane	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 12:16	
...,5-Trimethylbenzene	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 12:16	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5C0229	03/10/2015	03/10/15 12:16	
1,3-Dichloropropane	ND	0.50	0.34	1	B5C0229	03/10/2015	03/10/15 12:16	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5C0229	03/10/2015	03/10/15 12:16	
2,2-Dichloropropane	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 12:16	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5C0229	03/10/2015	03/10/15 12:16	
2-Chlorotoluene	ND	0.50	0.28	1	B5C0229	03/10/2015	03/10/15 12:16	
4-Chlorotoluene	ND	0.50	0.30	1	B5C0229	03/10/2015	03/10/15 12:16	
4-Isopropyltoluene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 12:16	
Benzene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 12:16	
Bromobenzene	ND	0.50	0.32	1	B5C0229	03/10/2015	03/10/15 12:16	
Bromochloromethane	ND	0.50	0.40	1	B5C0229	03/10/2015	03/10/15 12:16	
Bromodichloromethane	ND	0.50	0.20	1	B5C0229	03/10/2015	03/10/15 12:16	
Bromoform	ND	0.50	0.34	1	B5C0229	03/10/2015	03/10/15 12:16	
Bromomethane	ND	0.50	0.49	1	B5C0229	03/10/2015	03/10/15 12:16	
Carbon disulfide	ND	1.0	1.0	1	B5C0229	03/10/2015	03/10/15 12:16	
Carbon tetrachloride	ND	0.50	0.18	1	B5C0229	03/10/2015	03/10/15 12:16	
Chlorobenzene	ND	0.50	0.33	1	B5C0229	03/10/2015	03/10/15 12:16	
Chloroethane	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 12:16	
Chloroform	ND	0.50	0.32	1	B5C0229	03/10/2015	03/10/15 12:16	
Chloromethane	ND	0.50	0.30	1	B5C0229	03/10/2015	03/10/15 12:16	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5C0229	03/10/2015	03/10/15 12:16	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5C0229	03/10/2015	03/10/15 12:16	
Di-isopropyl ether	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 12:16	
Dibromochloromethane	ND	0.50	0.44	1	B5C0229	03/10/2015	03/10/15 12:16	
...bromomethane	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 12:16	
...ichlorodifluoromethane	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 12:16	
Ethyl Acetate	ND	10	4.0	1	B5C0229	03/10/2015	03/10/15 12:16	
Ethyl Ether	ND	10	2.9	1	B5C0229	03/10/2015	03/10/15 12:16	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-1-030515
Lab ID: 1500855-10

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5C0229	03/10/2015	03/10/15 12:16	
Ethylbenzene	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 12:16	
Freon-113	ND	0.50	0.35	1	B5C0229	03/10/2015	03/10/15 12:16	
Hexachlorobutadiene	ND	0.50	0.47	1	B5C0229	03/10/2015	03/10/15 12:16	
Isopropylbenzene	ND	0.50	0.25	1	B5C0229	03/10/2015	03/10/15 12:16	
m,p-Xylene	ND	1.0	0.46	1	B5C0229	03/10/2015	03/10/15 12:16	
Methylene chloride	ND	1.0	1.0	1	B5C0229	03/10/2015	03/10/15 12:16	
MTBE	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 12:16	
n-Butylbenzene	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 12:16	
n-Propylbenzene	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 12:16	
Naphthalene	ND	0.50	0.40	1	B5C0229	03/10/2015	03/10/15 12:16	
o-Xylene	ND	0.50	0.29	1	B5C0229	03/10/2015	03/10/15 12:16	
sec-Butylbenzene	ND	0.50	0.36	1	B5C0229	03/10/2015	03/10/15 12:16	
Styrene	ND	0.50	0.29	1	B5C0229	03/10/2015	03/10/15 12:16	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 12:16	
tert-Butanol	ND	10	7.6	1	B5C0229	03/10/2015	03/10/15 12:16	
tert-Butylbenzene	ND	0.50	0.32	1	B5C0229	03/10/2015	03/10/15 12:16	
Tetrachloroethene	ND	0.50	0.28	1	B5C0229	03/10/2015	03/10/15 12:16	
Toluene	ND	0.50	0.21	1	B5C0229	03/10/2015	03/10/15 12:16	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 12:16	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 12:16	
Trichloroethene	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 12:16	
Trichlorofluoromethane	ND	0.50	0.28	1	B5C0229	03/10/2015	03/10/15 12:16	
Vinyl acetate	ND	10	2.6	1	B5C0229	03/10/2015	03/10/15 12:16	
Vinyl chloride	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 12:16	
Surrogate: 1,2-Dichloroethane-d4	*89.6 %*	*49 - 148*			B5C0229	03/10/2015	*03/10/15 12:16*	
Surrogate: 4-Bromofluorobenzene	*95.0 %*	*65 - 132*			B5C0229	03/10/2015	*03/10/15 12:16*	
Surrogate: Dibromofluoromethane	*92.4 %*	*55 - 138*			B5C0229	03/10/2015	*03/10/15 12:16*	
Surrogate: Toluene-d8	*77.5 %*	*60 - 120*			B5C0229	03/10/2015	*03/10/15 12:16*	

Certificate of Analysis

...itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-133-0
Lab ID: 1500855-11

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:42	
Arsenic	**1.7**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:42	
Barium	**29**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:42	
Beryllium	**0.39**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:41	J
Cadmium	**0.62**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:42	J
Chromium	**6.2**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:42	
Cobalt	**2.7**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:42	
Copper	**6.2**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:42	
Lead	**72**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:42	
Molybdenum	**0.95**	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:42	J
Nickel	**6.4**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:42	
...nium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:42	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:42	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:42	
Vanadium	**17**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:42	
Zinc	**120**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:42	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 16:15	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 16:15	
Surrogate: 4-Bromofluorobenzene	*107 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 16:15*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**1.3**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:04	
C23-C32	4.3	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:04	
Surrogate: p-Terphenyl	*58.8 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 21:04*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
...1-Trichloroethane	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
1,1,2,2-Tetrachloroethane	ND	5.3	2.1	1	B5C0218	03/09/2015	03/09/15 21:02	
1,1,2-Trichloroethane	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-133-0

Lab ID: 1500855-11

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.3	1.0	1	B5C0218	03/09/2015	03/09/15 21:02	
1,1-Dichloroethene	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 21:02	
1,1-Dichloropropene	ND	5.3	1.6	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2,3-Trichloropropane	ND	5.3	1.9	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2,3-Trichlorobenzene	ND	5.3	2.9	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2,4-Trichlorobenzene	ND	5.3	2.2	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2,4-Trimethylbenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2-Dibromoethane	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2-Dichlorobenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2-Dichloroethane	ND	5.3	0.92	1	B5C0218	03/09/2015	03/09/15 21:02	
1,2-Dichloropropane	ND	5.3	3.6	1	B5C0218	03/09/2015	03/09/15 21:02	
1,3,5-Trimethylbenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
1,3-Dichlorobenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
1,3-Dichloropropane	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 21:02	
1,4-Dichlorobenzene	ND	5.3	1.9	1	B5C0218	03/09/2015	03/09/15 21:02	
2,2-Dichloropropane	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
2-Chlorotoluene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
4-Chlorotoluene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
4-Isopropyltoluene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
Benzene	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 21:02	
Bromobenzene	ND	5.3	1.7	1	B5C0218	03/09/2015	03/09/15 21:02	
Bromochloromethane	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
Bromodichloromethane	ND	5.3	1.6	1	B5C0218	03/09/2015	03/09/15 21:02	
Bromoform	ND	5.3	1.6	1	B5C0218	03/09/2015	03/09/15 21:02	
Bromomethane	ND	5.3	2.8	1	B5C0218	03/09/2015	03/09/15 21:02	
Carbon disulfide	ND	5.3	2.5	1	B5C0218	03/09/2015	03/09/15 21:02	
Carbon tetrachloride	ND	5.3	1.6	1	B5C0218	03/09/2015	03/09/15 21:02	
Chlorobenzene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
Chloroethane	ND	5.3	5.2	1	B5C0218	03/09/2015	03/09/15 21:02	
Chloroform	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
Chloromethane	ND	5.3	0.79	1	B5C0218	03/09/2015	03/09/15 21:02	
cis-1,2-Dichloroethene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
cis-1,3-Dichloropropene	ND	5.3	2.4	1	B5C0218	03/09/2015	03/09/15 21:02	
Di-isopropyl ether	ND	5.3	1.1	1	B5C0218	03/09/2015	03/09/15 21:02	
Dibromochloromethane	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
Dibromomethane	ND	5.3	2.1	1	B5C0218	03/09/2015	03/09/15 21:02	
Dichlorodifluoromethane	ND	5.3	0.78	1	B5C0218	03/09/2015	03/09/15 21:02	
Ethyl Acetate	ND	53	14	1	B5C0218	03/09/2015	03/09/15 21:02	
Ethyl Ether	ND	53	13	1	B5C0218	03/09/2015	03/09/15 21:02	
Ethyl tert-butyl ether	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 21:02	

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-133-0
Lab ID: 1500855-11

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 21:02	
Freon-113	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
Hexachlorobutadiene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
Isopropylbenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
m,p-Xylene	ND	11	2.6	1	B5C0218	03/09/2015	03/09/15 21:02	
Methylene chloride	ND	5.3	5.3	1	B5C0218	03/09/2015	03/09/15 21:02	
MTBE	ND	5.3	0.96	1	B5C0218	03/09/2015	03/09/15 21:02	
n-Butylbenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
n-Propylbenzene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
Naphthalene	ND	5.3	3.4	1	B5C0218	03/09/2015	03/09/15 21:02	
o-Xylene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
Butylbenzene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
..ene	ND	5.3	1.4	1	B5C0218	03/09/2015	03/09/15 21:02	
tert-Amyl methyl ether	ND	5.3	1.1	1	B5C0218	03/09/2015	03/09/15 21:02	
tert-Butanol	ND	110	21	1	B5C0218	03/09/2015	03/09/15 21:02	
tert-Butylbenzene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
Tetrachloroethene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
Toluene	ND	5.3	0.94	1	B5C0218	03/09/2015	03/09/15 21:02	
trans-1,2-Dichloroethene	ND	5.3	1.5	1	B5C0218	03/09/2015	03/09/15 21:02	
trans-1,3-Dichloropropene	ND	5.3	1.2	1	B5C0218	03/09/2015	03/09/15 21:02	
Trichloroethene	ND	5.3	1.3	1	B5C0218	03/09/2015	03/09/15 21:02	
Trichlorofluoromethane	ND	5.3	1.9	1	B5C0218	03/09/2015	03/09/15 21:02	
Vinyl acetate	ND	53	11	1	B5C0218	03/09/2015	03/09/15 21:02	
Vinyl chloride	ND	5.3	1.1	1	B5C0218	03/09/2015	03/09/15 21:02	
Surrogate: 1,2-Dichloroethane-d4	*136 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 21:02*	
Surrogate: 4-Bromofluorobenzene	*92.0 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 21:02*	
Surrogate: Dibromofluoromethane	*127 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 21:02*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 21:02*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-133-1.5
Lab ID: 1500855-12

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:45	
Arsenic	**1.4**	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:45	
Barium	**25**	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:45	
Beryllium	**0.32**	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:44	J
Cadmium	**0.41**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:45	J
Chromium	**5.5**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:45	
Cobalt	**2.2**	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:45	
Copper	**4.3**	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:45	
Lead	**18**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:45	
Molybdenum	**0.58**	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:45	J
Nickel	**5.3**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:45	
Selenium	ND	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:45	
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:45	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:45	
Vanadium	**14**	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:45	
Zinc	**26**	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:45	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 16:31	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 16:31	
Surrogate: 4-Bromofluorobenzene	*113 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 16:31*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**1.0**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 20:32	
C23-C32	**2.2**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 20:32	
Surrogate: p-Terphenyl	*45.0 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 20:32*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
1,1,1-Trichloroethane	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
1,1,2,2-Tetrachloroethane	ND	5.7	2.2	1	B5C0218	03/09/2015	03/09/15 21:21	
1,1,2-Trichloroethane	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	

Certificate of Analysis

..ltec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-133-1.5
Lab ID: 1500855-12

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.7	1.1	1	B5C0218	03/09/2015	03/09/15 21:21	
1,1-Dichloroethene	ND	5.7	1.3	1	B5C0218	03/09/2015	03/09/15 21:21	
1,1-Dichloropropene	ND	5.7	1.8	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2,3-Trichloropropane	ND	5.7	2.1	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2,3-Trichlorobenzene	ND	5.7	3.1	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2,4-Trichlorobenzene	ND	5.7	2.3	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2,4-Trimethylbenzene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2-Dibromo-3-chloropropane	ND	11	2.4	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2-Dibromoethane	ND	5.7	1.7	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2-Dichlorobenzene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
1,2-Dichloroethane	ND	5.7	1.0	1	B5C0218	03/09/2015	03/09/15 21:21	
Dichloropropane	ND	5.7	3.9	1	B5C0218	03/09/2015	03/09/15 21:21	
,5-Trimethylbenzene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
1,3-Dichlorobenzene	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
1,3-Dichloropropane	ND	5.7	1.3	1	B5C0218	03/09/2015	03/09/15 21:21	
1,4-Dichlorobenzene	ND	5.7	2.0	1	B5C0218	03/09/2015	03/09/15 21:21	
2,2-Dichloropropane	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
2-Chlorotoluene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
4-Chlorotoluene	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
4-Isopropyltoluene	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
Benzene	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
Bromobenzene	ND	5.7	1.9	1	B5C0218	03/09/2015	03/09/15 21:21	
Bromochloromethane	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
Bromodichloromethane	ND	5.7	1.8	1	B5C0218	03/09/2015	03/09/15 21:21	
Bromoform	ND	5.7	1.7	1	B5C0218	03/09/2015	03/09/15 21:21	
Bromomethane	ND	5.7	3.0	1	B5C0218	03/09/2015	03/09/15 21:21	
Carbon disulfide	ND	5.7	2.7	1	B5C0218	03/09/2015	03/09/15 21:21	
Carbon tetrachloride	ND	5.7	1.7	1	B5C0218	03/09/2015	03/09/15 21:21	
Chlorobenzene	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
Chloroethane	ND	5.7	5.7	1	B5C0218	03/09/2015	03/09/15 21:21	
Chloroform	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
Chloromethane	ND	5.7	0.85	1	B5C0218	03/09/2015	03/09/15 21:21	
cis-1,2-Dichloroethene	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
cis-1,3-Dichloropropene	ND	5.7	2.6	1	B5C0218	03/09/2015	03/09/15 21:21	
Di-isopropyl ether	ND	5.7	1.2	1	B5C0218	03/09/2015	03/09/15 21:21	
Dibromochloromethane	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
Dibromomethane	ND	5.7	2.3	1	B5C0218	03/09/2015	03/09/15 21:21	
hlorodifluoromethane	ND	5.7	0.85	1	B5C0218	03/09/2015	03/09/15 21:21	
l Acetate	ND	57	15	1	B5C0218	03/09/2015	03/09/15 21:21	
Ethyl Ether	ND	57	14	1	B5C0218	03/09/2015	03/09/15 21:21	
Ethyl tert-butyl ether	ND	5.7	1.3	1	B5C0218	03/09/2015	03/09/15 21:21	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-133-1.5

Lab ID: 1500855-12

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.7	1.3	1	B5C0218	03/09/2015	03/09/15 21:21	
Freon-113	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
Hexachlorobutadiene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
Isopropylbenzene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
m,p-Xylene	ND	11	2.9	1	B5C0218	03/09/2015	03/09/15 21:21	
Methylene chloride	ND	5.7	5.7	1	B5C0218	03/09/2015	03/09/15 21:21	
MTBE	ND	5.7	1.0	1	B5C0218	03/09/2015	03/09/15 21:21	
n-Butylbenzene	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
n-Propylbenzene	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
Naphthalene	ND	5.7	3.6	1	B5C0218	03/09/2015	03/09/15 21:21	
o-Xylene	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
sec-Butylbenzene	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
Styrene	ND	5.7	1.5	1	B5C0218	03/09/2015	03/09/15 21:21	
tert-Amyl methyl ether	ND	5.7	1.2	1	B5C0218	03/09/2015	03/09/15 21:21	
tert-Butanol	ND	110	23	1	B5C0218	03/09/2015	03/09/15 21:21	
tert-Butylbenzene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
Tetrachloroethene	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
Toluene	ND	5.7	1.0	1	B5C0218	03/09/2015	03/09/15 21:21	
trans-1,2-Dichloroethene	ND	5.7	1.6	1	B5C0218	03/09/2015	03/09/15 21:21	
trans-1,3-Dichloropropene	ND	5.7	1.3	1	B5C0218	03/09/2015	03/09/15 21:21	
Trichloroethene	ND	5.7	1.4	1	B5C0218	03/09/2015	03/09/15 21:21	
Trichlorofluoromethane	ND	5.7	2.1	1	B5C0218	03/09/2015	03/09/15 21:21	
Vinyl acetate	ND	57	12	1	B5C0218	03/09/2015	03/09/15 21:21	
Vinyl chloride	ND	5.7	1.2	1	B5C0218	03/09/2015	03/09/15 21:21	
Surrogate: 1,2-Dichloroethane-d4	*140 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 21:21*	
Surrogate: 4-Bromofluorobenzene	*91.5 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 21:21*	
Surrogate: Dibromofluoromethane	*128 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 21:21*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 21:21*	

Certificate of Analysis

...ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-134-0
Lab ID: 1500855-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0270	03/11/2015	03/12/15 13:49	
Arsenic	1.8	1.0	0.19	1	B5C0270	03/11/2015	03/12/15 13:49	
Barium	29	1.0	0.14	1	B5C0270	03/11/2015	03/12/15 13:48	
Beryllium	0.45	1.0	0.04	1	B5C0270	03/11/2015	03/12/15 13:48	J
Cadmium	0.80	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:49	J
Chromium	7.2	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:48	
Cobalt	2.8	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:49	
Copper	7.5	2.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:48	
Lead	58	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:49	
Molybdenum	0.96	1.0	0.05	1	B5C0270	03/11/2015	03/12/15 13:49	J
...kel	6.2	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:49	
...nium	0.42	1.0	0.15	1	B5C0270	03/11/2015	03/12/15 13:49	J
Silver	ND	1.0	0.06	1	B5C0270	03/11/2015	03/12/15 13:48	
Thallium	ND	1.0	0.20	1	B5C0270	03/11/2015	03/12/15 13:49	
Vanadium	17	1.0	0.07	1	B5C0270	03/11/2015	03/12/15 13:48	
Zinc	190	1.0	0.11	1	B5C0270	03/11/2015	03/12/15 13:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 16:47	
C4-C8	ND	1.0	0.20	1	B5C0207	03/05/2015	03/09/15 16:47	
Surrogate: 4-Bromofluorobenzene	*105 %*	*37 - 153*			B5C0207	03/05/2015	*03/09/15 16:47*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	2.0	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:53	
C23-C32	5.7	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 21:53	
Surrogate: p-Terphenyl	*37.4 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 21:53*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-134-1.5
Lab ID: 1500855-15

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.40**	2.0	0.25	1	B5C0271	03/11/2015	03/12/15 12:34	J
Arsenic	**1.0**	1.0	0.19	1	B5C0271	03/11/2015	03/12/15 12:34	
Barium	**22**	1.0	0.14	1	B5C0271	03/11/2015	03/12/15 12:34	
Beryllium	**0.42**	1.0	0.04	1	B5C0271	03/11/2015	03/12/15 12:33	J
Cadmium	**0.33**	1.0	0.11	1	B5C0271	03/11/2015	03/12/15 12:34	J
Chromium	**5.1**	1.0	0.07	1	B5C0271	03/11/2015	03/12/15 12:34	
Cobalt	**1.8**	1.0	0.15	1	B5C0271	03/11/2015	03/12/15 12:34	
Copper	**3.3**	2.0	0.05	1	B5C0271	03/11/2015	03/12/15 12:34	
Lead	**9.3**	1.0	0.07	1	B5C0271	03/11/2015	03/12/15 12:34	
Molybdenum	**0.84**	1.0	0.05	1	B5C0271	03/11/2015	03/12/15 12:34	J
Nickel	**4.9**	1.0	0.07	1	B5C0271	03/11/2015	03/12/15 12:34	
Selenium	ND	1.0	0.15	1	B5C0271	03/11/2015	03/12/15 12:34	
Silver	ND	1.0	0.06	1	B5C0271	03/11/2015	03/12/15 12:34	
Thallium	ND	1.0	0.20	1	B5C0271	03/11/2015	03/12/15 12:34	
Vanadium	**14**	1.0	0.07	1	B5C0271	03/11/2015	03/12/15 12:34	
Zinc	**31**	1.0	0.11	1	B5C0271	03/11/2015	03/12/15 12:34	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0208	03/05/2015	03/10/15 11:29	
C4-C8	ND	1.0	0.20	1	B5C0208	03/05/2015	03/10/15 11:29	
Surrogate: 4-Bromofluorobenzene	*106 %*	*37 - 153*			B5C0208	03/05/2015	*03/10/15 11:29*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 19:27	
C23-C32	**1.9**	1.0	1.0	1	B5C0247	03/10/2015	03/10/15 19:27	
Surrogate: p-Terphenyl	*62.7 %*	*26 - 123*			B5C0247	03/10/2015	*03/10/15 19:27*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
1,1,1-Trichloroethane	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
1,1,2,2-Tetrachloroethane	ND	8.0	3.1	1	B5C0218	03/09/2015	03/09/15 21:58	
1,1,2-Trichloroethane	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-134-1.5

Lab ID: 1500855-15

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	8.0	1.6	1	B5C0218	03/09/2015	03/09/15 21:58	
1,1-Dichloroethene	ND	8.0	1.8	1	B5C0218	03/09/2015	03/09/15 21:58	
1,1-Dichloropropene	ND	8.0	2.4	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2,3-Trichloropropane	ND	8.0	2.9	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2,3-Trichlorobenzene	ND	8.0	4.3	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2,4-Trichlorobenzene	ND	8.0	3.3	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2,4-Trimethylbenzene	ND	8.0	2.3	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2-Dibromo-3-chloropropane	ND	16	3.4	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2-Dibromoethane	ND	8.0	2.3	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2-Dichlorobenzene	ND	8.0	2.3	1	B5C0218	03/09/2015	03/09/15 21:58	
1,2-Dichloroethane	ND	8.0	1.4	1	B5C0218	03/09/2015	03/09/15 21:58	
...Dichloropropane	ND	8.0	5.4	1	B5C0218	03/09/2015	03/09/15 21:58	
...5-Trimethylbenzene	ND	8.0	2.2	1	B5C0218	03/09/2015	03/09/15 21:58	
1,3-Dichlorobenzene	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
1,3-Dichloropropane	ND	8.0	1.8	1	B5C0218	03/09/2015	03/09/15 21:58	
1,4-Dichlorobenzene	ND	8.0	2.8	1	B5C0218	03/09/2015	03/09/15 21:58	
2,2-Dichloropropane	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	
2-Chlorotoluene	ND	8.0	2.2	1	B5C0218	03/09/2015	03/09/15 21:58	
4-Chlorotoluene	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
4-Isopropyltoluene	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
Benzene	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	
Bromobenzene	ND	8.0	2.6	1	B5C0218	03/09/2015	03/09/15 21:58	
Bromochloromethane	ND	8.0	2.2	1	B5C0218	03/09/2015	03/09/15 21:58	
Bromodichloromethane	ND	8.0	2.5	1	B5C0218	03/09/2015	03/09/15 21:58	
Bromoform	ND	8.0	2.4	1	B5C0218	03/09/2015	03/09/15 21:58	
Bromomethane	ND	8.0	4.2	1	B5C0218	03/09/2015	03/09/15 21:58	
Carbon disulfide	ND	8.0	3.7	1	B5C0218	03/09/2015	03/09/15 21:58	
Carbon tetrachloride	ND	8.0	2.4	1	B5C0218	03/09/2015	03/09/15 21:58	
Chlorobenzene	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	
Chloroethane	ND	8.0	7.9	1	B5C0218	03/09/2015	03/09/15 21:58	
Chloroform	ND	8.0	2.3	1	B5C0218	03/09/2015	03/09/15 21:58	
Chloromethane	ND	8.0	1.2	1	B5C0218	03/09/2015	03/09/15 21:58	
cis-1,2-Dichloroethene	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	
cis-1,3-Dichloropropene	ND	8.0	3.6	1	B5C0218	03/09/2015	03/09/15 21:58	
Di-isopropyl ether	ND	8.0	1.6	1	B5C0218	03/09/2015	03/09/15 21:58	
Dibromochloromethane	ND	8.0	2.0	1	B5C0218	03/09/2015	03/09/15 21:58	
Dibromomethane	ND	8.0	3.1	1	B5C0218	03/09/2015	03/09/15 21:58	
...hlorodifluoromethane	ND	8.0	1.2	1	B5C0218	03/09/2015	03/09/15 21:58	
...l Acetate	ND	80	21	1	B5C0218	03/09/2015	03/09/15 21:58	
Ethyl Ether	ND	80	19	1	B5C0218	03/09/2015	03/09/15 21:58	
Ethyl tert-butyl ether	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-134-1.5
Lab ID: 1500855-15

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	8.0	1.8	1	B5C0218	03/09/2015	03/09/15 21:58	
Freon-113	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
Hexachlorobutadiene	ND	8.0	2.2	1	B5C0218	03/09/2015	03/09/15 21:58	
Isopropylbenzene	ND	8.0	2.3	1	B5C0218	03/09/2015	03/09/15 21:58	
m,p-Xylene	ND	16	4.0	1	B5C0218	03/09/2015	03/09/15 21:58	
Methylene chloride	ND	8.0	8.0	1	B5C0218	03/09/2015	03/09/15 21:58	
MTBE	ND	8.0	1.4	1	B5C0218	03/09/2015	03/09/15 21:58	
n-Butylbenzene	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
n-Propylbenzene	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	
Naphthalene	ND	8.0	5.1	1	B5C0218	03/09/2015	03/09/15 21:58	
o-Xylene	ND	8.0	2.0	1	B5C0218	03/09/2015	03/09/15 21:58	
sec-Butylbenzene	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
Styrene	ND	8.0	2.1	1	B5C0218	03/09/2015	03/09/15 21:58	
tert-Amyl methyl ether	ND	8.0	1.6	1	B5C0218	03/09/2015	03/09/15 21:58	
tert-Butanol	ND	160	32	1	B5C0218	03/09/2015	03/09/15 21:58	
tert-Butylbenzene	ND	8.0	2.2	1	B5C0218	03/09/2015	03/09/15 21:58	
Tetrachloroethene	ND	8.0	2.0	1	B5C0218	03/09/2015	03/09/15 21:58	
Toluene	ND	8.0	1.4	1	B5C0218	03/09/2015	03/09/15 21:58	
trans-1,2-Dichloroethene	ND	8.0	2.3	1	B5C0218	03/09/2015	03/09/15 21:58	
trans-1,3-Dichloropropene	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	
Trichloroethene	ND	8.0	1.9	1	B5C0218	03/09/2015	03/09/15 21:58	
Trichlorofluoromethane	ND	8.0	2.9	1	B5C0218	03/09/2015	03/09/15 21:58	
Vinyl acetate	ND	80	17	1	B5C0218	03/09/2015	03/09/15 21:58	
Vinyl chloride	ND	8.0	1.6	1	B5C0218	03/09/2015	03/09/15 21:58	
Surrogate: 1,2-Dichloroethane-d4	*146 %*	*20 - 189*			B5C0218	03/09/2015	*03/09/15 21:58*	
Surrogate: 4-Bromofluorobenzene	*88.3 %*	*20 - 173*			B5C0218	03/09/2015	*03/09/15 21:58*	
Surrogate: Dibromofluoromethane	*127 %*	*26 - 178*			B5C0218	03/09/2015	*03/09/15 21:58*	
Surrogate: Toluene-d8	*106 %*	*31 - 166*			B5C0218	03/09/2015	*03/09/15 21:58*	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-2-030515
Lab ID: 1500855-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0278	03/11/2015	03/12/15 12:16	
Arsenic	ND	0.010	0.0024	1	B5C0278	03/11/2015	03/12/15 12:16	
Barium	ND	0.0030	0.0004	1	B5C0278	03/11/2015	03/12/15 12:16	
Beryllium	**0.0002**	0.0030	0.0002	1	B5C0278	03/11/2015	03/12/15 12:15	J
Cadmium	**0.0001**	0.0030	0.0001	1	B5C0278	03/11/2015	03/12/15 12:16	J
Chromium	**0.0010**	0.0030	0.0003	1	B5C0278	03/11/2015	03/12/15 12:16	J
Cobalt	ND	0.0030	0.0004	1	B5C0278	03/11/2015	03/12/15 12:16	
Copper	**0.0011**	0.0090	0.0009	1	B5C0278	03/11/2015	03/12/15 12:16	J
Lead	ND	0.0050	0.0014	1	B5C0278	03/11/2015	03/12/15 12:16	
Molybdenum	ND	0.0050	0.0005	1	B5C0278	03/11/2015	03/12/15 12:16	
Nickel	ND	0.0050	0.0004	1	B5C0278	03/11/2015	03/12/15 12:16	
..nium	ND	0.010	0.0040	1	B5C0278	03/11/2015	03/12/15 12:16	
..ver	ND	0.0030	0.0006	1	B5C0278	03/11/2015	03/12/15 12:16	
Thallium	ND	0.015	0.0026	1	B5C0278	03/11/2015	03/12/15 12:16	
Vanadium	ND	0.0030	0.0013	1	B5C0278	03/11/2015	03/12/15 12:16	
Zinc	0.0047	0.025	0.0017	1	B5C0278	03/11/2015	03/12/15 12:16	J

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5C0209	03/09/2015	03/09/15 12:07	
C4-C8	ND	0.05	0.05	1	B5C0209	03/09/2015	03/09/15 12:07	
Surrogate: 4-Bromofluorobenzene	*96.0 %*	*70 - 130*			B5C0209	03/09/2015	*03/09/15 12:07*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5C0230	03/10/2015	03/11/15 01:49	
C23-C32	ND	0.05	0.05	1	B5C0230	03/10/2015	03/11/15 01:49	
Surrogate: p-Terphenyl	*66.6 %*	*20 - 141*			B5C0230	03/10/2015	*03/11/15 01:49*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
..1,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0229	03/10/2015	03/10/15 16:42	
1-Trichloroethane	ND	0.50	0.20	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2-Trichloroethane	ND	0.50	0.38	1	B5C0229	03/10/2015	03/10/15 16:42	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-2-030515
Lab ID: 1500855-17

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 16:42	
1,1-Dichloroethene	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 16:42	
1,1-Dichloropropene	ND	0.50	0.21	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2-Dibromoethane	ND	0.50	0.24	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2-Dichloroethane	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 16:42	
1,2-Dichloropropane	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 16:42	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 16:42	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5C0229	03/10/2015	03/10/15 16:42	
1,3-Dichloropropane	ND	0.50	0.34	1	B5C0229	03/10/2015	03/10/15 16:42	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5C0229	03/10/2015	03/10/15 16:42	
2,2-Dichloropropane	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 16:42	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5C0229	03/10/2015	03/10/15 16:42	
2-Chlorotoluene	ND	0.50	0.28	1	B5C0229	03/10/2015	03/10/15 16:42	
4-Chlorotoluene	ND	0.50	0.30	1	B5C0229	03/10/2015	03/10/15 16:42	
4-Isopropyltoluene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 16:42	
Benzene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 16:42	
Bromobenzene	ND	0.50	0.32	1	B5C0229	03/10/2015	03/10/15 16:42	
Bromochloromethane	ND	0.50	0.40	1	B5C0229	03/10/2015	03/10/15 16:42	
Bromodichloromethane	ND	0.50	0.20	1	B5C0229	03/10/2015	03/10/15 16:42	
Bromoform	ND	0.50	0.34	1	B5C0229	03/10/2015	03/10/15 16:42	
Bromomethane	ND	0.50	0.49	1	B5C0229	03/10/2015	03/10/15 16:42	
Carbon disulfide	ND	1.0	1.0	1	B5C0229	03/10/2015	03/10/15 16:42	
Carbon tetrachloride	ND	0.50	0.18	1	B5C0229	03/10/2015	03/10/15 16:42	
Chlorobenzene	ND	0.50	0.33	1	B5C0229	03/10/2015	03/10/15 16:42	
Chloroethane	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 16:42	
Chloroform	ND	0.50	0.32	1	B5C0229	03/10/2015	03/10/15 16:42	
Chloromethane	ND	0.50	0.30	1	B5C0229	03/10/2015	03/10/15 16:42	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5C0229	03/10/2015	03/10/15 16:42	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5C0229	03/10/2015	03/10/15 16:42	
Di-isopropyl ether	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 16:42	
Dibromochloromethane	ND	0.50	0.44	1	B5C0229	03/10/2015	03/10/15 16:42	
Dibromomethane	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 16:42	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 16:42	
Ethyl Acetate	ND	10	4.0	1	B5C0229	03/10/2015	03/10/15 16:42	
Ethyl Ether	ND	10	2.9	1	B5C0229	03/10/2015	03/10/15 16:42	

Certificate of Analysis

.itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-2-030515
Lab ID: 1500855-17

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5C0229	03/10/2015	03/10/15 16:42	
Ethylbenzene	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 16:42	
Freon-113	ND	0.50	0.35	1	B5C0229	03/10/2015	03/10/15 16:42	
Hexachlorobutadiene	ND	0.50	0.47	1	B5C0229	03/10/2015	03/10/15 16:42	
Isopropylbenzene	ND	0.50	0.25	1	B5C0229	03/10/2015	03/10/15 16:42	
m,p-Xylene	ND	1.0	0.46	1	B5C0229	03/10/2015	03/10/15 16:42	
Methylene chloride	ND	1.0	1.0	1	B5C0229	03/10/2015	03/10/15 16:42	
MTBE	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 16:42	
n-Butylbenzene	ND	0.50	0.27	1	B5C0229	03/10/2015	03/10/15 16:42	
n-Propylbenzene	ND	0.50	0.26	1	B5C0229	03/10/2015	03/10/15 16:42	
Naphthalene	ND	0.50	0.40	1	B5C0229	03/10/2015	03/10/15 16:42	
vlene	ND	0.50	0.29	1	B5C0229	03/10/2015	03/10/15 16:42	
-Butylbenzene	ND	0.50	0.36	1	B5C0229	03/10/2015	03/10/15 16:42	
Styrene	ND	0.50	0.29	1	B5C0229	03/10/2015	03/10/15 16:42	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 16:42	
tert-Butanol	ND	10	7.6	1	B5C0229	03/10/2015	03/10/15 16:42	
tert-Butylbenzene	ND	0.50	0.32	1	B5C0229	03/10/2015	03/10/15 16:42	
Tetrachloroethene	ND	0.50	0.28	1	B5C0229	03/10/2015	03/10/15 16:42	
Toluene	ND	0.50	0.21	1	B5C0229	03/10/2015	03/10/15 16:42	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 16:42	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5C0229	03/10/2015	03/10/15 16:42	
Trichloroethene	ND	0.50	0.31	1	B5C0229	03/10/2015	03/10/15 16:42	
Trichlorofluoromethane	ND	0.50	0.28	1	B5C0229	03/10/2015	03/10/15 16:42	
Vinyl acetate	ND	10	2.6	1	B5C0229	03/10/2015	03/10/15 16:42	
Vinyl chloride	ND	0.50	0.23	1	B5C0229	03/10/2015	03/10/15 16:42	
Surrogate: 1,2-Dichloroethane-d4	*77.6 %*	*49 - 148*			B5C0229	03/10/2015	*03/10/15 16:42*	
Surrogate: 4-Bromofluorobenzene	*90.5 %*	*65 - 132*			B5C0229	03/10/2015	*03/10/15 16:42*	
Surrogate: Dibromofluoromethane	*81.7 %*	*55 - 138*			B5C0229	03/10/2015	*03/10/15 16:42*	
Surrogate: Toluene-d8	*73.1 %*	*60 - 120*			B5C0229	03/10/2015	*03/10/15 16:42*	

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QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0270 - EPA 3050B_S									
Blank (B5C0270-BLK1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.190653	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.058400	2.0			NR				J
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.155833	1.0			NR				J
LCS (B5C0270-BS1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	52.1050	2.0	50.0000		104	80 - 120			
Arsenic	50.6782	1.0	50.0000		101	80 - 120			
Barium	56.2054	1.0	50.0000		112	80 - 120			
Beryllium	56.3776	1.0	50.0000		113	80 - 120			
Cadmium	53.3556	1.0	50.0000		107	80 - 120			
Chromium	56.3538	1.0	50.0000		113	80 - 120			
Cobalt	55.1540	1.0	50.0000		110	80 - 120			
Copper	54.4246	2.0	50.0000		109	80 - 120			
Lead	55.2476	1.0	50.0000		110	80 - 120			
Molybdenum	53.8300	1.0	50.0000		108	80 - 120			
Nickel	53.9797	1.0	50.0000		108	80 - 120			
Selenium	52.0818	1.0	50.0000		104	80 - 120			
Silver	53.8820	1.0	50.0000		108	80 - 120			
Thallium	53.6583	1.0	50.0000		107	80 - 120			
Vanadium	57.6952	1.0	50.0000		115	80 - 120			
Zinc	52.7104	1.0	50.0000		105	80 - 120			
Duplicate (B5C0270-DUP1)		**Source: 1500855-01**			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	ND	2.0		ND	NR			20	
Arsenic	6.12482	1.0		6.12210	NR		0.0443	20	
Barium	45.4893	1.0		39.8401	NR		13.2	20	
Beryllium	0.729186	1.0		0.687152	NR		5.94	20	J
Cadmium	0.954246	1.0		0.875582	NR		8.60	20	J
Chromium	17.8967	1.0		14.0886	NR		23.8	20	R
Cobalt	10.9558	1.0		12.4219	NR		12.5	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0270 - EPA 3050B_S (continued)									
Duplicate (B5C0270-DUP1) - Continued		**Source: 1500855-01**			**Prepared: 3/11/2015 Analyzed: 3/12/2015**				
Copper	21.5038	2.0		18.6300	NR		14.3	20	
Lead	31.7696	1.0		27.6558	NR		13.8	20	
Molybdenum	ND	1.0		ND	NR			20	
Nickel	36.7800	1.0		37.5069	NR		1.96	20	
Selenium	ND	1.0		ND	NR			20	
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	25.4897	1.0		21.9003	NR		15.1	20	
Zinc	90.9152	1.0		80.0074	NR		12.8	20	
Matrix Spike (B5C0270-MS1)		**Source: 1500855-01**			**Prepared: 3/11/2015 Analyzed: 3/12/2015**				
Antimony	72.4495	2.0	125.000	ND	58.0	28 - 106			
Arsenic	93.6860	1.0	125.000	6.12210	70.1	57 - 109			
Barium	137.260	1.0	125.000	39.8401	77.9	18 - 159			
Beryllium	95.4276	1.0	125.000	0.687152	75.8	61 - 107			
...ium	86.9843	1.0	125.000	0.875582	68.9	53 - 104			
...mium	109.990	1.0	125.000	14.0886	76.7	53 - 121			
Cobalt	99.1975	1.0	125.000	12.4219	69.4	55 - 109			
Copper	119.368	2.0	125.000	18.6300	80.6	58 - 124			
Lead	113.330	1.0	125.000	27.6558	68.5	35 - 129			
Molybdenum	87.7304	1.0	125.000	ND	70.2	57 - 108			
Nickel	124.763	1.0	125.000	37.5069	69.8	44 - 122			
Selenium	90.8190	1.0	125.000	ND	72.7	54 - 104			
Silver	94.3088	1.0	125.000	ND	75.4	60 - 112			
Thallium	83.0746	1.0	125.000	ND	66.5	50 - 103			
Vanadium	120.336	1.0	125.000	21.9003	78.7	54 - 123			
Zinc	170.574	1.0	125.000	80.0074	72.5	29 - 132			
Matrix Spike Dup (B5C0270-MSD1)		**Source: 1500855-01**			**Prepared: 3/11/2015 Analyzed: 3/12/2015**				
Antimony	74.1874	2.0	125.000	ND	59.3	28 - 106	2.37	20	
Arsenic	97.4239	1.0	125.000	6.12210	73.0	57 - 109	3.91	20	
Barium	138.954	1.0	125.000	39.8401	79.3	18 - 159	1.23	20	
Beryllium	97.1112	1.0	125.000	0.687152	77.1	61 - 107	1.75	20	
Cadmium	88.4998	1.0	125.000	0.875582	70.1	53 - 104	1.73	20	
Chromium	112.859	1.0	125.000	14.0886	79.0	53 - 121	2.58	20	
Cobalt	100.815	1.0	125.000	12.4219	70.7	55 - 109	1.62	20	
Copper	123.651	2.0	125.000	18.6300	84.0	58 - 124	3.52	20	
Lead	116.042	1.0	125.000	27.6558	70.7	35 - 129	2.36	20	
Molybdenum	89.4348	1.0	125.000	ND	71.5	57 - 108	1.92	20	
Nickel	129.049	1.0	125.000	37.5069	73.2	44 - 122	3.38	20	
Selenium	92.3234	1.0	125.000	ND	73.9	54 - 104	1.64	20	
Silver	96.2334	1.0	125.000	ND	77.0	60 - 112	2.02	20	
Thallium	85.3653	1.0	125.000	ND	68.3	50 - 103	2.72	20	
...dium	124.094	1.0	125.000	21.9003	81.8	54 - 123	3.07	20	
	172.010	1.0	125.000	80.0074	73.6	29 - 132	0.838	20	
Batch B5C0271 - EPA 3050B_S									

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec . Limits	RPD	RPD Limit	Notes
Batch B5C0271 - EPA 3050B_S (continued)									
Blank (B5C0271-BLK1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.191870	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	ND	2.0			NR				
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	ND	1.0			NR				
LCS (B5C0271-BS1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	43.8552	2.0	50.0000		87.7	80 - 120			
Arsenic	42.7534	1.0	50.0000		85.5	80 - 120			
Barium	47.5642	1.0	50.0000		95.1	80 - 120			
Beryllium	47.4800	1.0	50.0000		95.0	80 - 120			
Cadmium	45.0280	1.0	50.0000		90.1	80 - 120			
Chromium	47.7051	1.0	50.0000		95.4	80 - 120			
Cobalt	46.7554	1.0	50.0000		93.5	80 - 120			
Copper	45.9645	2.0	50.0000		91.9	80 - 120			
Lead	46.4660	1.0	50.0000		92.9	80 - 120			
Molybdenum	45.3255	1.0	50.0000		90.7	80 - 120			
Nickel	45.6933	1.0	50.0000		91.4	80 - 120			
Selenium	43.9339	1.0	50.0000		87.9	80 - 120			
Silver	45.6606	1.0	50.0000		91.3	80 - 120			
Thallium	45.3662	1.0	50.0000		90.7	80 - 120			
Vanadium	48.8109	1.0	50.0000		97.6	80 - 120			
Zinc	44.1311	1.0	50.0000		88.3	80 - 120			
Duplicate (B5C0271-DUP1)		Source: 1500855-15			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	0.438038	2.0		0.397172	NR		9.79	20	J
Arsenic	1.13008	1.0		1.02432	NR		9.82	20	
Barium	21.7016	1.0		21.9816	NR		1.28	20	
Beryllium	0.477658	1.0		0.419140	NR		13.1	20	J
Cadmium	0.488221	1.0		0.328279	NR		39.2	20	R, J
Chromium	5.29524	1.0		5.08156	NR		4.12	20	
Cobalt	1.54399	1.0		1.77263	NR		13.8	20	
Copper	3.69129	2.0		3.31908	NR		10.6	20	
Lead	8.95100	1.0		9.33004	NR		4.15	20	
Molybdenum	0.880519	1.0		0.835990	NR		5.19	20	J
Nickel	5.28792	1.0		4.90257	NR		7.56	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0271 - EPA 3050B_S (continued)									
Duplicate (B5C0271-DUP1) - Continued		**Source: 1500855-15**			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Selenium	ND	1.0		ND	NR			20	
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	14.2586	1.0		14.4793	NR		1.54	20	
Zinc	38.9388	1.0		30.8828	NR		23.1	20	R
Matrix Spike (B5C0271-MS1)		**Source: 1500855-15**			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	97.3533	2.0	125.000	0.397172	77.6	28 - 106			
Arsenic	101.558	1.0	125.000	1.02432	80.4	57 - 109			
Barium	131.568	1.0	125.000	21.9816	87.7	18 - 159			
Beryllium	112.390	1.0	125.000	0.419140	89.6	61 - 107			
Cadmium	103.733	1.0	125.000	0.328279	82.7	53 - 104			
Chromium	115.099	1.0	125.000	5.08156	88.0	53 - 121			
Cobalt	107.334	1.0	125.000	1.77263	84.4	55 - 109			
Copper	115.585	2.0	125.000	3.31908	89.8	58 - 124			
[illegible]	114.925	1.0	125.000	9.33004	84.5	35 - 129			
...ybdenum	105.877	1.0	125.000	0.835990	84.0	57 - 108			
Nickel	110.113	1.0	125.000	4.90257	84.2	44 - 122			
Selenium	104.093	1.0	125.000	ND	83.3	54 - 104			
Silver	109.075	1.0	125.000	ND	87.3	60 - 112			
Thallium	101.176	1.0	125.000	ND	80.9	50 - 103			
Vanadium	128.712	1.0	125.000	14.4793	91.4	54 - 123			
Zinc	136.054	1.0	125.000	30.8828	84.1	29 - 132			
Matrix Spike Dup (B5C0271-MSD1)		**Source: 1500855-15**			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	98.6818	2.0	125.000	0.397172	78.6	28 - 106	1.36	20	
Arsenic	102.783	1.0	125.000	1.02432	81.4	57 - 109	1.20	20	
Barium	130.257	1.0	125.000	21.9816	86.6	18 - 159	1.00	20	
Beryllium	111.951	1.0	125.000	0.419140	89.2	61 - 107	0.391	20	
Cadmium	103.811	1.0	125.000	0.328279	82.8	53 - 104	0.0753	20	
Chromium	114.238	1.0	125.000	5.08156	87.3	53 - 121	0.751	20	
Cobalt	107.466	1.0	125.000	1.77263	84.6	55 - 109	0.123	20	
Copper	114.018	2.0	125.000	3.31908	88.6	58 - 124	1.36	20	
Lead	114.372	1.0	125.000	9.33004	84.0	35 - 129	0.483	20	
Molybdenum	106.164	1.0	125.000	0.835990	84.3	57 - 108	0.271	20	
Nickel	109.960	1.0	125.000	4.90257	84.0	44 - 122	0.139	20	
Selenium	105.178	1.0	125.000	ND	84.1	54 - 104	1.04	20	
Silver	108.557	1.0	125.000	ND	86.8	60 - 112	0.477	20	
Thallium	102.600	1.0	125.000	ND	82.1	50 - 103	1.40	20	
Vanadium	126.739	1.0	125.000	14.4793	89.8	54 - 123	1.54	20	
Zinc	131.695	1.0	125.000	30.8828	80.6	29 - 132	3.26	20	
Batch B5C0278 - EPA 3010A_W									
...k (B5C0278-BLK1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
...timony	ND	0.010			NR				
Arsenic	ND	0.010			NR				

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0278 - EPA 3010A_W (continued)									
Blank (B5C0278-BLK1) - Continued					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Barium	ND	0.0030			NR				
Beryllium	ND	0.0030			NR				
Cadmium	ND	0.0030			NR				
Chromium	0.000885	0.0030			NR				J
Cobalt	ND	0.0030			NR				
Copper	ND	0.0090			NR				
Lead	ND	0.0050			NR				
Molybdenum	ND	0.0050			NR				
Nickel	ND	0.0050			NR				
Selenium	ND	0.010			NR				
Silver	ND	0.0030			NR				
Thallium	ND	0.015			NR				
Vanadium	ND	0.0030			NR				
Zinc	3.8638E-3	0.025			NR				J
LCS (B5C0278-BS1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	0.934459	0.010	1.00000		93.4	80 - 120			
Arsenic	0.910535	0.010	1.00000		91.1	80 - 120			
Barium	0.982115	0.0030	1.00000		98.2	80 - 120			
Beryllium	0.996963	0.0030	1.00000		99.7	80 - 120			
Cadmium	0.942305	0.0030	1.00000		94.2	80 - 120			
Chromium	0.975476	0.0030	1.00000		97.5	80 - 120			
Cobalt	0.971786	0.0030	1.00000		97.2	80 - 120			
Copper	0.965408	0.0090	1.00000		96.5	80 - 120			
Lead	0.970590	0.0050	1.00000		97.1	80 - 120			
Molybdenum	0.933384	0.0050	1.00000		93.3	80 - 120			
Nickel	0.952709	0.0050	1.00000		95.3	80 - 120			
Selenium	0.937078	0.010	1.00000		93.7	80 - 120			
Silver	0.973979	0.0030	1.00000		97.4	80 - 120			
Thallium	0.976678	0.015	1.00000		97.7	80 - 120			
Vanadium	1.00890	0.0030	1.00000		101	80 - 120			
Zinc	0.925100	0.025	1.00000		92.5	80 - 120			
Duplicate (B5C0278-DUP1)		Source: 1500855-10			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	ND	0.010		ND	NR			20	
Arsenic	ND	0.010		ND	NR			20	
Barium	0.000481	0.0030		0.000412	NR		15.5	20	J
Beryllium	ND	0.0030		ND	NR			20	
Cadmium	ND	0.0030		ND	NR			20	
Chromium	0.000852	0.0030		0.000806	NR		5.62	20	J
Cobalt	ND	0.0030		ND	NR			20	
Copper	ND	0.0090		ND	NR			20	
Lead	ND	0.0050		ND	NR			20	
Molybdenum	ND	0.0050		ND	NR			20	
Nickel	ND	0.0050		ND	NR			20	
Selenium	ND	0.010		ND	NR			20	
Silver	ND	0.0030		ND	NR			20	

Certificate of Analysis

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0278 - EPA 3010A_W (continued)									
Duplicate (B5C0278-DUP1) - Continued		**Source: 1500855-10**			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Thallium	ND	0.015		ND	NR			20	
Vanadium	ND	0.0030		ND	NR			20	
Zinc	0.003781	0.025		0.004149	NR		9.29	20	J
Matrix Spike (B5C0278-MS1)		**Source: 1500855-10**			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	2.33863	0.010	2.50000	ND	93.5	71 - 129			
Arsenic	2.29371	0.010	2.50000	ND	91.7	80 - 128			
Barium	2.42181	0.0030	2.50000	0.000412	96.9	77 - 124			
Beryllium	2.50735	0.0030	2.50000	ND	100	88 - 116			
Cadmium	2.33134	0.0030	2.50000	ND	93.3	83 - 116			
Chromium	2.41387	0.0030	2.50000	0.000806	96.5	86 - 116			
Cobalt	2.38586	0.0030	2.50000	ND	95.4	83 - 117			
Copper	2.43573	0.0090	2.50000	ND	97.4	87 - 121			
Lead	2.34278	0.0050	2.50000	ND	93.7	85 - 114			
Molybdenum	2.34598	0.0050	2.50000	ND	93.8	81 - 117			
..el	2.37448	0.0050	2.50000	ND	95.0	76 - 121			
..enium	2.35135	0.010	2.50000	ND	94.1	77 - 125			
Silver	2.42767	0.0030	2.50000	ND	97.1	77 - 129			
Thallium	2.42634	0.015	2.50000	ND	97.1	51 - 140			
Vanadium	2.51125	0.0030	2.50000	ND	100	86 - 120			
Zinc	2.30578	0.025	2.50000	0.004149	92.1	75 - 123			
Matrix Spike Dup (B5C0278-MSD1)		**Source: 1500855-10**			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Antimony	2.36936	0.010	2.50000	ND	94.8	71 - 129	1.31	20	
Arsenic	2.32022	0.010	2.50000	ND	92.8	80 - 128	1.15	20	
Barium	2.45425	0.0030	2.50000	0.000412	98.2	77 - 124	1.33	20	
Beryllium	2.50100	0.0030	2.50000	ND	100	88 - 116	0.253	20	
Cadmium	2.36050	0.0030	2.50000	ND	94.4	83 - 116	1.24	20	
Chromium	2.44333	0.0030	2.50000	0.000806	97.7	86 - 116	1.21	20	
Cobalt	2.41675	0.0030	2.50000	ND	96.7	83 - 117	1.29	20	
Copper	2.46886	0.0090	2.50000	ND	98.8	87 - 121	1.35	20	
Lead	2.37554	0.0050	2.50000	ND	95.0	85 - 114	1.39	20	
Molybdenum	2.37258	0.0050	2.50000	ND	94.9	81 - 117	1.13	20	
Nickel	2.40351	0.0050	2.50000	ND	96.1	76 - 121	1.22	20	
Selenium	2.38643	0.010	2.50000	ND	95.5	77 - 125	1.48	20	
Silver	2.45901	0.0030	2.50000	ND	98.4	77 - 129	1.28	20	
Thallium	2.45546	0.015	2.50000	ND	98.2	51 - 140	1.19	20	
Vanadium	2.54504	0.0030	2.50000	ND	102	86 - 120	1.34	20	
Zinc	2.33446	0.025	2.50000	0.004149	93.2	75 - 123	1.24	20	

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0279 - EPA 245.1/7470_W									
Blank (B5C0279-BLK1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	ND	0.20			NR				
LCS (B5C0279-BS1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	10.5557	0.20	10.0000		106	80 - 120			
Duplicate (B5C0279-DUP1)		Source: 1500855-10			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	ND	0.20		ND	NR			20	
Matrix Spike (B5C0279-MS1)		Source: 1500855-10			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	10.4156	0.20	10.0000	ND	104	70 - 130			
Matrix Spike Dup (B5C0279-MSD1)		Source: 1500855-10			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	10.3834	0.20	10.0000	ND	104	70 - 130	0.309	20	
Post Spike (B5C0279-PS1)		Source: 1500855-10			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	5.24304		5.00000	0.011679	105	85 - 115			

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0272 - EPA 7471_S									
Blank (B5C0272-BLK1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	ND	0.10			NR				
LCS (B5C0272-BS1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.771387	0.10	0.833333		92.6	80 - 120			
Duplicate (B5C0272-DUP1)		Source: 1500855-01			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.013601	0.10		0.014523	NR		6.56	20	J
Matrix Spike (B5C0272-MS1)		Source: 1500855-01			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.860310	0.10	0.833333	0.014523	101	70 - 130			
Matrix Spike Dup (B5C0272-MSD1)		Source: 1500855-01			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.865187	0.10	0.833333	0.014523	102	70 - 130	0.565	20	
Post Spike (B5C0272-PS1)		Source: 1500855-01			Prepared: 3/11/2015 Analyzed: 3/12/2015				
...ury	0.005962		5.00000E-3	0.000174	116	85 - 115			M1
...tch B5C0273 - EPA 7471_S									
Blank (B5C0273-BLK1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	ND	0.10			NR				
LCS (B5C0273-BS1)					Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.742724	0.10	0.833333		89.1	80 - 120			
Duplicate (B5C0273-DUP1)		Source: 1500855-15			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.014161	0.10		0.0136	NR		4.04	20	J
Matrix Spike (B5C0273-MS1)		Source: 1500855-15			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.890998	0.10	0.833333	0.0136	105	70 - 130			
Matrix Spike Dup (B5C0273-MSD1)		Source: 1500855-15			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.821873	0.10	0.833333	0.0136	97.0	70 - 130	8.07	20	
Post Spike (B5C0273-PS1)		Source: 1500855-15			Prepared: 3/11/2015 Analyzed: 3/12/2015				
Mercury	0.005639		5.00000E-3	1.6320E-4	110	85 - 115			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0207 - GCVOA_S									
Blank (B5C0207-BLK1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.2158*		*0.200000*		*108*	*37 - 153*			
LCS (B5C0207-BS1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	5.90500	1.0	5.00000		118	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2212*		*0.200000*		*111*	*37 - 153*			
Duplicate (B5C0207-DUP1)		**Source: 1500855-05**			Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2219*		*0.200000*		*111*	*37 - 153*			
Matrix Spike (B5C0207-MS1)		**Source: 1500855-05**			Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	4.31700	1.0	5.00000	ND	86.3	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2287*		*0.200000*		*114*	*37 - 153*			
Matrix Spike Dup (B5C0207-MSD1)		**Source: 1500855-05**			Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	4.18600	1.0	5.00000	ND	83.7	20 - 130	3.08	20	
Surrogate: 4-Bromofluorobenzene	*0.2245*		*0.200000*		*112*	*37 - 153*			
Batch B5C0208 - GCVOA_S									
Blank (B5C0208-BLK1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.2184*		*0.200000*		*109*	*37 - 153*			
LCS (B5C0208-BS1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
Gasoline Range Organics	4.56600	1.0	5.00000		91.3	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2233*		*0.200000*		*112*	*37 - 153*			
Duplicate (B5C0208-DUP1)		**Source: 1500855-15**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2102*		*0.200000*		*105*	*37 - 153*			
Matrix Spike (B5C0208-MS1)		**Source: 1500855-15**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
Gasoline Range Organics	4.35500	1.0	5.00000	ND	87.1	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2284*		*0.200000*		*114*	*37 - 153*			
Matrix Spike Dup (B5C0208-MSD1)		**Source: 1500855-15**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
Gasoline Range Organics	4.34300	1.0	5.00000	ND	86.9	20 - 130	0.276	20	
Surrogate: 4-Bromofluorobenzene	*0.2244*		*0.200000*		*112*	*37 - 153*			
Batch B5C0209 - GCVOA_W									

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0209 - GCVOA_W (continued)									
Blank (B5C0209-BLK1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	ND	0.05			NR				
C4-C8	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09758*		*0.100000*		*97.6*	*70 - 130*			
LCS (B5C0209-BS1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	1.01000	0.05	1.00000		101	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.09991*		*0.100000*		*99.9*	*70 - 130*			
LCS Dup (B5C0209-BSD1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	0.954000	0.05	1.00000		95.4	70 - 130	5.70	20	
Surrogate: 4-Bromofluorobenzene	*0.1016*		*0.100000*		*102*	*70 - 130*			
Duplicate (B5C0209-DUP1)		**Source: 1500855-17**			Prepared: 3/9/2015 Analyzed: 3/9/2015				
Gasoline Range Organics	ND	0.05		ND	NR			20	
...ate: 4-Bromofluorobenzene	*0.09405*		*0.100000*		*94.1*	*70 - 130*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0230 - GCSEMI_DRO_W									
Blank (B5C0230-BLK1)					Prepared: 3/10/2015 Analyzed: 3/11/2015				
C9-C22	ND	0.05			NR				
C23-C32	ND	0.05			NR				
Surrogate: p-Terphenyl	*0.05272*		*8.00000E-2*		*65.9*	*20 - 141*			
LCS (B5C0230-BS1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	0.631800	0.05	1.00000		63.2	29 - 135			
Surrogate: p-Terphenyl	*0.05364*		*8.00000E-2*		*67.0*	*20 - 141*			
LCS Dup (B5C0230-BSD1)					Prepared: 3/10/2015 Analyzed: 3/11/2015				
DRO	0.598230	0.05	1.00000		59.8	29 - 135	5.46	20	
Surrogate: p-Terphenyl	*0.04951*		*8.00000E-2*		*61.9*	*20 - 141*			
Batch B5C0246 - GCSEMI_DRO_LL_S									
Blank (B5C0246-BLK1)					Prepared: 3/10/2015 Analyzed: 3/11/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.109*		*2.66667*		*79.1*	*26 - 123*			
LCS (B5C0246-BS1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	24.4713	1.0	33.3333		73.4	47 - 127			
Surrogate: p-Terphenyl	*1.682*		*2.66667*		*63.1*	*26 - 123*			
Duplicate (B5C0246-DUP1)		Source: 1500855-01			Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	6.07567	1.0		5.34433	NR		12.8	20	
Surrogate: p-Terphenyl	*1.179*		*2.66667*		*44.2*	*26 - 123*			
Matrix Spike (B5C0246-MS1)		Source: 1500833-01			Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	17.2453	1.0	33.3333	1.63467	46.8	16 - 123			
Surrogate: p-Terphenyl	*1.341*		*2.66667*		*50.3*	*26 - 123*			
Matrix Spike Dup (B5C0246-MSD1)		Source: 1500833-01			Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	21.4767	1.0	33.3333	1.63467	59.5	16 - 123	21.9	20	R
Surrogate: p-Terphenyl	*1.439*		*2.66667*		*54.0*	*26 - 123*			
Batch B5C0247 - GCSEMI_DRO_LL_S									
Blank (B5C0247-BLK1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.869*		*2.66667*		*70.1*	*26 - 123*			
LCS (B5C0247-BS1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	23.3570	1.0	33.3333		70.1	47 - 127			
Surrogate: p-Terphenyl	*1.782*		*2.66667*		*66.8*	*26 - 123*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0247 - GCSEMI_DRO_LL_S (continued)									
Duplicate (B5C0247-DUP1)		**Source: 1500855-15**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	2.03567	1.0		1.97667	NR		2.94	20	
Surrogate: p-Terphenyl	*1.251*		*2.66667*		*46.9*	*26 - 123*			
Matrix Spike (B5C0247-MS1)		**Source: 1500855-15**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	9.60267	1.0	33.3333	1.97667	22.9	16 - 123			
Surrogate: p-Terphenyl	*1.189*		*2.66667*		*44.6*	*26 - 123*			
Matrix Spike Dup (B5C0247-MSD1)		**Source: 1500855-15**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
DRO	11.2107	1.0	33.3333	1.97667	27.7	16 - 123	15.5	20	
Surrogate: p-Terphenyl	*1.107*		*2.66667*		*41.5*	*26 - 123*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0229 - MSVOA_LL_W									
Blank (B5C0229-BLK1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethyl Acetate	ND	10			NR				
Ethyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0229 - MSVOA_LL_W (continued)									
Blank (B5C0229-BLK1) - Continued					Prepared: 3/10/2015 Analyzed: 3/10/2015				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
...-Butanol	ND	10			NR				
...utylbenzene	ND	0.50			NR				
...trachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*24.81*		*25.0000*		*99.2*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*25.10*		*25.0000*		*100*	*65 - 132*			
Surrogate: Dibromofluoromethane	*26.62*		*25.0000*		*106*	*55 - 138*			
Surrogate: Toluene-d8	*20.14*		*25.0000*		*80.6*	*60 - 120*			
LCS (B5C0229-BS1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
1,1,1,2-Tetrachloroethane	20.7400	0.50	20.0000		104	71 - 142			
1,1,1-Trichloroethane	21.4300	0.50	20.0000		107	68 - 141			
1,1,2,2-Tetrachloroethane	17.9900	0.50	20.0000		90.0	72 - 123			
1,1,2-Trichloroethane	18.0700	0.50	20.0000		90.4	63 - 129			
1,1-Dichloroethane	19.2700	0.50	20.0000		96.4	65 - 133			
1,1-Dichloroethene	19.1900	0.50	20.0000		96.0	61 - 136			
1,1-Dichloropropene	21.1200	0.50	20.0000		106	62 - 137			
1,2,3-Trichloropropane	18.4800	0.50	20.0000		92.4	71 - 128			
1,2,3-Trichlorobenzene	26.1300	0.50	20.0000		131	47 - 187			
1,2,4-Trichlorobenzene	20.0000	0.50	20.0000		100	53 - 154			
1,2,4-Trimethylbenzene	20.5800	0.50	20.0000		103	80 - 139			
1,2-Dibromo-3-chloropropane	20.8800	0.50	20.0000		104	53 - 166			
1,2-Dibromoethane	18.5800	0.50	20.0000		92.9	58 - 134			
...ichlorobenzene	19.1700	0.50	20.0000		95.8	75 - 130			
...-Dichloroethane	17.9100	0.50	20.0000		89.6	71 - 131			
1,2-Dichloropropane	17.5800	0.50	20.0000		87.9	69 - 130			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0229 - MSVOA_LL_W (continued)									
LCS (B5C0229-BS1) - Continued					Prepared: 3/10/2015 Analyzed: 3/10/2015				
1,3,5-Trimethylbenzene	20.9700	0.50	20.0000		105	80 - 139			
1,3-Dichlorobenzene	19.7100	0.50	20.0000		98.6	76 - 129			
1,3-Dichloropropane	18.0300	0.50	20.0000		90.2	75 - 124			
1,4-Dichlorobenzene	19.1200	0.50	20.0000		95.6	76 - 123			
2,2-Dichloropropane	24.4700	0.50	20.0000		122	60 - 149			
2-Chloroethyl vinyl ether	10.3700	0.50	20.0000		51.8	29 - 144			
2-Chlorotoluene	19.4600	0.50	20.0000		97.3	78 - 137			
4-Chlorotoluene	18.8500	0.50	20.0000		94.2	78 - 136			
4-Isopropyltoluene	21.7500	0.50	20.0000		109	75 - 146			
Benzene	36.0900	0.50	40.0000		90.2	72 - 127			
Bromobenzene	18.5700	0.50	20.0000		92.8	74 - 123			
Bromochloromethane	19.8500	0.50	20.0000		99.2	67 - 120			
Bromodichloromethane	17.8500	0.50	20.0000		89.2	74 - 130			
Bromoform	20.7200	0.50	20.0000		104	74 - 135			
Bromomethane	11.2100	0.50	20.0000		56.0	14 - 166			
Carbon disulfide	19.7100	1.0	20.0000		98.6	46 - 150			
Carbon tetrachloride	23.9900	0.50	20.0000		120	57 - 162			
Chlorobenzene	19.4100	0.50	20.0000		97.0	78 - 125			
Chloroethane	18.3300	0.50	20.0000		91.6	54 - 144			
Chloroform	19.5900	0.50	20.0000		98.0	66 - 132			
Chloromethane	13.7800	0.50	20.0000		68.9	31 - 128			
cis-1,2-Dichloroethene	18.6500	0.50	20.0000		93.2	68 - 124			
cis-1,3-Dichloropropene	19.7000	0.50	20.0000		98.5	63 - 139			
Di-isopropyl ether	17.4000	0.50	20.0000		87.0	61 - 142			
Dibromochloromethane	19.7000	0.50	20.0000		98.5	78 - 132			
Dibromomethane	17.2200	0.50	20.0000		86.1	76 - 122			
Dichlorodifluoromethane	23.1600	0.50	20.0000		116	17 - 171			
Ethyl Acetate	193.450	10	200.000		96.7	41 - 137			
Ethyl Ether	190.890	10	200.000		95.4	54 - 146			
Ethyl tert-butyl ether	18.1800	0.50	20.0000		90.9	61 - 133			
Ethylbenzene	38.5800	0.50	40.0000		96.4	71 - 142			
Freon-113	23.1400	0.50	20.0000		116	59 - 150			
Hexachlorobutadiene	20.1200	0.50	20.0000		101	54 - 169			
Isopropylbenzene	21.1400	0.50	20.0000		106	76 - 146			
m,p-Xylene	41.5700	1.0	40.0000		104	75 - 150			
Methylene chloride	21.2600	1.0	20.0000		106	66 - 130			
MTBE	14.9300	0.50	20.0000		74.6	60 - 132			
n-Butylbenzene	20.3000	0.50	20.0000		102	76 - 151			
n-Propylbenzene	20.2800	0.50	20.0000		101	76 - 147			
Naphthalene	20.2300	0.50	20.0000		101	36 - 180			
o-Xylene	39.6000	0.50	40.0000		99.0	75 - 143			
sec-Butylbenzene	22.1100	0.50	20.0000		111	77 - 147			
Styrene	19.6200	0.50	20.0000		98.1	75 - 133			
tert-Amyl methyl ether	16.8900	0.50	20.0000		84.4	63 - 125			
tert-Butanol	113.260	10	100.000		113	11 - 192			
tert-Butylbenzene	21.7400	0.50	20.0000		109	75 - 143			
Tetrachloroethene	20.6600	0.50	20.0000		103	58 - 139			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0229 - MSVOA_LL_W (continued)									
LCS (B5C0229-BS1) - Continued					Prepared: 3/10/2015 Analyzed: 3/10/2015				
Toluene	38.4600	0.50	40.0000		96.2	59 - 140			
trans-1,2-Dichloroethene	18.8300	0.50	20.0000		94.2	63 - 128			
trans-1,3-Dichloropropene	19.2600	0.50	20.0000		96.3	54 - 142			
Trichloroethene	19.5500	0.50	20.0000		97.8	67 - 130			
Trichlorofluoromethane	21.4200	0.50	20.0000		107	56 - 168			
Vinyl acetate	215.970	10	200.000		108	23 - 151			
Vinyl chloride	18.8400	0.50	20.0000		94.2	49 - 146			
Surrogate: 1,2-Dichloroethane-d4	*18.58*		*25.0000*		*74.3*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*22.78*		*25.0000*		*91.1*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.80*		*25.0000*		*79.2*	*55 - 138*			
Surrogate: Toluene-d8	*19.46*		*25.0000*		*77.8*	*60 - 120*			
LCS Dup (B5C0229-BSD1)					Prepared: 3/10/2015 Analyzed: 3/10/2015				
1,1,1,2-Tetrachloroethane	18.4400	0.50	20.0000		92.2	71 - 142	11.7	20	
...1-Trichloroethane	20.1000	0.50	20.0000		100	68 - 141	6.41	20	
...2-Tetrachloroethane	17.5700	0.50	20.0000		87.8	72 - 123	2.36	20	
...,2-Trichloroethane	17.3900	0.50	20.0000		87.0	63 - 129	3.84	20	
1,1-Dichloroethane	18.2000	0.50	20.0000		91.0	65 - 133	5.71	20	
1,1-Dichloroethene	17.0600	0.50	20.0000		85.3	61 - 136	11.8	20	
1,1-Dichloropropene	20.4300	0.50	20.0000		102	62 - 137	3.32	20	
1,2,3-Trichloropropane	17.8700	0.50	20.0000		89.4	71 - 128	3.36	20	
1,2,3-Trichlorobenzene	25.8000	0.50	20.0000		129	47 - 187	1.27	20	
1,2,4-Trichlorobenzene	19.7300	0.50	20.0000		98.6	53 - 154	1.36	20	
1,2,4-Trimethylbenzene	19.9600	0.50	20.0000		99.8	80 - 139	3.06	20	
1,2-Dibromo-3-chloropropane	20.4400	0.50	20.0000		102	53 - 166	2.13	20	
1,2-Dibromoethane	18.4100	0.50	20.0000		92.0	58 - 134	0.919	20	
1,2-Dichlorobenzene	18.6200	0.50	20.0000		93.1	75 - 130	2.91	20	
1,2-Dichloroethane	17.2600	0.50	20.0000		86.3	71 - 131	3.70	20	
1,2-Dichloropropane	17.0900	0.50	20.0000		85.4	69 - 130	2.83	20	
1,3,5-Trimethylbenzene	20.2900	0.50	20.0000		101	80 - 139	3.30	20	
1,3-Dichlorobenzene	18.9000	0.50	20.0000		94.5	76 - 129	4.20	20	
1,3-Dichloropropane	17.6400	0.50	20.0000		88.2	75 - 124	2.19	20	
1,4-Dichlorobenzene	18.1700	0.50	20.0000		90.8	76 - 123	5.10	20	
2,2-Dichloropropane	23.4500	0.50	20.0000		117	60 - 149	4.26	20	
2-Chloroethyl vinyl ether	10.3300	0.50	20.0000		51.6	29 - 144	0.386	20	
2-Chlorotoluene	18.9300	0.50	20.0000		94.6	78 - 137	2.76	20	
4-Chlorotoluene	18.2600	0.50	20.0000		91.3	78 - 136	3.18	20	
4-Isopropyltoluene	21.1800	0.50	20.0000		106	75 - 146	2.66	20	
Benzene	34.8500	0.50	40.0000		87.1	72 - 127	3.50	20	
Bromobenzene	18.0100	0.50	20.0000		90.0	74 - 123	3.06	20	
Bromochloromethane	18.8300	0.50	20.0000		94.2	67 - 120	5.27	20	
Bromodichloromethane	17.2300	0.50	20.0000		86.2	74 - 130	3.53	20	
Bromoform	19.0000	0.50	20.0000		95.0	74 - 135	8.66	20	
...omethane	11.5400	0.50	20.0000		57.7	14 - 166	2.90	20	
...on disulfide	17.0000	1.0	20.0000		85.0	46 - 150	14.8	20	
Carbon tetrachloride	22.6400	0.50	20.0000		113	57 - 162	5.79	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0229 - MSVOA_LL_W (continued)									
LCS Dup (B5C0229-BSD1) - Continued					Prepared: 3/10/2015 Analyzed: 3/10/2015				
Chlorobenzene	18.7700	0.50	20.0000		93.8	78 - 125	3.35	20	
Chloroethane	17.6900	0.50	20.0000		88.4	54 - 144	3.55	20	
Chloroform	18.7100	0.50	20.0000		93.6	66 - 132	4.60	20	
Chloromethane	13.6800	0.50	20.0000		68.4	31 - 128	0.728	20	
cis-1,2-Dichloroethene	17.8600	0.50	20.0000		89.3	68 - 124	4.33	20	
cis-1,3-Dichloropropene	18.5000	0.50	20.0000		92.5	63 - 139	6.28	20	
Di-isopropyl ether	17.2600	0.50	20.0000		86.3	61 - 142	0.808	20	
Dibromochloromethane	18.6600	0.50	20.0000		93.3	78 - 132	5.42	20	
Dibromomethane	16.3400	0.50	20.0000		81.7	76 - 122	5.24	20	
Dichlorodifluoromethane	20.2100	0.50	20.0000		101	17 - 171	13.6	20	
Ethyl Acetate	188.170	10	200.000		94.1	41 - 137	2.77	20	
Ethyl Ether	175.880	10	200.000		87.9	54 - 146	8.18	20	
Ethyl tert-butyl ether	17.8400	0.50	20.0000		89.2	61 - 133	1.89	20	
Ethylbenzene	35.2700	0.50	40.0000		88.2	71 - 142	8.96	20	
Freon-113	19.5400	0.50	20.0000		97.7	59 - 150	16.9	20	
Hexachlorobutadiene	20.1700	0.50	20.0000		101	54 - 169	0.248	20	
Isopropylbenzene	20.6100	0.50	20.0000		103	76 - 146	2.54	20	
m,p-Xylene	38.6000	1.0	40.0000		96.5	75 - 150	7.41	20	
Methylene chloride	20.4700	1.0	20.0000		102	66 - 130	3.79	20	
MTBE	14.7100	0.50	20.0000		73.6	60 - 132	1.48	20	
n-Butylbenzene	19.8000	0.50	20.0000		99.0	76 - 151	2.49	20	
n-Propylbenzene	19.5600	0.50	20.0000		97.8	76 - 147	3.61	20	
Naphthalene	20.2600	0.50	20.0000		101	36 - 180	0.148	20	
o-Xylene	37.4700	0.50	40.0000		93.7	75 - 143	5.53	20	
sec-Butylbenzene	21.3400	0.50	20.0000		107	77 - 147	3.54	20	
Styrene	18.4400	0.50	20.0000		92.2	75 - 133	6.20	20	
tert-Amyl methyl ether	16.9300	0.50	20.0000		84.6	63 - 125	0.237	20	
tert-Butanol	124.180	10	100.000		124	11 - 192	9.20	20	
tert-Butylbenzene	21.0600	0.50	20.0000		105	75 - 143	3.18	20	
Tetrachloroethene	20.2400	0.50	20.0000		101	58 - 139	2.05	20	
Toluene	36.7900	0.50	40.0000		92.0	59 - 140	4.44	20	
trans-1,2-Dichloroethene	17.8200	0.50	20.0000		89.1	63 - 128	5.51	20	
trans-1,3-Dichloropropene	17.9100	0.50	20.0000		89.6	54 - 142	7.26	20	
Trichloroethene	18.7800	0.50	20.0000		93.9	67 - 130	4.02	20	
Trichlorofluoromethane	21.0600	0.50	20.0000		105	56 - 168	1.69	20	
Vinyl acetate	207.080	10	200.000		104	23 - 151	4.20	20	
Vinyl chloride	17.9800	0.50	20.0000		89.9	49 - 146	4.67	20	
Surrogate: 1,2-Dichloroethane-d4	*18.13*		*25.0000*		*72.5*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*23.46*		*25.0000*		*93.8*	*65 - 132*			
Surrogate: Dibromofluoromethane	*19.56*		*25.0000*		*78.2*	*55 - 138*			
Surrogate: Toluene-d8	*19.60*		*25.0000*		*78.4*	*60 - 120*			
Duplicate (B5C0229-DUP1)		**Source: 1500855-10**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
1,1,1,2-Tetrachloroethane	ND	0.50		ND	NR			20	
1,1,1-Trichloroethane	ND	0.50		ND	NR			20	
1,1,2,2-Tetrachloroethane	ND	0.50		ND	NR			20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0229 - MSVOA_LL_W (continued)									
Duplicate (B5C0229-DUP1) - Continued		Source: 1500855-10			Prepared: 3/10/2015 Analyzed: 3/10/2015				
1,1,2-Trichloroethane	ND	0.50		ND	NR			20	
1,1-Dichloroethane	ND	0.50		ND	NR			20	
1,1-Dichloroethene	ND	0.50		ND	NR			20	
1,1-Dichloropropene	ND	0.50		ND	NR			20	
1,2,3-Trichloropropane	ND	0.50		ND	NR			20	
1,2,3-Trichlorobenzene	ND	0.50		ND	NR			20	
1,2,4-Trichlorobenzene	ND	0.50		ND	NR			20	
1,2,4-Trimethylbenzene	ND	0.50		ND	NR			20	
1,2-Dibromo-3-chloropropane	ND	0.50		ND	NR			20	
1,2-Dibromoethane	ND	0.50		ND	NR			20	
1,2-Dichlorobenzene	ND	0.50		ND	NR			20	
1,2-Dichloroethane	ND	0.50		ND	NR			20	
1,2-Dichloropropane	ND	0.50		ND	NR			20	
1,3,5-Trimethylbenzene	ND	0.50		ND	NR			20	
1,3-Dichlorobenzene	ND	0.50		ND	NR			20	
...ichloropropane	ND	0.50		ND	NR			20	
...-Dichlorobenzene	ND	0.50		ND	NR			20	
2,2-Dichloropropane	ND	0.50		ND	NR			20	
2-Chloroethyl vinyl ether	ND	0.50		ND	NR			20	
2-Chlorotoluene	ND	0.50		ND	NR			20	
4-Chlorotoluene	ND	0.50		ND	NR			20	
4-Isopropyltoluene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Bromobenzene	ND	0.50		ND	NR			20	
Bromochloromethane	ND	0.50		ND	NR			20	
Bromodichloromethane	ND	0.50		ND	NR			20	
Bromoform	ND	0.50		ND	NR			20	
Bromomethane	ND	0.50		ND	NR			20	
Carbon disulfide	ND	1.0		ND	NR			20	
Carbon tetrachloride	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
Chloroethane	ND	0.50		ND	NR			20	
Chloroform	ND	0.50		ND	NR			20	
Chloromethane	ND	0.50		ND	NR			20	
cis-1,2-Dichloroethene	ND	0.50		ND	NR			20	
cis-1,3-Dichloropropene	ND	0.50		ND	NR			20	
Di-isopropyl ether	ND	0.50		ND	NR			20	
Dibromochloromethane	ND	0.50		ND	NR			20	
Dibromomethane	ND	0.50		ND	NR			20	
Dichlorodifluoromethane	ND	0.50		ND	NR			20	
Ethyl Acetate	ND	10		ND	NR			20	
Ethyl Ether	ND	10		ND	NR			20	
Ethyl tert-butyl ether	ND	0.50		ND	NR			20	
...benzene	ND	0.50		ND	NR			20	
...n-113	ND	0.50		ND	NR			20	
Hexachlorobutadiene	ND	0.50		ND	NR			20	
Isopropylbenzene	ND	0.50		ND	NR			20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0229 - MSVOA_LL_W (continued)									
Duplicate (B5C0229-DUP1) - Continued		**Source: 1500855-10**			Prepared: 3/10/2015 Analyzed: 3/10/2015				
m,p-Xylene	ND	1.0		ND	NR			20	
Methylene chloride	ND	1.0		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
n-Butylbenzene	ND	0.50		ND	NR			20	
n-Propylbenzene	ND	0.50		ND	NR			20	
Naphthalene	ND	0.50		ND	NR			20	
o-Xylene	ND	0.50		ND	NR			20	
sec-Butylbenzene	ND	0.50		ND	NR			20	
Styrene	ND	0.50		ND	NR			20	
tert-Amyl methyl ether	ND	0.50		ND	NR			20	
tert-Butanol	ND	10		ND	NR			20	
tert-Butylbenzene	ND	0.50		ND	NR			20	
Tetrachloroethene	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
trans-1,2-Dichloroethene	ND	0.50		ND	NR			20	
trans-1,3-Dichloropropene	ND	0.50		ND	NR			20	
Trichloroethene	ND	0.50		ND	NR			20	
Trichlorofluoromethane	ND	0.50		ND	NR			20	
Vinyl acetate	ND	10		ND	NR			20	
Vinyl chloride	ND	0.50		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*21.32*		*25.0000*		*85.3*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*23.19*		*25.0000*		*92.8*	*65 - 132*			
Surrogate: Dibromofluoromethane	*22.29*		*25.0000*		*89.2*	*55 - 138*			
Surrogate: Toluene-d8	*18.71*		*25.0000*		*74.8*	*60 - 120*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0203 - MSVOA_S									
Blank (B5C0203-BLK1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
...Dichloroethane	ND	5.0			NR				
...ichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
...Ether	ND	50			NR				
...yl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				

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Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0203 - MSVOA_S (continued)									
Blank (B5C0203-BLK1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*48.90*		*50.0000*		*97.8*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*46.22*		*50.0000*		*92.4*	*20 - 173*			
Surrogate: Dibromofluoromethane	*50.14*		*50.0000*		*100*	*26 - 178*			
Surrogate: Toluene-d8	*48.63*		*50.0000*		*97.3*	*31 - 166*			
LCS (B5C0203-BS1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,1,1,2-Tetrachloroethane	50.5600	5.0	50.0000		101	74 - 117			
1,1,1-Trichloroethane	50.2600	5.0	50.0000		101	65 - 130			
1,1,2,2-Tetrachloroethane	45.9900	5.0	50.0000		92.0	63 - 123			
1,1,2-Trichloroethane	46.7700	5.0	50.0000		93.5	66 - 122			
1,1-Dichloroethane	51.2900	5.0	50.0000		103	65 - 124			
1,1-Dichloroethene	40.3700	5.0	50.0000		80.7	60 - 130			
1,1-Dichloropropene	49.5900	5.0	50.0000		99.2	75 - 121			
1,2,3-Trichloropropane	46.9800	5.0	50.0000		94.0	62 - 126			
1,2,3-Trichlorobenzene	49.1900	5.0	50.0000		98.4	72 - 120			
1,2,4-Trichlorobenzene	51.0300	5.0	50.0000		102	75 - 121			
1,2,4-Trimethylbenzene	53.6800	5.0	50.0000		107	82 - 118			
1,2-Dibromo-3-chloropropane	46.0800	10	50.0000		92.2	67 - 121			
1,2-Dibromoethane	46.9000	5.0	50.0000		93.8	69 - 123			
1,2-Dichlorobenzene	50.6000	5.0	50.0000		101	81 - 114			
1,2-Dichloroethane	50.5400	5.0	50.0000		101	71 - 119			
1,2-Dichloropropane	49.5700	5.0	50.0000		99.1	71 - 118			
1,3,5-Trimethylbenzene	53.6700	5.0	50.0000		107	81 - 120			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0203 - MSVOA_S (continued)									
LCS (B5C0203-BS1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,3-Dichlorobenzene	51.4200	5.0	50.0000		103	80 - 115			
1,3-Dichloropropane	49.3800	5.0	50.0000		98.8	77 - 117			
1,4-Dichlorobenzene	51.2600	5.0	50.0000		103	80 - 115			
2,2-Dichloropropane	53.0800	5.0	50.0000		106	58 - 141			
2-Chlorotoluene	53.3000	5.0	50.0000		107	78 - 120			
4-Chlorotoluene	53.4200	5.0	50.0000		107	79 - 119			
4-Isopropyltoluene	56.1100	5.0	50.0000		112	81 - 125			
Benzene	94.4100	5.0	100.000		94.4	73 - 116			
Bromobenzene	50.1800	5.0	50.0000		100	78 - 115			
Bromochloromethane	48.9700	5.0	50.0000		97.9	66 - 121			
Bromodichloromethane	49.6300	5.0	50.0000		99.3	73 - 120			
Bromoform	47.9700	5.0	50.0000		95.9	68 - 124			
Bromomethane	56.4400	5.0	50.0000		113	26 - 163			
Carbon disulfide	46.8700	5.0	50.0000		93.7	43 - 142			
...rbon tetrachloride	49.9000	5.0	50.0000		99.8	67 - 130			
...obenzene	50.6000	5.0	50.0000		101	82 - 114			
...oroethane	40.4200	5.0	50.0000		80.8	40 - 151			
Chloroform	50.1500	5.0	50.0000		100	68 - 124			
Chloromethane	47.2300	5.0	50.0000		94.5	18 - 144			
cis-1,2-Dichloroethene	51.9900	5.0	50.0000		104	66 - 125			
cis-1,3-Dichloropropene	54.2700	5.0	50.0000		109	77 - 120			
Di-isopropyl ether	50.8900	5.0	50.0000		102	56 - 132			
Dibromochloromethane	48.8600	5.0	50.0000		97.7	76 - 118			
Dibromomethane	49.8500	5.0	50.0000		99.7	69 - 122			
Dichlorodifluoromethane	50.1600	5.0	50.0000		100	0 - 155			
Ethyl Acetate	469.080	50	500.000		93.8	31 - 137			
Ethyl Ether	507.220	50	500.000		101	47 - 150			
Ethyl tert-butyl ether	51.4200	5.0	50.0000		103	63 - 134			
Ethylbenzene	100.860	5.0	100.000		101	79 - 115			
Freon-113	44.3300	5.0	50.0000		88.7	62 - 134			
Hexachlorobutadiene	53.5800	5.0	50.0000		107	71 - 121			
Isopropylbenzene	54.9500	5.0	50.0000		110	78 - 126			
m,p-Xylene	107.850	10	100.000		108	80 - 119			
Methylene chloride	55.1400	5.0	50.0000		110	56 - 129			
MTBE	48.3800	5.0	50.0000		96.8	61 - 124			
n-Butylbenzene	56.1600	5.0	50.0000		112	78 - 127			
n-Propylbenzene	55.7800	5.0	50.0000		112	77 - 128			
Naphthalene	59.3800	5.0	50.0000		119	61 - 141			
o-Xylene	105.330	5.0	100.000		105	81 - 116			
sec-Butylbenzene	55.6100	5.0	50.0000		111	81 - 125			
Styrene	53.0400	5.0	50.0000		106	82 - 120			
tert-Amyl methyl ether	48.5100	5.0	50.0000		97.0	52 - 149			
tert-Butanol	202.020	100	250.000		80.8	26 - 160			
...Butylbenzene	55.9400	5.0	50.0000		112	80 - 123			
...achloroethene	50.5900	5.0	50.0000		101	75 - 123			
Toluene	98.8200	5.0	100.000		98.8	75 - 119			
trans-1,2-Dichloroethene	51.0200	5.0	50.0000		102	62 - 127			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0203 - MSVOA_S (continued)									
LCS (B5C0203-BS1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
trans-1,3-Dichloropropene	51.5800	5.0	50.0000		103	68 - 121			
Trichloroethene	51.0600	5.0	50.0000		102	73 - 119			
Trichlorofluoromethane	45.9500	5.0	50.0000		91.9	47 - 157			
Vinyl acetate	467.550	50	500.000		93.5	20 - 136			
Vinyl chloride	47.0800	5.0	50.0000		94.2	27 - 147			
Surrogate: 1,2-Dichloroethane-d4	*46.97*		*50.0000*		*93.9*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*50.92*		*50.0000*		*102*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.64*		*50.0000*		*99.3*	*26 - 178*			
Surrogate: Toluene-d8	*51.36*		*50.0000*		*103*	*31 - 166*			
LCS Dup (B5C0203-BSD1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,1,1,2-Tetrachloroethane	49.7000	5.0	50.0000		99.4	74 - 117	1.72	20	
1,1,1-Trichloroethane	48.1000	5.0	50.0000		96.2	65 - 130	4.39	20	
1,1,2,2-Tetrachloroethane	49.1200	5.0	50.0000		98.2	63 - 123	6.58	20	
1,1,2-Trichloroethane	48.5500	5.0	50.0000		97.1	66 - 122	3.73	20	
1,1-Dichloroethane	47.9100	5.0	50.0000		95.8	65 - 124	6.81	20	
1,1-Dichloroethene	36.1100	5.0	50.0000		72.2	60 - 130	11.1	20	
1,1-Dichloropropene	49.3000	5.0	50.0000		98.6	75 - 121	0.587	20	
1,2,3-Trichloropropane	49.1800	5.0	50.0000		98.4	62 - 126	4.58	20	
1,2,3-Trichlorobenzene	48.9600	5.0	50.0000		97.9	72 - 120	0.469	20	
1,2,4-Trichlorobenzene	50.7200	5.0	50.0000		101	75 - 121	0.609	20	
1,2,4-Trimethylbenzene	53.1000	5.0	50.0000		106	82 - 118	1.09	20	
1,2-Dibromo-3-chloropropane	50.6700	10	50.0000		101	67 - 121	9.49	20	
1,2-Dibromoethane	49.2800	5.0	50.0000		98.6	69 - 123	4.95	20	
1,2-Dichlorobenzene	51.5700	5.0	50.0000		103	81 - 114	1.90	20	
1,2-Dichloroethane	51.5100	5.0	50.0000		103	71 - 119	1.90	20	
1,2-Dichloropropane	48.3900	5.0	50.0000		96.8	71 - 118	2.41	20	
1,3,5-Trimethylbenzene	52.9500	5.0	50.0000		106	81 - 120	1.35	20	
1,3-Dichlorobenzene	51.7300	5.0	50.0000		103	80 - 115	0.601	20	
1,3-Dichloropropane	49.5200	5.0	50.0000		99.0	77 - 117	0.283	20	
1,4-Dichlorobenzene	50.3400	5.0	50.0000		101	80 - 115	1.81	20	
2,2-Dichloropropane	50.7200	5.0	50.0000		101	58 - 141	4.55	20	
2-Chlorotoluene	51.8600	5.0	50.0000		104	78 - 120	2.74	20	
4-Chlorotoluene	52.8100	5.0	50.0000		106	79 - 119	1.15	20	
4-Isopropyltoluene	55.0500	5.0	50.0000		110	81 - 125	1.91	20	
Benzene	93.3900	5.0	100.000		93.4	73 - 116	1.09	20	
Bromobenzene	51.2800	5.0	50.0000		103	78 - 115	2.17	20	
Bromochloromethane	46.8600	5.0	50.0000		93.7	66 - 121	4.40	20	
Bromodichloromethane	50.0100	5.0	50.0000		100	73 - 120	0.763	20	
Bromoform	51.3100	5.0	50.0000		103	68 - 124	6.73	20	
Bromomethane	51.4000	5.0	50.0000		103	26 - 163	9.35	20	
Carbon disulfide	42.5000	5.0	50.0000		85.0	43 - 142	9.78	20	
Carbon tetrachloride	49.6400	5.0	50.0000		99.3	67 - 130	0.522	20	
Chlorobenzene	49.9400	5.0	50.0000		99.9	82 - 114	1.31	20	
Chloroethane	37.8300	5.0	50.0000		75.7	40 - 151	6.62	20	
Chloroform	47.2500	5.0	50.0000		94.5	68 - 124	5.95	20	

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0203 - MSVOA_S (continued)									
LCS Dup (B5C0203-BSD1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Chloromethane	45.1300	5.0	50.0000		90.3	18 - 144	4.55	20	
cis-1,2-Dichloroethene	48.4400	5.0	50.0000		96.9	66 - 125	7.07	20	
cis-1,3-Dichloropropene	54.1100	5.0	50.0000		108	77 - 120	0.295	20	
Di-isopropyl ether	49.8100	5.0	50.0000		99.6	56 - 132	2.14	20	
Dibromochloromethane	49.9200	5.0	50.0000		99.8	76 - 118	2.15	20	
Dibromomethane	51.1800	5.0	50.0000		102	69 - 122	2.63	20	
Dichlorodifluoromethane	48.4600	5.0	50.0000		96.9	0 - 155	3.45	20	
Ethyl Acetate	498.250	50	500.000		99.6	31 - 137	6.03	20	
Ethyl Ether	487.280	50	500.000		97.5	47 - 150	4.01	20	
Ethyl tert-butyl ether	51.0000	5.0	50.0000		102	63 - 134	0.820	20	
Ethylbenzene	99.9100	5.0	100.000		99.9	79 - 115	0.946	20	
Freon-113	39.9200	5.0	50.0000		79.8	62 - 134	10.5	20	
Hexachlorobutadiene	51.6400	5.0	50.0000		103	71 - 121	3.69	20	
Isopropylbenzene	53.4400	5.0	50.0000		107	78 - 126	2.79	20	
m,p-Xylene	107.240	10	100.000		107	80 - 119	0.567	20	
ylene chloride	51.0800	5.0	50.0000		102	56 - 129	7.64	20	
BE	49.0500	5.0	50.0000		98.1	61 - 124	1.38	20	
n-Butylbenzene	55.3200	5.0	50.0000		111	78 - 127	1.51	20	
n-Propylbenzene	54.2500	5.0	50.0000		108	77 - 128	2.78	20	
Naphthalene	61.3400	5.0	50.0000		123	61 - 141	3.25	20	
o-Xylene	104.560	5.0	100.000		105	81 - 116	0.734	20	
sec-Butylbenzene	53.9600	5.0	50.0000		108	81 - 125	3.01	20	
Styrene	53.4900	5.0	50.0000		107	82 - 120	0.845	20	
tert-Amyl methyl ether	49.6900	5.0	50.0000		99.4	52 - 149	2.40	20	
tert-Butanol	234.060	100	250.000		93.6	26 - 160	14.7	20	
tert-Butylbenzene	54.6300	5.0	50.0000		109	80 - 123	2.37	20	
Tetrachloroethene	49.7800	5.0	50.0000		99.6	75 - 123	1.61	20	
Toluene	100.000	5.0	100.000		100	75 - 119	1.19	20	
trans-1,2-Dichloroethene	47.3800	5.0	50.0000		94.8	62 - 127	7.40	20	
trans-1,3-Dichloropropene	52.9400	5.0	50.0000		106	68 - 121	2.60	20	
Trichloroethene	49.9400	5.0	50.0000		99.9	73 - 119	2.22	20	
Trichlorofluoromethane	42.8400	5.0	50.0000		85.7	47 - 157	7.01	20	
Vinyl acetate	471.060	50	500.000		94.2	20 - 136	0.748	20	
Vinyl chloride	43.6700	5.0	50.0000		87.3	27 - 147	7.52	20	
Surrogate: 1,2-Dichloroethane-d4	*47.12*		*50.0000*		*94.2*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*52.23*		*50.0000*		*104*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.29*		*50.0000*		*98.6*	*26 - 178*			
Surrogate: Toluene-d8	*52.56*		*50.0000*		*105*	*31 - 166*			
Batch B5C0218 - MSVOA_S									
Blank (B5C0218-BLK1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
-Trichloroethane	ND	5.0			NR				
,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0218 - MSVOA_S (continued)									
Blank (B5C0218-BLK1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				

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Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0218 - MSVOA_S (continued)									
Blank (B5C0218-BLK1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
...acetate	ND	50			NR				
...yl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*55.73*		*50.0000*		*111*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*44.85*		*50.0000*		*89.7*	*20 - 173*			
Surrogate: Dibromofluoromethane	*57.29*		*50.0000*		*115*	*26 - 178*			
Surrogate: Toluene-d8	*49.48*		*50.0000*		*99.0*	*31 - 166*			
LCS (B5C0218-BS1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,1,1,2-Tetrachloroethane	50.5400	5.0	50.0000		101	74 - 117			
1,1,1-Trichloroethane	53.7000	5.0	50.0000		107	65 - 130			
1,1,2,2-Tetrachloroethane	46.0100	5.0	50.0000		92.0	63 - 123			
1,1,2-Trichloroethane	48.5900	5.0	50.0000		97.2	66 - 122			
1,1-Dichloroethane	55.0600	5.0	50.0000		110	65 - 124			
1,1-Dichloroethene	40.6200	5.0	50.0000		81.2	60 - 130			
1,1-Dichloropropene	51.8500	5.0	50.0000		104	75 - 121			
1,2,3-Trichloropropane	48.1900	5.0	50.0000		96.4	62 - 126			
1,2,3-Trichlorobenzene	52.5900	5.0	50.0000		105	72 - 120			
1,2,4-Trichlorobenzene	52.9400	5.0	50.0000		106	75 - 121			
1,2,4-Trimethylbenzene	53.5700	5.0	50.0000		107	82 - 118			
1,2-Dibromo-3-chloropropane	44.8600	10	50.0000		89.7	67 - 121			
1,2-Dibromoethane	48.7500	5.0	50.0000		97.5	69 - 123			
1,2-Dichlorobenzene	51.4900	5.0	50.0000		103	81 - 114			
1,2-Dichloroethane	50.7000	5.0	50.0000		101	71 - 119			
1,2-Dichloropropane	50.1400	5.0	50.0000		100	71 - 118			
1,3,5-Trimethylbenzene	53.3900	5.0	50.0000		107	81 - 120			
1,3-Dichlorobenzene	52.2200	5.0	50.0000		104	80 - 115			
1,3-Dichloropropane	49.7800	5.0	50.0000		99.6	77 - 117			
1,4-Dichlorobenzene	51.4700	5.0	50.0000		103	80 - 115			
...ichloropropane	54.9200	5.0	50.0000		110	58 - 141			
...lorotoluene	52.7800	5.0	50.0000		106	78 - 120			
4-Chlorotoluene	54.2400	5.0	50.0000		108	79 - 119			

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0218 - MSVOA_S (continued)									
LCS (B5C0218-BS1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
4-Isopropyltoluene	56.7200	5.0	50.0000		113	81 - 125			
Benzene	98.3100	5.0	100.000		98.3	73 - 116			
Bromobenzene	49.8600	5.0	50.0000		99.7	78 - 115			
Bromochloromethane	51.3100	5.0	50.0000		103	66 - 121			
Bromodichloromethane	50.1700	5.0	50.0000		100	73 - 120			
Bromoform	47.0000	5.0	50.0000		94.0	68 - 124			
Bromomethane	60.3300	5.0	50.0000		121	26 - 163			
Carbon disulfide	37.9800	5.0	50.0000		76.0	43 - 142			
Carbon tetrachloride	52.0600	5.0	50.0000		104	67 - 130			
Chlorobenzene	50.4100	5.0	50.0000		101	82 - 114			
Chloroethane	47.1500	5.0	50.0000		94.3	40 - 151			
Chloroform	53.2100	5.0	50.0000		106	68 - 124			
Chloromethane	54.4000	5.0	50.0000		109	18 - 144			
cis-1,2-Dichloroethene	54.4900	5.0	50.0000		109	66 - 125			
cis-1,3-Dichloropropene	53.2200	5.0	50.0000		106	77 - 120			
Di-isopropyl ether	53.2500	5.0	50.0000		106	56 - 132			
Dibromochloromethane	48.8800	5.0	50.0000		97.8	76 - 118			
Dibromomethane	50.0700	5.0	50.0000		100	69 - 122			
Dichlorodifluoromethane	55.4400	5.0	50.0000		111	0 - 155			
Ethyl Acetate	509.020	50	500.000		102	31 - 137			
Ethyl Ether	591.590	50	500.000		118	47 - 150			
Ethyl tert-butyl ether	53.0600	5.0	50.0000		106	63 - 134			
Ethylbenzene	101.990	5.0	100.000		102	79 - 115			
Freon-113	41.4000	5.0	50.0000		82.8	62 - 134			
Hexachlorobutadiene	54.1200	5.0	50.0000		108	71 - 121			
Isopropylbenzene	54.9700	5.0	50.0000		110	78 - 126			
m,p-Xylene	107.350	10	100.000		107	80 - 119			
Methylene chloride	57.8400	5.0	50.0000		116	56 - 129			
MTBE	51.2700	5.0	50.0000		103	61 - 124			
n-Butylbenzene	57.3400	5.0	50.0000		115	78 - 127			
n-Propylbenzene	56.0900	5.0	50.0000		112	77 - 128			
Naphthalene	61.2700	5.0	50.0000		123	61 - 141			
o-Xylene	104.280	5.0	100.000		104	81 - 116			
sec-Butylbenzene	56.3200	5.0	50.0000		113	81 - 125			
Styrene	52.4200	5.0	50.0000		105	82 - 120			
tert-Amyl methyl ether	49.8500	5.0	50.0000		99.7	52 - 149			
tert-Butanol	241.440	100	250.000		96.6	26 - 160			
tert-Butylbenzene	55.6500	5.0	50.0000		111	80 - 123			
Tetrachloroethene	51.3300	5.0	50.0000		103	75 - 123			
Toluene	101.660	5.0	100.000		102	75 - 119			
trans-1,2-Dichloroethene	53.9500	5.0	50.0000		108	62 - 127			
trans-1,3-Dichloropropene	52.1900	5.0	50.0000		104	68 - 121			
Trichloroethene	52.3200	5.0	50.0000		105	73 - 119			
Trichlorofluoromethane	52.6900	5.0	50.0000		105	47 - 157			
Vinyl acetate	512.950	50	500.000		103	20 - 136			
Vinyl chloride	56.5900	5.0	50.0000		113	27 - 147			

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0218 - MSVOA_S (continued)									
LCS (B5C0218-BS1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Surrogate: 1,2-Dichloroethane-d4	*50.85*		*50.0000*		*102*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*50.14*		*50.0000*		*100*	*20 - 173*			
Surrogate: Dibromofluoromethane	*54.26*		*50.0000*		*109*	*26 - 178*			
Surrogate: Toluene-d8	*51.34*		*50.0000*		*103*	*31 - 166*			
LCS Dup (B5C0218-BSD1)					Prepared: 3/9/2015 Analyzed: 3/9/2015				
1,1,1,2-Tetrachloroethane	49.3100	5.0	50.0000		98.6	74 - 117	2.46	20	
1,1,1-Trichloroethane	52.7000	5.0	50.0000		105	65 - 130	1.88	20	
1,1,2,2-Tetrachloroethane	45.3500	5.0	50.0000		90.7	63 - 123	1.44	20	
1,1,2-Trichloroethane	49.3300	5.0	50.0000		98.7	66 - 122	1.51	20	
1,1-Dichloroethane	55.4000	5.0	50.0000		111	65 - 124	0.616	20	
1,1-Dichloroethene	41.6100	5.0	50.0000		83.2	60 - 130	2.41	20	
1,1-Dichloropropene	48.0400	5.0	50.0000		96.1	75 - 121	7.63	20	
1,2,3-Trichloropropane	48.6400	5.0	50.0000		97.3	62 - 126	0.929	20	
1,2,3-Trichlorobenzene	51.5500	5.0	50.0000		103	72 - 120	2.00	20	
...-Trichlorobenzene	51.5600	5.0	50.0000		103	75 - 121	2.64	20	
...-Trimethylbenzene	51.4800	5.0	50.0000		103	82 - 118	3.98	20	
1,2-Dibromo-3-chloropropane	46.5400	10	50.0000		93.1	67 - 121	3.68	20	
1,2-Dibromoethane	49.7000	5.0	50.0000		99.4	69 - 123	1.93	20	
1,2-Dichlorobenzene	49.6500	5.0	50.0000		99.3	81 - 114	3.64	20	
1,2-Dichloroethane	51.7100	5.0	50.0000		103	71 - 119	1.97	20	
1,2-Dichloropropane	48.7000	5.0	50.0000		97.4	71 - 118	2.91	20	
1,3,5-Trimethylbenzene	51.5400	5.0	50.0000		103	81 - 120	3.53	20	
1,3-Dichlorobenzene	49.8300	5.0	50.0000		99.7	80 - 115	4.68	20	
1,3-Dichloropropane	50.2200	5.0	50.0000		100	77 - 117	0.880	20	
1,4-Dichlorobenzene	49.4400	5.0	50.0000		98.9	80 - 115	4.02	20	
2,2-Dichloropropane	54.4600	5.0	50.0000		109	58 - 141	0.841	20	
2-Chlorotoluene	51.0300	5.0	50.0000		102	78 - 120	3.37	20	
4-Chlorotoluene	51.5100	5.0	50.0000		103	79 - 119	5.16	20	
4-Isopropyltoluene	54.2100	5.0	50.0000		108	81 - 125	4.53	20	
Benzene	95.1700	5.0	100.000		95.2	73 - 116	3.25	20	
Bromobenzene	48.7700	5.0	50.0000		97.5	78 - 115	2.21	20	
Bromochloromethane	52.6200	5.0	50.0000		105	66 - 121	2.52	20	
Bromodichloromethane	49.4100	5.0	50.0000		98.8	73 - 120	1.53	20	
Bromoform	47.2000	5.0	50.0000		94.4	68 - 124	0.425	20	
Bromomethane	63.9800	5.0	50.0000		128	26 - 163	5.87	20	
Carbon disulfide	37.7800	5.0	50.0000		75.6	43 - 142	0.528	20	
Carbon tetrachloride	48.4100	5.0	50.0000		96.8	67 - 130	7.27	20	
Chlorobenzene	48.1400	5.0	50.0000		96.3	82 - 114	4.61	20	
Chloroethane	46.9800	5.0	50.0000		94.0	40 - 151	0.361	20	
Chloroform	54.0700	5.0	50.0000		108	68 - 124	1.60	20	
Chloromethane	57.3800	5.0	50.0000		115	18 - 144	5.33	20	
cis-1,2-Dichloroethene	54.9900	5.0	50.0000		110	66 - 125	0.913	20	
...3-Dichloropropene	52.6000	5.0	50.0000		105	77 - 120	1.17	20	
...opropyl ether	54.4600	5.0	50.0000		109	56 - 132	2.25	20	
Dibromochloromethane	48.5800	5.0	50.0000		97.2	76 - 118	0.616	20	
Dibromomethane	50.6500	5.0	50.0000		101	69 - 122	1.15	20	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0218 - MSVOA_S (continued)									
LCS Dup (B5C0218-BSD1) - Continued					Prepared: 3/9/2015 Analyzed: 3/9/2015				
Dichlorodifluoromethane	54.0900	5.0	50.0000		108	0 - 155	2.47	20	
Ethyl Acetate	554.360	50	500.000		111	31 - 137	8.53	20	
Ethyl Ether	645.230	50	500.000		129	47 - 150	8.67	20	
Ethyl tert-butyl ether	55.5500	5.0	50.0000		111	63 - 134	4.59	20	
Ethylbenzene	97.8700	5.0	100.000		97.9	79 - 115	4.12	20	
Freon-113	41.8300	5.0	50.0000		83.7	62 - 134	1.03	20	
Hexachlorobutadiene	51.7400	5.0	50.0000		103	71 - 121	4.50	20	
Isopropylbenzene	52.9200	5.0	50.0000		106	78 - 126	3.80	20	
m,p-Xylene	102.590	10	100.000		103	80 - 119	4.53	20	
Methylene chloride	60.4500	5.0	50.0000		121	56 - 129	4.41	20	
MTBE	53.4000	5.0	50.0000		107	61 - 124	4.07	20	
n-Butylbenzene	54.9600	5.0	50.0000		110	78 - 127	4.24	20	
n-Propylbenzene	53.6200	5.0	50.0000		107	77 - 128	4.50	20	
Naphthalene	61.0900	5.0	50.0000		122	61 - 141	0.294	20	
o-Xylene	99.6000	5.0	100.000		99.6	81 - 116	4.59	20	
sec-Butylbenzene	53.4800	5.0	50.0000		107	81 - 125	5.17	20	
Styrene	50.2300	5.0	50.0000		100	82 - 120	4.27	20	
tert-Amyl methyl ether	51.8800	5.0	50.0000		104	52 - 149	3.99	20	
tert-Butanol	258.010	100	250.000		103	26 - 160	6.64	20	
tert-Butylbenzene	53.6700	5.0	50.0000		107	80 - 123	3.62	20	
Tetrachloroethene	48.2800	5.0	50.0000		96.6	75 - 123	6.12	20	
Toluene	97.4000	5.0	100.000		97.4	75 - 119	4.28	20	
trans-1,2-Dichloroethene	54.6300	5.0	50.0000		109	62 - 127	1.25	20	
trans-1,3-Dichloropropene	52.9000	5.0	50.0000		106	68 - 121	1.35	20	
Trichloroethene	50.3200	5.0	50.0000		101	73 - 119	3.90	20	
Trichlorofluoromethane	52.5800	5.0	50.0000		105	47 - 157	0.209	20	
Vinyl acetate	544.510	50	500.000		109	20 - 136	5.97	20	
Vinyl chloride	58.4100	5.0	50.0000		117	27 - 147	3.17	20	
Surrogate: 1,2-Dichloroethane-d4	*56.75*		*50.0000*		*114*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*49.54*		*50.0000*		*99.1*	*20 - 173*			
Surrogate: Dibromofluoromethane	*57.35*		*50.0000*		*115*	*26 - 178*			
Surrogate: Toluene-d8	*51.96*		*50.0000*		*104*	*31 - 166*			

Certificate of Analysis

..ntec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

The reported MDL and PQL are based on prep ratio variation and analytical dilution.

The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.

(3) Results are wet unless otherwise specified.

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Advanced Technology Laboratories **3275 Walnut Avenue** **Signal Hill, CA 90755-5225**

Number of Pages	3
Date Received	03/09/2015
Date Reported	03/20/2015

Telephone: (562) 989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76217	03/09/2015	ATL

Project ID: 1500855
Project Name: PO# SC09407

Enclosed please find results of analyses of 2 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
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Ordered By

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755-5225

Project ID: 1500855 Date Received 03/09/2015 Date Reported 03/20/2015

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76217	03/09/2015	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 2 samples with the following specification on 03/09/2015.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76217.01	1500855-10	03/05/2015	Aqueous	1
76217.02	1500855-17	03/05/2015	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
8151A	03/16/2015	2	Normal	ug/L

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

American Environmental Testing Laboratory Inc.
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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 2

Project ID: 1500855
Project Name: PO# SC09407

AETL Job Number	Submitted	Client
76217	03/09/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 031215

Our Lab I.D.			Method Blank	76217.01	76217.02		
Client Sample I.D.				1500855-10	1500855-17		
Date Sampled				03/05/2015	03/05/2015		
Date Prepared			03/12/2015	03/12/2015	03/12/2015		
Preparation Method			3510C	3510C	3510C		
Date Analyzed			03/13/2015	03/14/2015	03/14/2015		
Matrix			Aqueous	Aqueous	Aqueous		
Units			ug/L	ug/L	ug/L		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Acifluorfen	1.0	1.0	ND	ND	ND		
Bentazon	0.5	0.5	ND	ND	ND		
Chloramben	0.5	0.5	ND	ND	ND		
2,4-D	0.5	0.5	ND	ND	ND		
Dalapon	1.0	1.0	ND	ND	ND		
2,4-DB	0.5	0.5	ND	ND	ND		
DCPA diacid	1.0	1.0	ND	ND	ND		
Dicamba	0.5	0.5	ND	ND	ND		
3,5-Dichlorobenzoic acid	0.5	0.5	ND	ND	ND		
Dichloroprop	0.5	0.5	ND	ND	ND		
Dinoseb	0.5	0.5	ND	ND	ND		
MCPA	100	100	ND	ND	ND		
MCPP	100	100	ND	ND	ND		
4-Nitrophenol	0.5	0.5	ND	ND	ND		
Pentachlorophenol (PCP)	0.5	0.5	ND	ND	ND		
Picloram	0.5	0.5	ND	ND	ND		
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.5	0.5	ND	ND	ND		
2,4,5-TP	0.5	0.5	ND	ND	ND		
Our Lab I.D.			Method Blank	76217.01	76217.02		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
DCAA	50-150		85.9	87.9	87.7		

American Environmental Testing Laboratory Inc.
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QUALITY CONTROL RESULTS

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Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 3

Project ID: 1500855
Project Name: PO# SC09407

AETL Job Number	Submitted	Client
76217	03/09/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 031215; LCS: Clean Water; LCS Prepared: 03/12/2015; LCS Analyzed: 03/13/2015; Units: ug/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	64.0	128	50.0	61.0	122	4.8	50-150	<50	
Dalapon	50.0	63.0	126	50.0	56.5	113	10.9	50-150	<50	
2,4-DB	50.0	36.3	72.6	50.0	66.5	133	58.8	50-150	<50	
Dicamba	50.0	29.0	58.0	50.0	32.0	63.9	9.7	50-150	<50	
Dinoseb	50.0	34.5	69.0	50.0	27.1	54.2	24.0	50-150	<50	
MCPA	5,000	4,700	94.0	5,000	3,730	74.6	23.0	50-150	<50	
MCPP	5,000	4,050	81.0	5,000	4,340	86.8	6.9	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	26.3	52.6	50.0	30.8	61.6	15.8	50-150	<50	
2,4,5-TP	50.0	39.7	79.3	50.0	61.5	123	43.2	50-150	<50	
Surrogates										
DCAA	100	61.9	61.9	100	68.6	68.6	10.3	50-150	<20	

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6;	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY LABORATORIES

76217

SUBCONTRACT ORDER

Work Order: 1500855

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09407- STANDARD TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500855-10 / **EB-1-030515**		**Water**	**03/05/15 13:09**	76217-01
8151_SUB	03/16/15 17:00	03/12/15 13:09		
[Chlorinated Herbicides]				
1-Amber Unpres - 1000mL				
ATL Lab#: 1500855-17 / **EB-2-030515**		**Water**	**03/05/15 15:00**	76217-02
8151_SUB	03/16/15 17:00	03/12/15 15:00		
[Chlorinated Herbicides]				
1-Amber Unpres - 1000mL				

Released By	Date	Received By	Date
	3/9/15 1116	Sanjis-P	3/9/15 1116
Sanjis-P	3/9/15 1245	Lean Lande	03/09/15 1245

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____

Page 1 of 2

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

	Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix*	Container & Size**	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1500855-1	1278-127-0	3/5/15	0946	SO	40mL VOA(3) 8oz Jar(1)	MeOH/NaSO4	4	X	X			X					
-2	1278-127-1.5		0954														
-3	1278-127-3.5		1003														On Hold
-4	1278-128-0		1013														
-5	1278-131-0		1044														
-6	1278-131-1.5		1050														
-7	1278-132-0		1114														
-8	1278-132-1.5		1130														
-9	1278-132-3.5		1139														On Hold
-10	EB-1-030515		1309	AQ	40mL VOA(6) 2 1L Amber 1500mL Poly	HCL	9								X		
-11	1278-133-0		1334	SO	40mL VOA(3) 8oz Jar(1)	MeOH/NaSO4	4										

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: J. Stagno/S. Edblad/A. Sawant Shipment Method: Lab Pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a) Relinquished by:	[signature]	Anuya Sawant	Stantec Consulting	3-6-15	
1(b) Received by:	[signature]	Edward Rodriguez	ATL	3-6-15	13:35
2(a) Relinquished by:	[signature]	Edward Rodriguez	ATL	3-6-15	1720
2(b) Received by:	[signature]	FP Diwa	ATL	3-6-15	1720
3(a) Relinquished by:					
3(b) Received by:					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____
Page 2 of 2

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1266

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

	Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1500855-12	1278-133-1.5	3/5/15	1342	SO	40mL VOA(3) 50z glass jar(1)	MeOH/ [illegible]	4	X	X			X					
-13	1278-133-3.5	↓	1354	↓	↓	↓	↓	↓	↓			↓					On Hold
-14	1278-134-0	↓	1410	↓	↓	↓	↓	↓	↓			↓					
-15	1278-134-1.5	↓	1417	↓	↓	↓	↓	↓	↓			↓					
-16	1278-134-3.5	↓	1437	↓	↓	↓	↓	↓	↓			↓					On Hold
-17	EB-2-030515	↓	1500	AQ	40mL VOA(6) 1 Amber(2) 500 mL Poly(1)	HCl	9	↓	↓			↓			X		

AS

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: J. Stagno / S. Edblad / A. Sawant *Shipment Method:* Lab Pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a) *Relinquished by:*	Anuya	Anuya Sawant	Stantec Consulting	3-6-15	
1(b) *Received by:*	[signature]	Edward Rodriguez	ATL	3-6-15	1335
2(a) *Relinquished by:*	[signature]	Edward Rodriguez	ATL	3-6-15	1720
2(b) *Received by:*	[signature]	T P Diwa	ATL	3-6-15	1720
3(a) *Relinquished by:*					
3(b) *Received by:*					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500855

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Report To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone: (805) 230-1266
Fax: (805) 230-1277

Invoice To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone :(805) 230-1266
Fax: (805) 230-1277

Date Due:	03/13/15 17:00 (5 day TAT)	Date Received:	03/06/15 13:35
Received By:	Ron Diwa	Date Logged In:	03/06/15 14:38
Logged In By:	Ron Diwa	Shipped by:	ATL

Please review the checklist below. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues. If you have any questions or further instructions, please contact your Project Manager at (526) 989-4045.

Sample(s) received on ice?	Yes	☐	No	☑
Sample(s) received on blue ice?	Yes	☑	No	☐
Cooler temperature within acceptance limit?	Yes	☑	No	☐
Shipping container received in good condition?	Not Applicable			
Custody seals present on shipping container?	Yes	☐	No	☑
Custody seals intact on shipping container?	Not Applicable			
Custody seals present on sample bottles?	Yes	☐	No	☑
Custody seals intact on sample bottles?	Not Applicable			
Chain of Custody (COC) present?	Yes	☑	No	☐
Sampler name present in COC?	Yes	☑	No	☐
COC signed when relinquished and received?	Yes	☑	No	☐
COC agrees with sample labels?	Yes	☑	No	☐
Samples in proper container/bottle?	Yes	☑	No	☐
Sample containers intact?	Yes	☑	No	☐
Sufficient sample amount for indicated tests?	Yes	☑	No	☐
All samples received within holding time?	Yes	☑	No	☐
Water for VOC – Were VOA vials submitted?	Yes	☑	No	☐
Water samples submitted?	Yes	☑	No	☐
VOA vials for VOC meet headspace criteria?	Yes	☑	No	☐
Water samples meet preservation criteria?	Yes	☑	No	☐

Default Cooler Temp: 5.6 °C

Sample Receipt Comments:
Water sample for metals- filter and preserve per client's instruction. One vial with NaHSO4 1278-134-0 received empty (no soil sample).

ADVANCED TECHNOLOGY
LABORATORIES

March 20, 2015

Anne Perez/Kristy Edblad
Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Tel: (805) 230-1266
Fax:(805) 230-1277

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500894
Client Reference : 185832023, 200.0003, Caltrans 07A3322-23

Enclosed are the results for sample(s) received on March 11, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1278-167-0	1500894-01	Soil	3/10/15 7:39	3/11/15 14:10
1278-167-1.5	1500894-02	Soil	3/10/15 8:00	3/11/15 14:10
1278-166-0	1500894-03	Soil	3/10/15 8:34	3/11/15 14:10
1278-166-1.5	1500894-04	Soil	3/10/15 8:42	3/11/15 14:10
1278-165-0	1500894-05	Soil	3/10/15 9:09	3/11/15 14:10
1278-165-1.5	1500894-06	Soil	3/10/15 9:29	3/11/15 14:10
1278-164-0	1500894-07	Soil	3/10/15 9:51	3/11/15 14:10
1278-163-0	1500894-08	Soil	3/10/15 10:12	3/11/15 14:10
1278-163-1.5	1500894-09	Soil	3/10/15 10:41	3/11/15 14:10
1278-162-0	1500894-10	Soil	3/10/15 11:17	3/11/15 14:10
EB-1-031015	1500894-11	Aqueous	3/10/15 13:05	3/11/15 14:10
'278-168-0	1500894-12	Soil	3/10/15 13:36	3/11/15 14:10
.278-168-1.5	1500894-13	Soil	3/10/15 13:54	3/11/15 14:10
1278-169-0	1500894-14	Soil	3/10/15 14:18	3/11/15 14:10
1278-169-1.5	1500894-15	Soil	3/10/15 14:26	3/11/15 14:10
EB-2-031015	1500894-17	Aqueous	3/10/15 15:11	3/11/15 14:10
1278-134-0	1500894-18	Soil	3/10/15 16:13	3/11/15 14:10

CASE NARRATIVE

The samples for EPA 8151 (Chlorinated Herbicides) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

EPA 8260 analysis was performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

Sample 1278-134-0 was originally received 03/06/15. Client resubmitted sample needed for 8260 analysis. The original TPH GRO and CC 8015M and Title 22 Metals 6010/7000 analyses were reported under ATL work order 1500855.

Results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the ·lculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to ·urately quantitate the analyte near the MDL.

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Mercury by AA (Cold Vapor) EPA 7470A

Analyte: Mercury **Analyst: VV**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500894-11	EB-1-031015	ND	ug/L	0.20	0.11	1	B5C0372	03/16/2015	03/16/15 15:15	
1500894-17	EB-2-031015	ND	ug/L	0.20	0.11	1	B5C0372	03/16/2015	03/16/15 15:27	

Mercury by AA (Cold Vapor) EPA 7471A

Analyte: Mercury **Analyst: VV**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1500894-01	1278-167-0	0.02	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:28	J
1500894-02	1278-167-1.5	0.04	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:37	J
1500894-03	1278-166-0	0.02	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:39	J
1500894-04	1278-166-1.5	0.03	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:41	J
1500894-05	1278-165-0	0.11	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:47	
1500894-06	1278-165-1.5	0.04	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:49	J
1500894-07	1278-164-0	0.04	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:52	J
1500894-08	1278-163-0	0.05	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:54	J
1500894-09	1278-163-1.5	0.03	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:56	J
1500894-10	1278-162-0	0.03	mg/kg	0.10	0.009	1	B5C0411	03/17/2015	03/17/15 16:58	J
1500894-12	1278-168-0	0.04	mg/kg	0.10	0.009	1	B5C0412	03/17/2015	03/17/15 17:03	J
1500894-13	1278-168-1.5	0.03	mg/kg	0.10	0.009	1	B5C0412	03/17/2015	03/17/15 17:17	J
1500894-14	1278-169-0	0.05	mg/kg	0.10	0.009	1	B5C0412	03/17/2015	03/17/15 17:19	J
1500894-15	1278-169-1.5	0.09	mg/kg	0.10	0.009	1	B5C0412	03/17/2015	03/17/15 17:21	J

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-167-0
Lab ID: 1500894-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.39**	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 09:33	J
Arsenic	**0.20**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 09:33	J
Barium	**100**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 09:33	
Beryllium	ND	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 09:33	
Cadmium	**0.70**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:33	J
Chromium	**10**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:33	
Cobalt	**4.9**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:33	
Copper	**19**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:33	
Lead	**250**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:33	
Molybdenum	**0.77**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:33	J
Nickel	**8.2**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:33	
...nium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:33	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 09:33	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 09:33	
Vanadium	**26**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:33	
Zinc	**130**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:33	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 12:29	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 12:29	
Surrogate: 4-Bromofluorobenzene	*92.8 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 12:29*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**85**	10	10	5	B5C0390	03/16/2015	03/17/15 04:23	
C23-C32	**730**	10	10	5	B5C0390	03/16/2015	03/17/15 04:23	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 04:23*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...,2-Tetrachloroethane	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
...,1-Trichloroethane	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
1,1,2,2-Tetrachloroethane	ND	4.8	1.9	1	B5C0298	03/12/2015	03/12/15 12:03	
1,1,2-Trichloroethane	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-167-0
Lab ID: 1500894-01

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	4.8	0.95	1	B5C0298	03/12/2015	03/12/15 12:03	
1,1-Dichloroethene	ND	4.8	1.1	1	B5C0298	03/12/2015	03/12/15 12:03	
1,1-Dichloropropene	ND	4.8	1.5	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2,3-Trichloropropane	ND	4.8	1.8	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2,3-Trichlorobenzene	ND	4.8	2.6	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2,4-Trichlorobenzene	ND	4.8	2.0	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2,4-Trimethylbenzene	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2-Dibromo-3-chloropropane	ND	9.7	2.1	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2-Dibromoethane	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2-Dichlorobenzene	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2-Dichloroethane	ND	4.8	0.84	1	B5C0298	03/12/2015	03/12/15 12:03	
1,2-Dichloropropane	ND	4.8	3.3	1	B5C0298	03/12/2015	03/12/15 12:03	
1,3,5-Trimethylbenzene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
1,3-Dichlorobenzene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
1,3-Dichloropropane	ND	4.8	1.1	1	B5C0298	03/12/2015	03/12/15 12:03	
1,4-Dichlorobenzene	ND	4.8	1.7	1	B5C0298	03/12/2015	03/12/15 12:03	
2,2-Dichloropropane	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
2-Chlorotoluene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
4-Chlorotoluene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
4-Isopropyltoluene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
Benzene	ND	4.8	1.1	1	B5C0298	03/12/2015	03/12/15 12:03	
Bromobenzene	ND	4.8	1.6	1	B5C0298	03/12/2015	03/12/15 12:03	
Bromochloromethane	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
Bromodichloromethane	ND	4.8	1.5	1	B5C0298	03/12/2015	03/12/15 12:03	
Bromoform	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
Bromomethane	ND	4.8	2.5	1	B5C0298	03/12/2015	03/12/15 12:03	
Carbon disulfide	ND	4.8	2.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Carbon tetrachloride	ND	4.8	1.5	1	B5C0298	03/12/2015	03/12/15 12:03	
Chlorobenzene	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Chloroethane	ND	4.8	4.8	1	B5C0298	03/12/2015	03/12/15 12:03	
Chloroform	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
Chloromethane	ND	4.8	0.72	1	B5C0298	03/12/2015	03/12/15 12:03	
cis-1,2-Dichloroethene	ND	4.8	1.1	1	B5C0298	03/12/2015	03/12/15 12:03	
cis-1,3-Dichloropropene	ND	4.8	2.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Di-isopropyl ether	ND	4.8	0.98	1	B5C0298	03/12/2015	03/12/15 12:03	
Dibromochloromethane	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Dibromomethane	ND	4.8	1.9	1	B5C0298	03/12/2015	03/12/15 12:03	
Dichlorodifluoromethane	ND	4.8	0.71	1	B5C0298	03/12/2015	03/12/15 12:03	
Ethyl Acetate	ND	48	13	1	B5C0298	03/12/2015	03/12/15 12:03	
Ethyl Ether	ND	48	12	1	B5C0298	03/12/2015	03/12/15 12:03	
Ethyl tert-butyl ether	ND	4.8	1.1	1	B5C0298	03/12/2015	03/12/15 12:03	

Certificate of Analysis

ıtec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-167-0
Lab ID: 1500894-01

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	4.8	1.1	1	B5C0298	03/12/2015	03/12/15 12:03	
Freon-113	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Hexachlorobutadiene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
Isopropylbenzene	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
m,p-Xylene	ND	9.7	2.4	1	B5C0298	03/12/2015	03/12/15 12:03	
Methylene chloride	ND	4.8	4.8	1	B5C0298	03/12/2015	03/12/15 12:03	
MTBE	ND	4.8	0.87	1	B5C0298	03/12/2015	03/12/15 12:03	
n-Butylbenzene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
n-Propylbenzene	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Naphthalene	ND	4.8	3.1	1	B5C0298	03/12/2015	03/12/15 12:03	
o-Xylene	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Butylbenzene	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
ene	ND	4.8	1.3	1	B5C0298	03/12/2015	03/12/15 12:03	
tert-Amyl methyl ether	ND	4.8	0.99	1	B5C0298	03/12/2015	03/12/15 12:03	
tert-Butanol	ND	97	19	1	B5C0298	03/12/2015	03/12/15 12:03	
tert-Butylbenzene	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
Tetrachloroethene	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Toluene	ND	4.8	0.85	1	B5C0298	03/12/2015	03/12/15 12:03	
trans-1,2-Dichloroethene	ND	4.8	1.4	1	B5C0298	03/12/2015	03/12/15 12:03	
trans-1,3-Dichloropropene	ND	4.8	1.1	1	B5C0298	03/12/2015	03/12/15 12:03	
Trichloroethene	ND	4.8	1.2	1	B5C0298	03/12/2015	03/12/15 12:03	
Trichlorofluoromethane	ND	4.8	1.7	1	B5C0298	03/12/2015	03/12/15 12:03	
Vinyl acetate	ND	48	10	1	B5C0298	03/12/2015	03/12/15 12:03	
Vinyl chloride	ND	4.8	0.99	1	B5C0298	03/12/2015	03/12/15 12:03	
Surrogate: 1,2-Dichloroethane-d4	*116 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 12:03*	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 12:03*	
Surrogate: Dibromofluoromethane	*104 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 12:03*	
Surrogate: Toluene-d8	*101 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 12:03*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-167-1.5
Lab ID: 1500894-02

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	1.2	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 09:40	J
Arsenic	5.5	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 09:40	
Barium	100	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 09:40	
Beryllium	0.08	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 09:40	J
Cadmium	1.1	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:40	
Chromium	30	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:40	
Cobalt	9.1	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:40	
Copper	43	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:40	
Lead	180	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:40	
Molybdenum	0.15	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:40	J
Nickel	24	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:40	
Selenium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:40	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 09:40	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 09:40	
Vanadium	45	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:40	
Zinc	110	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:40	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:47	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:47	
Surrogate: 4-Bromofluorobenzene	*91.1 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 14:47*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	43	10	10	10	B5C0390	03/16/2015	03/17/15 15:39	
C23-C32	360	10	10	10	B5C0390	03/16/2015	03/17/15 15:39	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 15:39*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
1,1,1-Trichloroethane	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
1,1,2,2-Tetrachloroethane	ND	8.4	3.2	1	B5C0298	03/12/2015	03/12/15 12:21	

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Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-167-1.5
Lab ID: 1500894-02

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
1,1-Dichloroethane	ND	8.4	1.6	1	B5C0298	03/12/2015	03/12/15 12:21	
1,1-Dichloroethene	ND	8.4	1.9	1	B5C0298	03/12/2015	03/12/15 12:21	
1,1-Dichloropropene	ND	8.4	2.6	1	B5C0298	03/12/2015	03/12/15 12:21	
1,2,3-Trichloropropane	ND	8.4	3.0	1	B5C0298	03/12/2015	03/12/15 12:21	
1,2,3-Trichlorobenzene	ND	8.4	4.5	1	B5C0298	03/12/2015	03/12/15 12:21	
1,2,4-Trichlorobenzene	ND	8.4	3.4	1	B5C0298	03/12/2015	03/12/15 12:21	
1,2,4-Trimethylbenzene	ND	8.4	2.4	1	B5C0298	03/12/2015	03/12/15 12:21	
1,2-Dibromo-3-chloropropane	ND	17	3.6	1	B5C0298	03/12/2015	03/12/15 12:21	
1,2-Dibromoethane	ND	8.4	2.4	1	B5C0298	03/12/2015	03/12/15 12:21	
1,2-Dichlorobenzene	ND	8.4	2.4	1	B5C0298	03/12/2015	03/12/15 12:21	
Dichloroethane	ND	8.4	1.5	1	B5C0298	03/12/2015	03/12/15 12:21	
-Dichloropropane	ND	8.4	5.7	1	B5C0298	03/12/2015	03/12/15 12:21	
1,3,5-Trimethylbenzene	ND	8.4	2.3	1	B5C0298	03/12/2015	03/12/15 12:21	
1,3-Dichlorobenzene	ND	8.4	2.3	1	B5C0298	03/12/2015	03/12/15 12:21	
1,3-Dichloropropane	ND	8.4	1.8	1	B5C0298	03/12/2015	03/12/15 12:21	
1,4-Dichlorobenzene	ND	8.4	3.0	1	B5C0298	03/12/2015	03/12/15 12:21	
2,2-Dichloropropane	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
2-Chlorotoluene	ND	8.4	2.3	1	B5C0298	03/12/2015	03/12/15 12:21	
4-Chlorotoluene	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
4-Isopropyltoluene	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
Benzene	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
Bromobenzene	ND	8.4	2.7	1	B5C0298	03/12/2015	03/12/15 12:21	
Bromochloromethane	ND	8.4	2.3	1	B5C0298	03/12/2015	03/12/15 12:21	
Bromodichloromethane	ND	8.4	2.6	1	B5C0298	03/12/2015	03/12/15 12:21	
Bromoform	ND	8.4	2.5	1	B5C0298	03/12/2015	03/12/15 12:21	
Bromomethane	ND	8.4	4.4	1	B5C0298	03/12/2015	03/12/15 12:21	
Carbon disulfide	ND	8.4	3.9	1	B5C0298	03/12/2015	03/12/15 12:21	
Carbon tetrachloride	ND	8.4	2.5	1	B5C0298	03/12/2015	03/12/15 12:21	
Chlorobenzene	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
Chloroethane	ND	8.4	8.3	1	B5C0298	03/12/2015	03/12/15 12:21	
Chloroform	ND	8.4	2.4	1	B5C0298	03/12/2015	03/12/15 12:21	
Chloromethane	ND	8.4	1.2	1	B5C0298	03/12/2015	03/12/15 12:21	
cis-1,2-Dichloroethene	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
cis-1,3-Dichloropropene	ND	8.4	3.8	1	B5C0298	03/12/2015	03/12/15 12:21	
Di-isopropyl ether	ND	8.4	1.7	1	B5C0298	03/12/2015	03/12/15 12:21	
Dibromochloromethane	ND	8.4	2.1	1	B5C0298	03/12/2015	03/12/15 12:21	
romomethane	ND	8.4	3.3	1	B5C0298	03/12/2015	03/12/15 12:21	
alorodifluoromethane	ND	8.4	1.2	1	B5C0298	03/12/2015	03/12/15 12:21	
Ethyl Acetate	ND	84	22	1	B5C0298	03/12/2015	03/12/15 12:21	
Ethyl Ether	ND	84	20	1	B5C0298	03/12/2015	03/12/15 12:21	

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Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-167-1.5
Lab ID: 1500894-02

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	8.4	1.9	1	B5C0298	03/12/2015	03/12/15 12:21	
Ethylbenzene	ND	8.4	1.9	1	B5C0298	03/12/2015	03/12/15 12:21	
Freon-113	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
Hexachlorobutadiene	ND	8.4	2.3	1	B5C0298	03/12/2015	03/12/15 12:21	
Isopropylbenzene	ND	8.4	2.4	1	B5C0298	03/12/2015	03/12/15 12:21	
m,p-Xylene	ND	17	4.2	1	B5C0298	03/12/2015	03/12/15 12:21	
Methylene chloride	ND	8.4	8.4	1	B5C0298	03/12/2015	03/12/15 12:21	
MTBE	ND	8.4	1.5	1	B5C0298	03/12/2015	03/12/15 12:21	
n-Butylbenzene	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
n-Propylbenzene	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
Naphthalene	ND	8.4	5.3	1	B5C0298	03/12/2015	03/12/15 12:21	
o-Xylene	ND	8.4	2.1	1	B5C0298	03/12/2015	03/12/15 12:21	
sec-Butylbenzene	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
Styrene	ND	8.4	2.2	1	B5C0298	03/12/2015	03/12/15 12:21	
tert-Amyl methyl ether	ND	8.4	1.7	1	B5C0298	03/12/2015	03/12/15 12:21	
tert-Butanol	ND	170	33	1	B5C0298	03/12/2015	03/12/15 12:21	
tert-Butylbenzene	ND	8.4	2.3	1	B5C0298	03/12/2015	03/12/15 12:21	
Tetrachloroethene	ND	8.4	2.1	1	B5C0298	03/12/2015	03/12/15 12:21	
Toluene	ND	8.4	1.5	1	B5C0298	03/12/2015	03/12/15 12:21	
trans-1,2-Dichloroethene	ND	8.4	2.4	1	B5C0298	03/12/2015	03/12/15 12:21	
trans-1,3-Dichloropropene	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
Trichloroethene	ND	8.4	2.0	1	B5C0298	03/12/2015	03/12/15 12:21	
Trichlorofluoromethane	ND	8.4	3.0	1	B5C0298	03/12/2015	03/12/15 12:21	
Vinyl acetate	ND	84	18	1	B5C0298	03/12/2015	03/12/15 12:21	
Vinyl chloride	ND	8.4	1.7	1	B5C0298	03/12/2015	03/12/15 12:21	
Surrogate: 1,2-Dichloroethane-d4	*120 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 12:21*	
Surrogate: 4-Bromofluorobenzene	*101 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 12:21*	
Surrogate: Dibromofluoromethane	*107 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 12:21*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 12:21*	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-166-0
Lab ID: 1500894-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.37**	**2.0**	**0.25**	1	B5C0406	03/17/2015	03/18/15 09:41	J
Arsenic	**1.2**	1.0	**0.19**	1	B5C0406	03/17/2015	03/18/15 09:41	
Barium	**78**	1.0	**0.14**	1	B5C0406	03/17/2015	03/18/15 09:41	
Beryllium	**0.04**	1.0	**0.04**	1	B5C0406	03/17/2015	03/18/15 09:41	J
Cadmium	**0.66**	1.0	**0.11**	1	B5C0406	03/17/2015	03/18/15 09:41	J
Chromium	**12**	1.0	**0.07**	1	B5C0406	03/17/2015	03/18/15 09:41	
Cobalt	**6.0**	1.0	**0.15**	1	B5C0406	03/17/2015	03/18/15 09:41	
Copper	**23**	2.0	**0.05**	1	B5C0406	03/17/2015	03/18/15 09:41	
Lead	**160**	1.0	**0.07**	1	B5C0406	03/17/2015	03/18/15 09:41	
Molybdenum	**0.33**	1.0	**0.05**	1	B5C0406	03/17/2015	03/18/15 09:41	J
...kel	**11**	1.0	**0.07**	1	B5C0406	03/17/2015	03/18/15 09:41	
...nium	ND	1.0	**0.15**	1	B5C0406	03/17/2015	03/18/15 09:41	
Silver	ND	1.0	**0.06**	1	B5C0406	03/17/2015	03/18/15 09:41	
Thallium	ND	1.0	**0.20**	1	B5C0406	03/17/2015	03/18/15 09:41	
Vanadium	**25**	1.0	**0.07**	1	B5C0406	03/17/2015	03/18/15 09:41	
Zinc	**73**	1.0	**0.11**	1	B5C0406	03/17/2015	03/18/15 09:41	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 12:58	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 12:58	
Surrogate: 4-Bromofluorobenzene	*136 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 12:58*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**6.6**	1.0	1.0	1	B5C0390	03/16/2015	03/17/15 02:46	
C23-C32	43	1.0	1.0	1	B5C0390	03/16/2015	03/17/15 02:46	
Surrogate: p-Terphenyl	*70.6 %*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 02:46*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
,1-Trichloroethane	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
1,1,2,2-Tetrachloroethane	ND	4.3	1.7	1	B5C0298	03/12/2015	03/12/15 12:40	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-166-0
Lab ID: 1500894-03

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
1,1-Dichloroethane	ND	4.3	0.84	1	B5C0298	03/12/2015	03/12/15 12:40	
1,1-Dichloroethene	ND	4.3	0.97	1	B5C0298	03/12/2015	03/12/15 12:40	
1,1-Dichloropropene	ND	4.3	1.3	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2,3-Trichloropropane	ND	4.3	1.6	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2,3-Trichlorobenzene	ND	4.3	2.3	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2,4-Trichlorobenzene	ND	4.3	1.8	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2,4-Trimethylbenzene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2-Dibromo-3-chloropropane	ND	8.6	1.8	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2-Dibromoethane	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2-Dichlorobenzene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2-Dichloroethane	ND	4.3	0.75	1	B5C0298	03/12/2015	03/12/15 12:40	
1,2-Dichloropropane	ND	4.3	2.9	1	B5C0298	03/12/2015	03/12/15 12:40	
1,3,5-Trimethylbenzene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
1,3-Dichlorobenzene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
1,3-Dichloropropane	ND	4.3	0.94	1	B5C0298	03/12/2015	03/12/15 12:40	
1,4-Dichlorobenzene	ND	4.3	1.5	1	B5C0298	03/12/2015	03/12/15 12:40	
2,2-Dichloropropane	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
2-Chlorotoluene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
4-Chlorotoluene	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
4-Isopropyltoluene	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
Benzene	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Bromobenzene	ND	4.3	1.4	1	B5C0298	03/12/2015	03/12/15 12:40	
Bromochloromethane	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
Bromodichloromethane	ND	4.3	1.3	1	B5C0298	03/12/2015	03/12/15 12:40	
Bromoform	ND	4.3	1.3	1	B5C0298	03/12/2015	03/12/15 12:40	
Bromomethane	ND	4.3	2.3	1	B5C0298	03/12/2015	03/12/15 12:40	
Carbon disulfide	ND	4.3	2.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Carbon tetrachloride	ND	4.3	1.3	1	B5C0298	03/12/2015	03/12/15 12:40	
Chlorobenzene	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Chloroethane	ND	4.3	4.2	1	B5C0298	03/12/2015	03/12/15 12:40	
Chloroform	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
Chloromethane	ND	4.3	0.64	1	B5C0298	03/12/2015	03/12/15 12:40	
cis-1,2-Dichloroethene	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
cis-1,3-Dichloropropene	ND	4.3	2.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Di-isopropyl ether	ND	4.3	0.87	1	B5C0298	03/12/2015	03/12/15 12:40	
Dibromochloromethane	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
Dibromomethane	ND	4.3	1.7	1	B5C0298	03/12/2015	03/12/15 12:40	
Dichlorodifluoromethane	ND	4.3	0.63	1	B5C0298	03/12/2015	03/12/15 12:40	
Ethyl Acetate	ND	43	11	1	B5C0298	03/12/2015	03/12/15 12:40	
Ethyl Ether	ND	43	10	1	B5C0298	03/12/2015	03/12/15 12:40	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-166-0

Lab ID: 1500894-03

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Ethylbenzene	ND	4.3	0.96	1	B5C0298	03/12/2015	03/12/15 12:40	
Freon-113	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
Hexachlorobutadiene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
Isopropylbenzene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
m,p-Xylene	ND	8.6	2.1	1	B5C0298	03/12/2015	03/12/15 12:40	
Methylene chloride	ND	4.3	4.3	1	B5C0298	03/12/2015	03/12/15 12:40	
MTBE	ND	4.3	0.77	1	B5C0298	03/12/2015	03/12/15 12:40	
n-Butylbenzene	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
n-Propylbenzene	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Naphthalene	ND	4.3	2.7	1	B5C0298	03/12/2015	03/12/15 12:40	
ylene	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
-Butylbenzene	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
Styrene	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
tert-Amyl methyl ether	ND	4.3	0.88	1	B5C0298	03/12/2015	03/12/15 12:40	
tert-Butanol	ND	86	17	1	B5C0298	03/12/2015	03/12/15 12:40	
tert-Butylbenzene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
Tetrachloroethene	ND	4.3	1.1	1	B5C0298	03/12/2015	03/12/15 12:40	
Toluene	ND	4.3	0.76	1	B5C0298	03/12/2015	03/12/15 12:40	
trans-1,2-Dichloroethene	ND	4.3	1.2	1	B5C0298	03/12/2015	03/12/15 12:40	
trans-1,3-Dichloropropene	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Trichloroethene	ND	4.3	1.0	1	B5C0298	03/12/2015	03/12/15 12:40	
Trichlorofluoromethane	ND	4.3	1.5	1	B5C0298	03/12/2015	03/12/15 12:40	
Vinyl acetate	ND	43	9.2	1	B5C0298	03/12/2015	03/12/15 12:40	
Vinyl chloride	ND	4.3	0.88	1	B5C0298	03/12/2015	03/12/15 12:40	
Surrogate: 1,2-Dichloroethane-d4	*114 %*		*20 - 189*		B5C0298	03/12/2015	*03/12/15 12:40*	
Surrogate: 4-Bromofluorobenzene	*99.2 %*		*20 - 173*		B5C0298	03/12/2015	*03/12/15 12:40*	
Surrogate: Dibromofluoromethane	*105 %*		*26 - 178*		B5C0298	03/12/2015	*03/12/15 12:40*	
Surrogate: Toluene-d8	*103 %*		*31 - 166*		B5C0298	03/12/2015	*03/12/15 12:40*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-166-1.5
Lab ID: 1500894-04

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.36**	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 09:43	J
Arsenic	**4.6**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 09:43	
Barium	**90**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 09:43	
Beryllium	**0.05**	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 09:43	J
Cadmium	**0.91**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:43	J
Chromium	**21**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:43	
Cobalt	**6.3**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:43	
Copper	**32**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:43	
Lead	**100**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:43	
Molybdenum	**0.30**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:43	J
Nickel	**16**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:43	
Selenium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:43	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 09:43	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 09:43	
Vanadium	**36**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:43	
Zinc	**190**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:43	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 13:13	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 13:13	
Surrogate: 4-Bromofluorobenzene	*100 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 13:13*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**4.9**	1.0	1.0	1	B5C0390	03/16/2015	03/17/15 02:13	
C23-C32	**35**	1.0	1.0	1	B5C0390	03/16/2015	03/17/15 02:13	
Surrogate: p-Terphenyl	*56.5 %*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 02:13*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
1,1,1-Trichloroethane	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
1,1,2,2-Tetrachloroethane	ND	5.1	2.0	1	B5C0298	03/12/2015	03/12/15 12:59	

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Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-166-1.5
Lab ID: 1500894-04

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
1,1-Dichloroethane	ND	5.1	0.99	1	B5C0298	03/12/2015	03/12/15 12:59	
1,1-Dichloroethene	ND	5.1	1.1	1	B5C0298	03/12/2015	03/12/15 12:59	
1,1-Dichloropropene	ND	5.1	1.6	1	B5C0298	03/12/2015	03/12/15 12:59	
1,2,3-Trichloropropane	ND	5.1	1.8	1	B5C0298	03/12/2015	03/12/15 12:59	
1,2,3-Trichlorobenzene	ND	5.1	2.7	1	B5C0298	03/12/2015	03/12/15 12:59	
1,2,4-Trichlorobenzene	ND	5.1	2.1	1	B5C0298	03/12/2015	03/12/15 12:59	
1,2,4-Trimethylbenzene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5C0298	03/12/2015	03/12/15 12:59	
1,2-Dibromoethane	ND	5.1	1.5	1	B5C0298	03/12/2015	03/12/15 12:59	
1,2-Dichlorobenzene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
Dichloroethane	ND	5.1	0.88	1	B5C0298	03/12/2015	03/12/15 12:59	
-Dichloropropane	ND	5.1	3.5	1	B5C0298	03/12/2015	03/12/15 12:59	
1,3,5-Trimethylbenzene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
1,3-Dichlorobenzene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
1,3-Dichloropropane	ND	5.1	1.1	1	B5C0298	03/12/2015	03/12/15 12:59	
1,4-Dichlorobenzene	ND	5.1	1.8	1	B5C0298	03/12/2015	03/12/15 12:59	
2,2-Dichloropropane	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
2-Chlorotoluene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
4-Chlorotoluene	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
4-Isopropyltoluene	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
Benzene	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
Bromobenzene	ND	5.1	1.7	1	B5C0298	03/12/2015	03/12/15 12:59	
Bromochloromethane	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
Bromodichloromethane	ND	5.1	1.6	1	B5C0298	03/12/2015	03/12/15 12:59	
Bromoform	ND	5.1	1.5	1	B5C0298	03/12/2015	03/12/15 12:59	
Bromomethane	ND	5.1	2.7	1	B5C0298	03/12/2015	03/12/15 12:59	
Carbon disulfide	ND	5.1	2.3	1	B5C0298	03/12/2015	03/12/15 12:59	
Carbon tetrachloride	ND	5.1	1.5	1	B5C0298	03/12/2015	03/12/15 12:59	
Chlorobenzene	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
Chloroethane	ND	5.1	5.0	1	B5C0298	03/12/2015	03/12/15 12:59	
Chloroform	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
Chloromethane	ND	5.1	0.75	1	B5C0298	03/12/2015	03/12/15 12:59	
cis-1,2-Dichloroethene	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
cis-1,3-Dichloropropene	ND	5.1	2.3	1	B5C0298	03/12/2015	03/12/15 12:59	
Di-isopropyl ether	ND	5.1	1.0	1	B5C0298	03/12/2015	03/12/15 12:59	
Dibromochloromethane	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
romomethane	ND	5.1	2.0	1	B5C0298	03/12/2015	03/12/15 12:59	
hlorodifluoromethane	ND	5.1	0.75	1	B5C0298	03/12/2015	03/12/15 12:59	
Ethyl Acetate	ND	51	13	1	B5C0298	03/12/2015	03/12/15 12:59	
Ethyl Ether	ND	51	12	1	B5C0298	03/12/2015	03/12/15 12:59	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-166-1.5
Lab ID: 1500894-04

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
Ethylbenzene	ND	5.1	1.1	1	B5C0298	03/12/2015	03/12/15 12:59	
Freon-113	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
Hexachlorobutadiene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
Isopropylbenzene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
m,p-Xylene	ND	10	2.5	1	B5C0298	03/12/2015	03/12/15 12:59	
Methylene chloride	ND	5.1	5.1	1	B5C0298	03/12/2015	03/12/15 12:59	
MTBE	ND	5.1	0.91	1	B5C0298	03/12/2015	03/12/15 12:59	
n-Butylbenzene	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
n-Propylbenzene	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
Naphthalene	ND	5.1	3.2	1	B5C0298	03/12/2015	03/12/15 12:59	
o-Xylene	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
sec-Butylbenzene	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
Styrene	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
tert-Amyl methyl ether	ND	5.1	1.0	1	B5C0298	03/12/2015	03/12/15 12:59	
tert-Butanol	ND	100	20	1	B5C0298	03/12/2015	03/12/15 12:59	
tert-Butylbenzene	ND	5.1	1.4	1	B5C0298	03/12/2015	03/12/15 12:59	
Tetrachloroethene	ND	5.1	1.3	1	B5C0298	03/12/2015	03/12/15 12:59	
Toluene	ND	5.1	0.90	1	B5C0298	03/12/2015	03/12/15 12:59	
trans-1,2-Dichloroethene	ND	5.1	1.5	1	B5C0298	03/12/2015	03/12/15 12:59	
trans-1,3-Dichloropropene	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
Trichloroethene	ND	5.1	1.2	1	B5C0298	03/12/2015	03/12/15 12:59	
Trichlorofluoromethane	ND	5.1	1.8	1	B5C0298	03/12/2015	03/12/15 12:59	
Vinyl acetate	ND	51	11	1	B5C0298	03/12/2015	03/12/15 12:59	
Vinyl chloride	ND	5.1	1.0	1	B5C0298	03/12/2015	03/12/15 12:59	
Surrogate: 1,2-Dichloroethane-d4	*118 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 12:59*	
Surrogate: 4-Bromofluorobenzene	*102 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 12:59*	
Surrogate: Dibromofluoromethane	*107 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 12:59*	
Surrogate: Toluene-d8	*107 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 12:59*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-165-0
Lab ID: 1500894-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.3**	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 09:44	J
Arsenic	**5.3**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 09:44	
Barium	**120**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 09:44	
Beryllium	**0.17**	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 09:44	J
Cadmium	**2.1**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:44	
Chromium	**29**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:44	
Cobalt	**7.1**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:44	
Copper	**56**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:44	
Lead	**2500**	5.0	0.34	5	B5C0406	03/17/2015	03/18/15 10:09	D6
Molybdenum	**2.2**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 09:44	
...ickel	22	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:44	
...nium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 09:44	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 09:44	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 09:44	
Vanadium	**33**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 09:44	
Zinc	**460**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 09:44	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 13:29	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 13:29	
Surrogate: 4-Bromofluorobenzene	*94.0 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 13:29*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**50**	10	10	5	B5C0390	03/16/2015	03/17/15 04:39	
C23-C32	**270**	10	10	5	B5C0390	03/16/2015	03/17/15 04:39	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 04:39*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
...1-Trichloroethane	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
1,1,2,2-Tetrachloroethane	ND	5.0	1.9	1	B5C0298	03/12/2015	03/12/15 13:17	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-165-0
Lab ID: 1500894-05

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
1,1-Dichloroethane	ND	5.0	0.98	1	B5C0298	03/12/2015	03/12/15 13:17	
1,1-Dichloroethene	ND	5.0	1.1	1	B5C0298	03/12/2015	03/12/15 13:17	
1,1-Dichloropropene	ND	5.0	1.5	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2,3-Trichloropropane	ND	5.0	1.8	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2,3-Trichlorobenzene	ND	5.0	2.7	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2,4-Trichlorobenzene	ND	5.0	2.0	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2,4-Trimethylbenzene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2-Dibromo-3-chloropropane	ND	10	2.1	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2-Dibromoethane	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2-Dichlorobenzene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2-Dichloroethane	ND	5.0	0.87	1	B5C0298	03/12/2015	03/12/15 13:17	
1,2-Dichloropropane	ND	5.0	3.4	1	B5C0298	03/12/2015	03/12/15 13:17	
1,3,5-Trimethylbenzene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
1,3-Dichlorobenzene	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
1,3-Dichloropropane	ND	5.0	1.1	1	B5C0298	03/12/2015	03/12/15 13:17	
1,4-Dichlorobenzene	ND	5.0	1.8	1	B5C0298	03/12/2015	03/12/15 13:17	
2,2-Dichloropropane	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
2-Chlorotoluene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
4-Chlorotoluene	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
4-Isopropyltoluene	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
Benzene	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
Bromobenzene	ND	5.0	1.6	1	B5C0298	03/12/2015	03/12/15 13:17	
Bromochloromethane	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
Bromodichloromethane	ND	5.0	1.6	1	B5C0298	03/12/2015	03/12/15 13:17	
Bromoform	ND	5.0	1.5	1	B5C0298	03/12/2015	03/12/15 13:17	
Bromomethane	ND	5.0	2.6	1	B5C0298	03/12/2015	03/12/15 13:17	
Carbon disulfide	ND	5.0	2.3	1	B5C0298	03/12/2015	03/12/15 13:17	
Carbon tetrachloride	ND	5.0	1.5	1	B5C0298	03/12/2015	03/12/15 13:17	
Chlorobenzene	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
Chloroethane	ND	5.0	4.9	1	B5C0298	03/12/2015	03/12/15 13:17	
Chloroform	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
Chloromethane	ND	5.0	0.74	1	B5C0298	03/12/2015	03/12/15 13:17	
cis-1,2-Dichloroethene	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
cis-1,3-Dichloropropene	ND	5.0	2.3	1	B5C0298	03/12/2015	03/12/15 13:17	
Di-isopropyl ether	ND	5.0	1.0	1	B5C0298	03/12/2015	03/12/15 13:17	
Dibromochloromethane	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
Dibromomethane	ND	5.0	2.0	1	B5C0298	03/12/2015	03/12/15 13:17	
Dichlorodifluoromethane	ND	5.0	0.74	1	B5C0298	03/12/2015	03/12/15 13:17	
Ethyl Acetate	ND	50	13	1	B5C0298	03/12/2015	03/12/15 13:17	
Ethyl Ether	ND	50	12	1	B5C0298	03/12/2015	03/12/15 13:17	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-165-0
Lab ID: 1500894-05

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
Ethylbenzene	ND	5.0	1.1	1	B5C0298	03/12/2015	03/12/15 13:17	
Freon-113	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
Hexachlorobutadiene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
Isopropylbenzene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
m,p-Xylene	ND	10	2.5	1	B5C0298	03/12/2015	03/12/15 13:17	
Methylene chloride	ND	5.0	5.0	1	B5C0298	03/12/2015	03/12/15 13:17	
MTBE	ND	5.0	0.90	1	B5C0298	03/12/2015	03/12/15 13:17	
n-Butylbenzene	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
n-Propylbenzene	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
Naphthalene	ND	5.0	3.2	1	B5C0298	03/12/2015	03/12/15 13:17	
ylene	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
-Butylbenzene	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
Styrene	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
tert-Amyl methyl ether	ND	5.0	1.0	1	B5C0298	03/12/2015	03/12/15 13:17	
tert-Butanol	ND	100	20	1	B5C0298	03/12/2015	03/12/15 13:17	
tert-Butylbenzene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
Tetrachloroethene	ND	5.0	1.3	1	B5C0298	03/12/2015	03/12/15 13:17	
Toluene	ND	5.0	0.88	1	B5C0298	03/12/2015	03/12/15 13:17	
trans-1,2-Dichloroethene	ND	5.0	1.4	1	B5C0298	03/12/2015	03/12/15 13:17	
trans-1,3-Dichloropropene	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
Trichloroethene	ND	5.0	1.2	1	B5C0298	03/12/2015	03/12/15 13:17	
Trichlorofluoromethane	ND	5.0	1.8	1	B5C0298	03/12/2015	03/12/15 13:17	
Vinyl acetate	ND	50	11	1	B5C0298	03/12/2015	03/12/15 13:17	
Vinyl chloride	ND	5.0	1.0	1	B5C0298	03/12/2015	03/12/15 13:17	
Surrogate: 1,2-Dichloroethane-d4	*113 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 13:17*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 13:17*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 13:17*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 13:17*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-165-1.5
Lab ID: 1500894-06

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 10:01	
Arsenic	**8.4**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 10:01	
Barium	**140**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 10:01	
Beryllium	**0.50**	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 10:01	J
Cadmium	**1.7**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:01	
Chromium	**48**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:01	
Cobalt	**12**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:01	
Copper	**49**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:01	
Lead	**270**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:01	
Molybdenum	**1.1**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:01	
Nickel	**34**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:01	
Selenium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:01	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 10:01	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 10:01	
Vanadium	**64**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:01	
Zinc	**220**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:01	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 13:45	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 13:45	
Surrogate: 4-Bromofluorobenzene	*99.5 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 13:45*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	8.6	2.0	2.0	2	B5C0390	03/16/2015	03/17/15 03:18	
C23-C32	59	2.0	2.0	2	B5C0390	03/16/2015	03/17/15 03:18	
Surrogate: p-Terphenyl	*64.2 %*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 03:18*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
1,1,1-Trichloroethane	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
1,1,2,2-Tetrachloroethane	ND	6.6	2.6	1	B5C0298	03/12/2015	03/12/15 13:36	
1,1,2-Trichloroethane	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-165-1.5
Lab ID: 1500894-06

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	6.6	1.3	1	B5C0298	03/12/2015	03/12/15 13:36	
1,1-Dichloroethene	ND	6.6	1.5	1	B5C0298	03/12/2015	03/12/15 13:36	
1,1-Dichloropropene	ND	6.6	2.0	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2,3-Trichloropropane	ND	6.6	2.4	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2,3-Trichlorobenzene	ND	6.6	3.6	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2,4-Trichlorobenzene	ND	6.6	2.7	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2,4-Trimethylbenzene	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2-Dibromo-3-chloropropane	ND	13	2.8	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2-Dibromoethane	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2-Dichlorobenzene	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
1,2-Dichloroethane	ND	6.6	1.2	1	B5C0298	03/12/2015	03/12/15 13:36	
Dichloropropane	ND	6.6	4.5	1	B5C0298	03/12/2015	03/12/15 13:36	
,5-Trimethylbenzene	ND	6.6	1.8	1	B5C0298	03/12/2015	03/12/15 13:36	
1,3-Dichlorobenzene	ND	6.6	1.8	1	B5C0298	03/12/2015	03/12/15 13:36	
1,3-Dichloropropane	ND	6.6	1.5	1	B5C0298	03/12/2015	03/12/15 13:36	
1,4-Dichlorobenzene	ND	6.6	2.4	1	B5C0298	03/12/2015	03/12/15 13:36	
2,2-Dichloropropane	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
2-Chlorotoluene	ND	6.6	1.8	1	B5C0298	03/12/2015	03/12/15 13:36	
4-Chlorotoluene	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
4-Isopropyltoluene	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
Benzene	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
Bromobenzene	ND	6.6	2.2	1	B5C0298	03/12/2015	03/12/15 13:36	
Bromochloromethane	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
Bromodichloromethane	ND	6.6	2.1	1	B5C0298	03/12/2015	03/12/15 13:36	
Bromoform	ND	6.6	2.0	1	B5C0298	03/12/2015	03/12/15 13:36	
Bromomethane	ND	6.6	3.5	1	B5C0298	03/12/2015	03/12/15 13:36	
Carbon disulfide	ND	6.6	3.1	1	B5C0298	03/12/2015	03/12/15 13:36	
Carbon tetrachloride	ND	6.6	2.0	1	B5C0298	03/12/2015	03/12/15 13:36	
Chlorobenzene	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
Chloroethane	ND	6.6	6.6	1	B5C0298	03/12/2015	03/12/15 13:36	
Chloroform	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
Chloromethane	ND	6.6	0.99	1	B5C0298	03/12/2015	03/12/15 13:36	
cis-1,2-Dichloroethene	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
cis-1,3-Dichloropropene	ND	6.6	3.0	1	B5C0298	03/12/2015	03/12/15 13:36	
Di-isopropyl ether	ND	6.6	1.3	1	B5C0298	03/12/2015	03/12/15 13:36	
Dibromochloromethane	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
Dibromomethane	ND	6.6	2.6	1	B5C0298	03/12/2015	03/12/15 13:36	
hlorodifluoromethane	ND	6.6	0.98	1	B5C0298	03/12/2015	03/12/15 13:36	
l Acetate	ND	66	18	1	B5C0298	03/12/2015	03/12/15 13:36	
Ethyl Ether	ND	66	16	1	B5C0298	03/12/2015	03/12/15 13:36	
Ethyl tert-butyl ether	ND	6.6	1.5	1	B5C0298	03/12/2015	03/12/15 13:36	

Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-165-1.5

Lab ID: 1500894-06

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	6.6	1.5	1	B5C0298	03/12/2015	03/12/15 13:36	
Freon-113	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
Hexachlorobutadiene	ND	6.6	1.8	1	B5C0298	03/12/2015	03/12/15 13:36	
Isopropylbenzene	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
m,p-Xylene	ND	13	3.3	1	B5C0298	03/12/2015	03/12/15 13:36	
Methylene chloride	ND	6.6	6.6	1	B5C0298	03/12/2015	03/12/15 13:36	
MTBE	ND	6.6	1.2	1	B5C0298	03/12/2015	03/12/15 13:36	
n-Butylbenzene	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
n-Propylbenzene	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
Naphthalene	ND	6.6	4.2	1	B5C0298	03/12/2015	03/12/15 13:36	
o-Xylene	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
sec-Butylbenzene	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
Styrene	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
tert-Amyl methyl ether	ND	6.6	1.4	1	B5C0298	03/12/2015	03/12/15 13:36	
tert-Butanol	ND	130	27	1	B5C0298	03/12/2015	03/12/15 13:36	
tert-Butylbenzene	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
Tetrachloroethene	ND	6.6	1.7	1	B5C0298	03/12/2015	03/12/15 13:36	
Toluene	ND	6.6	1.2	1	B5C0298	03/12/2015	03/12/15 13:36	
trans-1,2-Dichloroethene	ND	6.6	1.9	1	B5C0298	03/12/2015	03/12/15 13:36	
trans-1,3-Dichloropropene	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
Trichloroethene	ND	6.6	1.6	1	B5C0298	03/12/2015	03/12/15 13:36	
Trichlorofluoromethane	ND	6.6	2.4	1	B5C0298	03/12/2015	03/12/15 13:36	
Vinyl acetate	ND	66	14	1	B5C0298	03/12/2015	03/12/15 13:36	
Vinyl chloride	ND	6.6	1.4	1	B5C0298	03/12/2015	03/12/15 13:36	
Surrogate: 1,2-Dichloroethane-d4	*121 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 13:36*	
Surrogate: 4-Bromofluorobenzene	*96.9 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 13:36*	
Surrogate: Dibromofluoromethane	*106 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 13:36*	
Surrogate: Toluene-d8	*102 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 13:36*	

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-164-0
Lab ID: 1500894-07

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.42**	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 10:03	J
Arsenic	**6.0**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 10:03	
Barium	**90**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 10:03	
Beryllium	**0.39**	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 10:03	J
Cadmium	**1.4**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:03	
Chromium	**27**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:03	
Cobalt	**8.2**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:03	
Copper	**29**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:03	
Lead	**270**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:03	
Molybdenum	**0.98**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:03	J
...ickel	**25**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:03	
...nium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:03	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 10:03	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 10:03	
Vanadium	**39**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:03	
Zinc	**130**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:03	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:00	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:00	
Surrogate: 4-Bromofluorobenzene	*99.6 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 14:00*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	8.3	1.0	1.0	1	B5C0390	03/16/2015	03/17/15 02:30	
C23-C32	45	1.0	1.0	1	B5C0390	03/16/2015	03/17/15 02:30	
Surrogate: p-Terphenyl	*73.8 %*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 02:30*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
...1-Trichloroethane	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
1,1,2,2-Tetrachloroethane	ND	5.8	2.2	1	B5C0298	03/12/2015	03/12/15 13:55	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-164-0
Lab ID: 1500894-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
1,1-Dichloroethane	ND	5.8	1.1	1	B5C0298	03/12/2015	03/12/15 13:55	
1,1-Dichloroethene	ND	5.8	1.3	1	B5C0298	03/12/2015	03/12/15 13:55	
1,1-Dichloropropene	ND	5.8	1.8	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2,3-Trichloropropane	ND	5.8	2.1	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2,3-Trichlorobenzene	ND	5.8	3.1	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2,4-Trichlorobenzene	ND	5.8	2.4	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2,4-Trimethylbenzene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2-Dibromo-3-chloropropane	ND	12	2.5	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2-Dibromoethane	ND	5.8	1.7	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2-Dichlorobenzene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2-Dichloroethane	ND	5.8	1.0	1	B5C0298	03/12/2015	03/12/15 13:55	
1,2-Dichloropropane	ND	5.8	3.9	1	B5C0298	03/12/2015	03/12/15 13:55	
1,3,5-Trimethylbenzene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
1,3-Dichlorobenzene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
1,3-Dichloropropane	ND	5.8	1.3	1	B5C0298	03/12/2015	03/12/15 13:55	
1,4-Dichlorobenzene	ND	5.8	2.1	1	B5C0298	03/12/2015	03/12/15 13:55	
2,2-Dichloropropane	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
2-Chlorotoluene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
4-Chlorotoluene	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
4-Isopropyltoluene	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
Benzene	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
Bromobenzene	ND	5.8	1.9	1	B5C0298	03/12/2015	03/12/15 13:55	
Bromochloromethane	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
Bromodichloromethane	ND	5.8	1.8	1	B5C0298	03/12/2015	03/12/15 13:55	
Bromoform	ND	5.8	1.7	1	B5C0298	03/12/2015	03/12/15 13:55	
Bromomethane	ND	5.8	3.0	1	B5C0298	03/12/2015	03/12/15 13:55	
Carbon disulfide	ND	5.8	2.7	1	B5C0298	03/12/2015	03/12/15 13:55	
Carbon tetrachloride	ND	5.8	1.7	1	B5C0298	03/12/2015	03/12/15 13:55	
Chlorobenzene	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
Chloroethane	ND	5.8	5.7	1	B5C0298	03/12/2015	03/12/15 13:55	
Chloroform	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
Chloromethane	ND	5.8	0.86	1	B5C0298	03/12/2015	03/12/15 13:55	
cis-1,2-Dichloroethene	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
cis-1,3-Dichloropropene	ND	5.8	2.7	1	B5C0298	03/12/2015	03/12/15 13:55	
Di-isopropyl ether	ND	5.8	1.2	1	B5C0298	03/12/2015	03/12/15 13:55	
Dibromochloromethane	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
Dibromomethane	ND	5.8	2.3	1	B5C0298	03/12/2015	03/12/15 13:55	
Dichlorodifluoromethane	ND	5.8	0.86	1	B5C0298	03/12/2015	03/12/15 13:55	
Ethyl Acetate	ND	58	15	1	B5C0298	03/12/2015	03/12/15 13:55	
Ethyl Ether	ND	58	14	1	B5C0298	03/12/2015	03/12/15 13:55	

Certificate of Analysis

...atec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-164-0
Lab ID: 1500894-07

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	5.8	1.3	1	B5C0298	03/12/2015	03/12/15 13:55	
Ethylbenzene	ND	5.8	1.3	1	B5C0298	03/12/2015	03/12/15 13:55	
Freon-113	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
Hexachlorobutadiene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
Isopropylbenzene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
m,p-Xylene	ND	12	2.9	1	B5C0298	03/12/2015	03/12/15 13:55	
Methylene chloride	ND	5.8	5.8	1	B5C0298	03/12/2015	03/12/15 13:55	
MTBE	ND	5.8	1.0	1	B5C0298	03/12/2015	03/12/15 13:55	
n-Butylbenzene	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
n-Propylbenzene	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
Naphthalene	ND	5.8	3.7	1	B5C0298	03/12/2015	03/12/15 13:55	
...ylene	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
...c-Butylbenzene	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
Styrene	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
tert-Amyl methyl ether	ND	5.8	1.2	1	B5C0298	03/12/2015	03/12/15 13:55	
tert-Butanol	ND	120	23	1	B5C0298	03/12/2015	03/12/15 13:55	
tert-Butylbenzene	ND	5.8	1.6	1	B5C0298	03/12/2015	03/12/15 13:55	
Tetrachloroethene	ND	5.8	1.5	1	B5C0298	03/12/2015	03/12/15 13:55	
Toluene	ND	5.8	1.0	1	B5C0298	03/12/2015	03/12/15 13:55	
trans-1,2-Dichloroethene	ND	5.8	1.7	1	B5C0298	03/12/2015	03/12/15 13:55	
trans-1,3-Dichloropropene	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
Trichloroethene	ND	5.8	1.4	1	B5C0298	03/12/2015	03/12/15 13:55	
Trichlorofluoromethane	ND	5.8	2.1	1	B5C0298	03/12/2015	03/12/15 13:55	
Vinyl acetate	ND	58	12	1	B5C0298	03/12/2015	03/12/15 13:55	
Vinyl chloride	ND	5.8	1.2	1	B5C0298	03/12/2015	03/12/15 13:55	
Surrogate: 1,2-Dichloroethane-d4	*117 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 13:55*	
Surrogate: 4-Bromofluorobenzene	*98.1 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 13:55*	
Surrogate: Dibromofluoromethane	*105 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 13:55*	
Surrogate: Toluene-d8	*104 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 13:55*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-163-0
Lab ID: 1500894-08

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 10:04	
Arsenic	**9.3**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 10:04	
Barium	**100**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 10:04	
Beryllium	**0.44**	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 10:04	J
Cadmium	**1.6**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:04	
Chromium	**35**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:04	
Cobalt	**11**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:04	
Copper	**44**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:04	
Lead	**240**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:04	
Molybdenum	**1.1**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:04	
Nickel	**29**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:04	
Selenium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:04	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 10:04	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 10:04	
Vanadium	**47**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:04	
Zinc	**260**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:04	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:16	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:16	
Surrogate: 4-Bromofluorobenzene	*95.9 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 14:16*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**19**	5.0	5.0	5	B5C0390	03/16/2015	03/17/15 04:07	
C23-C32	**150**	5.0	5.0	5	B5C0390	03/16/2015	03/17/15 04:07	
Surrogate: p-Terphenyl	*0%*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 04:07*	S4

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
1,1,1-Trichloroethane	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
1,1,2,2-Tetrachloroethane	ND	5.4	2.1	1	B5C0298	03/12/2015	03/12/15 14:13	
1,1,2-Trichloroethane	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	

Certificate of Analysis

ıtec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-163-0
Lab ID: 1500894-08

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.4	1.1	1	B5C0298	03/12/2015	03/12/15 14:13	
1,1-Dichloroethene	ND	5.4	1.2	1	B5C0298	03/12/2015	03/12/15 14:13	
1,1-Dichloropropene	ND	5.4	1.7	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2,3-Trichloropropane	ND	5.4	2.0	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2,3-Trichlorobenzene	ND	5.4	2.9	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2,4-Trichlorobenzene	ND	5.4	2.2	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2,4-Trimethylbenzene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2-Dibromo-3-chloropropane	ND	11	2.3	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2-Dibromoethane	ND	5.4	1.6	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2-Dichlorobenzene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
1,2-Dichloroethane	ND	5.4	0.95	1	B5C0298	03/12/2015	03/12/15 14:13	
·Dichloropropane	ND	5.4	3.7	1	B5C0298	03/12/2015	03/12/15 14:13	
,5-Trimethylbenzene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
1,3-Dichlorobenzene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
1,3-Dichloropropane	ND	5.4	1.2	1	B5C0298	03/12/2015	03/12/15 14:13	
1,4-Dichlorobenzene	ND	5.4	1.9	1	B5C0298	03/12/2015	03/12/15 14:13	
2,2-Dichloropropane	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
2-Chlorotoluene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
4-Chlorotoluene	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
4-Isopropyltoluene	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
Benzene	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
Bromobenzene	ND	5.4	1.8	1	B5C0298	03/12/2015	03/12/15 14:13	
Bromochloromethane	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
Bromodichloromethane	ND	5.4	1.7	1	B5C0298	03/12/2015	03/12/15 14:13	
Bromoform	ND	5.4	1.6	1	B5C0298	03/12/2015	03/12/15 14:13	
Bromomethane	ND	5.4	2.9	1	B5C0298	03/12/2015	03/12/15 14:13	
Carbon disulfide	ND	5.4	2.5	1	B5C0298	03/12/2015	03/12/15 14:13	
Carbon tetrachloride	ND	5.4	1.6	1	B5C0298	03/12/2015	03/12/15 14:13	
Chlorobenzene	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
Chloroethane	ND	5.4	5.4	1	B5C0298	03/12/2015	03/12/15 14:13	
Chloroform	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
Chloromethane	1.7	5.4	0.81	1	B5C0298	03/12/2015	03/12/15 14:13	J
cis-1,2-Dichloroethene	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
cis-1,3-Dichloropropene	ND	5.4	2.5	1	B5C0298	03/12/2015	03/12/15 14:13	
Di-isopropyl ether	ND	5.4	1.1	1	B5C0298	03/12/2015	03/12/15 14:13	
Dibromochloromethane	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
Dibromomethane	ND	5.4	2.1	1	B5C0298	03/12/2015	03/12/15 14:13	
Dichlorodifluoromethane	ND	5.4	0.80	1	B5C0298	03/12/2015	03/12/15 14:13	
yl Acetate	ND	54	14	1	B5C0298	03/12/2015	03/12/15 14:13	
Ethyl Ether	ND	54	13	1	B5C0298	03/12/2015	03/12/15 14:13	
Ethyl tert-butyl ether	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	

Certificate of Analysis

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Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-163-0

Lab ID: 1500894-08

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.4	1.2	1	B5C0298	03/12/2015	03/12/15 14:13	
Freon-113	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
Hexachlorobutadiene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
Isopropylbenzene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
m,p-Xylene	ND	11	2.7	1	B5C0298	03/12/2015	03/12/15 14:13	
Methylene chloride	ND	5.4	5.4	1	B5C0298	03/12/2015	03/12/15 14:13	
MTBE	ND	5.4	0.98	1	B5C0298	03/12/2015	03/12/15 14:13	
n-Butylbenzene	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
n-Propylbenzene	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
Naphthalene	ND	5.4	3.5	1	B5C0298	03/12/2015	03/12/15 14:13	
o-Xylene	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
sec-Butylbenzene	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
Styrene	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
tert-Amyl methyl ether	ND	5.4	1.1	1	B5C0298	03/12/2015	03/12/15 14:13	
tert-Butanol	ND	110	22	1	B5C0298	03/12/2015	03/12/15 14:13	
tert-Butylbenzene	ND	5.4	1.5	1	B5C0298	03/12/2015	03/12/15 14:13	
Tetrachloroethene	ND	5.4	1.4	1	B5C0298	03/12/2015	03/12/15 14:13	
Toluene	ND	5.4	0.96	1	B5C0298	03/12/2015	03/12/15 14:13	
trans-1,2-Dichloroethene	ND	5.4	1.6	1	B5C0298	03/12/2015	03/12/15 14:13	
trans-1,3-Dichloropropene	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
Trichloroethene	ND	5.4	1.3	1	B5C0298	03/12/2015	03/12/15 14:13	
Trichlorofluoromethane	ND	5.4	1.9	1	B5C0298	03/12/2015	03/12/15 14:13	
Vinyl acetate	ND	54	12	1	B5C0298	03/12/2015	03/12/15 14:13	
Vinyl chloride	ND	5.4	1.1	1	B5C0298	03/12/2015	03/12/15 14:13	
Surrogate: 1,2-Dichloroethane-d4	*115 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 14:13*	
Surrogate: 4-Bromofluorobenzene	*96.1 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 14:13*	
Surrogate: Dibromofluoromethane	*109 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 14:13*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 14:13*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-163-1.5
Lab ID: 1500894-09

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.48**	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 10:06	J
Arsenic	**4.7**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 10:06	
Barium	**73**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 10:06	
Beryllium	**0.31**	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 10:06	J
Cadmium	**1.4**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:06	
Chromium	**18**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:06	
Cobalt	**7.9**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:06	
Copper	**28**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:06	
Lead	**220**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:06	
Molybdenum	**1.3**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:06	
Nickel	**22**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:06	
...nium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:06	
...ilver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 10:06	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 10:06	
Vanadium	**30**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:06	
Zinc	**140**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:06	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:31	
C4-C8	ND	1.0	0.20	1	B5C0307	03/10/2015	03/12/15 14:31	
Surrogate: 4-Bromofluorobenzene	*94.7 %*	*37 - 153*			B5C0307	03/10/2015	*03/12/15 14:31*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**10**	2.0	2.0	2	B5C0390	03/16/2015	03/17/15 03:34	
C23-C32	83	2.0	2.0	2	B5C0390	03/16/2015	03/17/15 03:34	
Surrogate: p-Terphenyl	*58.7 %*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 03:34*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,2-Tetrachloroethane	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
...l-Trichloroethane	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
1,1,2,2-Tetrachloroethane	ND	6.5	2.5	1	B5C0298	03/12/2015	03/12/15 14:32	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-163-1.5
Lab ID: 1500894-09

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
1,1-Dichloroethane	ND	6.5	1.3	1	B5C0298	03/12/2015	03/12/15 14:32	
1,1-Dichloroethene	ND	6.5	1.5	1	B5C0298	03/12/2015	03/12/15 14:32	
1,1-Dichloropropene	ND	6.5	2.0	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2,3-Trichloropropane	ND	6.5	2.4	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2,3-Trichlorobenzene	ND	6.5	3.5	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2,4-Trichlorobenzene	ND	6.5	2.7	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2,4-Trimethylbenzene	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2-Dibromo-3-chloropropane	ND	13	2.8	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2-Dibromoethane	ND	6.5	1.9	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2-Dichlorobenzene	ND	6.5	1.9	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2-Dichloroethane	ND	6.5	1.1	1	B5C0298	03/12/2015	03/12/15 14:32	
1,2-Dichloropropane	ND	6.5	4.4	1	B5C0298	03/12/2015	03/12/15 14:32	
1,3,5-Trimethylbenzene	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
1,3-Dichlorobenzene	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
1,3-Dichloropropane	ND	6.5	1.4	1	B5C0298	03/12/2015	03/12/15 14:32	
1,4-Dichlorobenzene	ND	6.5	2.3	1	B5C0298	03/12/2015	03/12/15 14:32	
2,2-Dichloropropane	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
2-Chlorotoluene	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
4-Chlorotoluene	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
4-Isopropyltoluene	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
Benzene	ND	6.5	1.5	1	B5C0298	03/12/2015	03/12/15 14:32	
Bromobenzene	ND	6.5	2.1	1	B5C0298	03/12/2015	03/12/15 14:32	
Bromochloromethane	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
Bromodichloromethane	ND	6.5	2.0	1	B5C0298	03/12/2015	03/12/15 14:32	
Bromoform	ND	6.5	1.9	1	B5C0298	03/12/2015	03/12/15 14:32	
Bromomethane	ND	6.5	3.4	1	B5C0298	03/12/2015	03/12/15 14:32	
Carbon disulfide	ND	6.5	3.0	1	B5C0298	03/12/2015	03/12/15 14:32	
Carbon tetrachloride	ND	6.5	2.0	1	B5C0298	03/12/2015	03/12/15 14:32	
Chlorobenzene	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
Chloroethane	ND	6.5	6.4	1	B5C0298	03/12/2015	03/12/15 14:32	
Chloroform	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
Chloromethane	ND	6.5	0.97	1	B5C0298	03/12/2015	03/12/15 14:32	
cis-1,2-Dichloroethene	ND	6.5	1.5	1	B5C0298	03/12/2015	03/12/15 14:32	
cis-1,3-Dichloropropene	ND	6.5	3.0	1	B5C0298	03/12/2015	03/12/15 14:32	
Di-isopropyl ether	ND	6.5	1.3	1	B5C0298	03/12/2015	03/12/15 14:32	
Dibromochloromethane	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
Dibromomethane	ND	6.5	2.6	1	B5C0298	03/12/2015	03/12/15 14:32	
Dichlorodifluoromethane	ND	6.5	0.96	1	B5C0298	03/12/2015	03/12/15 14:32	
Ethyl Acetate	ND	65	17	1	B5C0298	03/12/2015	03/12/15 14:32	
Ethyl Ether	ND	65	16	1	B5C0298	03/12/2015	03/12/15 14:32	

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Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-163-1.5
Lab ID: 1500894-09

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	6.5	1.5	1	B5C0298	03/12/2015	03/12/15 14:32	
Ethylbenzene	ND	6.5	1.5	1	B5C0298	03/12/2015	03/12/15 14:32	
Freon-113	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
Hexachlorobutadiene	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
Isopropylbenzene	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
m,p-Xylene	ND	13	3.2	1	B5C0298	03/12/2015	03/12/15 14:32	
Methylene chloride	ND	6.5	6.5	1	B5C0298	03/12/2015	03/12/15 14:32	
MTBE	ND	6.5	1.2	1	B5C0298	03/12/2015	03/12/15 14:32	
n-Butylbenzene	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
n-Propylbenzene	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
Naphthalene	ND	6.5	4.1	1	B5C0298	03/12/2015	03/12/15 14:32	
ylene	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
-Butylbenzene	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
Styrene	ND	6.5	1.7	1	B5C0298	03/12/2015	03/12/15 14:32	
tert-Amyl methyl ether	ND	6.5	1.3	1	B5C0298	03/12/2015	03/12/15 14:32	
tert-Butanol	ND	130	26	1	B5C0298	03/12/2015	03/12/15 14:32	
tert-Butylbenzene	ND	6.5	1.8	1	B5C0298	03/12/2015	03/12/15 14:32	
Tetrachloroethene	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
Toluene	ND	6.5	1.2	1	B5C0298	03/12/2015	03/12/15 14:32	
trans-1,2-Dichloroethene	ND	6.5	1.9	1	B5C0298	03/12/2015	03/12/15 14:32	
trans-1,3-Dichloropropene	ND	6.5	1.5	1	B5C0298	03/12/2015	03/12/15 14:32	
Trichloroethene	ND	6.5	1.6	1	B5C0298	03/12/2015	03/12/15 14:32	
Trichlorofluoromethane	ND	6.5	2.3	1	B5C0298	03/12/2015	03/12/15 14:32	
Vinyl acetate	ND	65	14	1	B5C0298	03/12/2015	03/12/15 14:32	
Vinyl chloride	ND	6.5	1.3	1	B5C0298	03/12/2015	03/12/15 14:32	
Surrogate: 1,2-Dichloroethane-d4	*118 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 14:32*	
Surrogate: 4-Bromofluorobenzene	*98.9 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 14:32*	
Surrogate: Dibromofluoromethane	*104 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 14:32*	
Surrogate: Toluene-d8	*105 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 14:32*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-162-0
Lab ID: 1500894-10

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.70**	2.0	0.25	1	B5C0406	03/17/2015	03/18/15 10:07	J
Arsenic	**2.7**	1.0	0.19	1	B5C0406	03/17/2015	03/18/15 10:07	
Barium	**73**	1.0	0.14	1	B5C0406	03/17/2015	03/18/15 10:07	
Beryllium	**0.11**	1.0	0.04	1	B5C0406	03/17/2015	03/18/15 10:07	J
Cadmium	**0.70**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:07	J
Chromium	**18**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:07	
Cobalt	**5.8**	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:07	
Copper	**21**	2.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:07	
Lead	**97**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:07	
Molybdenum	**0.50**	1.0	0.05	1	B5C0406	03/17/2015	03/18/15 10:07	J
Nickel	**14**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:07	
Selenium	ND	1.0	0.15	1	B5C0406	03/17/2015	03/18/15 10:07	
Silver	ND	1.0	0.06	1	B5C0406	03/17/2015	03/18/15 10:07	
Thallium	ND	1.0	0.20	1	B5C0406	03/17/2015	03/18/15 10:07	
Vanadium	**31**	1.0	0.07	1	B5C0406	03/17/2015	03/18/15 10:07	
Zinc	**86**	1.0	0.11	1	B5C0406	03/17/2015	03/18/15 10:07	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0308	03/10/2015	03/12/15 17:25	
C4-C8	ND	1.0	0.20	1	B5C0308	03/10/2015	03/12/15 17:25	
Surrogate: 4-Bromofluorobenzene	*100 %*	*37 - 153*			B5C0308	03/10/2015	*03/12/15 17:25*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	12	2.0	2.0	2	B5C0390	03/16/2015	03/17/15 03:51	
C23-C32	70	2.0	2.0	2	B5C0390	03/16/2015	03/17/15 03:51	
Surrogate: p-Terphenyl	*50.9 %*	*26 - 123*			B5C0390	03/16/2015	*03/17/15 03:51*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
1,1,1-Trichloroethane	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
1,1,2,2-Tetrachloroethane	ND	4.7	1.8	1	B5C0298	03/12/2015	03/12/15 14:51	

Certificate of Analysis

ıtec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-162-0
Lab ID: 1500894-10

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
1,1-Dichloroethane	ND	4.7	0.91	1	B5C0298	03/12/2015	03/12/15 14:51	
1,1-Dichloroethene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
1,1-Dichloropropene	ND	4.7	1.4	1	B5C0298	03/12/2015	03/12/15 14:51	
1,2,3-Trichloropropane	ND	4.7	1.7	1	B5C0298	03/12/2015	03/12/15 14:51	
1,2,3-Trichlorobenzene	ND	4.7	2.5	1	B5C0298	03/12/2015	03/12/15 14:51	
1,2,4-Trichlorobenzene	ND	4.7	1.9	1	B5C0298	03/12/2015	03/12/15 14:51	
1,2,4-Trimethylbenzene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
1,2-Dibromo-3-chloropropane	ND	9.3	2.0	1	B5C0298	03/12/2015	03/12/15 14:51	
1,2-Dibromoethane	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
1,2-Dichlorobenzene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
Dichloroethane	ND	4.7	0.81	1	B5C0298	03/12/2015	03/12/15 14:51	
Dichloropropane	ND	4.7	3.2	1	B5C0298	03/12/2015	03/12/15 14:51	
1,3,5-Trimethylbenzene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
1,3-Dichlorobenzene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
1,3-Dichloropropane	ND	4.7	1.0	1	B5C0298	03/12/2015	03/12/15 14:51	
1,4-Dichlorobenzene	ND	4.7	1.7	1	B5C0298	03/12/2015	03/12/15 14:51	
2,2-Dichloropropane	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
2-Chlorotoluene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
4-Chlorotoluene	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
4-Isopropyltoluene	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
Benzene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Bromobenzene	ND	4.7	1.5	1	B5C0298	03/12/2015	03/12/15 14:51	
Bromochloromethane	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
Bromodichloromethane	ND	4.7	1.4	1	B5C0298	03/12/2015	03/12/15 14:51	
Bromoform	ND	4.7	1.4	1	B5C0298	03/12/2015	03/12/15 14:51	
Bromomethane	ND	4.7	2.4	1	B5C0298	03/12/2015	03/12/15 14:51	
Carbon disulfide	ND	4.7	2.2	1	B5C0298	03/12/2015	03/12/15 14:51	
Carbon tetrachloride	ND	4.7	1.4	1	B5C0298	03/12/2015	03/12/15 14:51	
Chlorobenzene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Chloroethane	ND	4.7	4.6	1	B5C0298	03/12/2015	03/12/15 14:51	
Chloroform	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
Chloromethane	ND	4.7	0.69	1	B5C0298	03/12/2015	03/12/15 14:51	
cis-1,2-Dichloroethene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
cis-1,3-Dichloropropene	ND	4.7	2.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Di-isopropyl ether	ND	4.7	0.94	1	B5C0298	03/12/2015	03/12/15 14:51	
Dibromochloromethane	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Dibromomethane	ND	4.7	1.8	1	B5C0298	03/12/2015	03/12/15 14:51	
Dichlorodifluoromethane	ND	4.7	0.69	1	B5C0298	03/12/2015	03/12/15 14:51	
Ethyl Acetate	ND	47	12	1	B5C0298	03/12/2015	03/12/15 14:51	
Ethyl Ether	ND	47	11	1	B5C0298	03/12/2015	03/12/15 14:51	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-162-0
Lab ID: 1500894-10

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Ethylbenzene	ND	4.7	1.0	1	B5C0298	03/12/2015	03/12/15 14:51	
Freon-113	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
Hexachlorobutadiene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
Isopropylbenzene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
m,p-Xylene	ND	9.3	2.3	1	B5C0298	03/12/2015	03/12/15 14:51	
Methylene chloride	ND	4.7	4.7	1	B5C0298	03/12/2015	03/12/15 14:51	
MTBE	ND	4.7	0.84	1	B5C0298	03/12/2015	03/12/15 14:51	
n-Butylbenzene	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
n-Propylbenzene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Naphthalene	ND	4.7	3.0	1	B5C0298	03/12/2015	03/12/15 14:51	
o-Xylene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
sec-Butylbenzene	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
Styrene	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
tert-Amyl methyl ether	ND	4.7	0.95	1	B5C0298	03/12/2015	03/12/15 14:51	
tert-Butanol	ND	93	19	1	B5C0298	03/12/2015	03/12/15 14:51	
tert-Butylbenzene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
Tetrachloroethene	ND	4.7	1.2	1	B5C0298	03/12/2015	03/12/15 14:51	
Toluene	ND	4.7	0.82	1	B5C0298	03/12/2015	03/12/15 14:51	
trans-1,2-Dichloroethene	ND	4.7	1.3	1	B5C0298	03/12/2015	03/12/15 14:51	
trans-1,3-Dichloropropene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Trichloroethene	ND	4.7	1.1	1	B5C0298	03/12/2015	03/12/15 14:51	
Trichlorofluoromethane	ND	4.7	1.7	1	B5C0298	03/12/2015	03/12/15 14:51	
Vinyl acetate	ND	47	9.9	1	B5C0298	03/12/2015	03/12/15 14:51	
Vinyl chloride	ND	4.7	0.95	1	B5C0298	03/12/2015	03/12/15 14:51	
Surrogate: 1,2-Dichloroethane-d4	*119 %*	*20 - 189*			B5C0298	03/12/2015	*03/12/15 14:51*	
Surrogate: 4-Bromofluorobenzene	*95.7 %*	*20 - 173*			B5C0298	03/12/2015	*03/12/15 14:51*	
Surrogate: Dibromofluoromethane	*101 %*	*26 - 178*			B5C0298	03/12/2015	*03/12/15 14:51*	
Surrogate: Toluene-d8	*100 %*	*31 - 166*			B5C0298	03/12/2015	*03/12/15 14:51*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-1-031015
Lab ID: 1500894-11

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0368	03/16/2015	03/17/15 11:38	
Arsenic	ND	0.010	0.0024	1	B5C0368	03/16/2015	03/17/15 11:38	
Barium	**0.0004**	0.0030	0.0004	1	B5C0368	03/16/2015	03/17/15 11:38	J
Beryllium	ND	0.0030	0.0002	1	B5C0368	03/16/2015	03/17/15 11:37	
Cadmium	**0.0003**	0.0030	0.0001	1	B5C0368	03/16/2015	03/17/15 11:38	J
Chromium	**0.0015**	0.0030	0.0003	1	B5C0368	03/16/2015	03/17/15 11:38	J
Cobalt	ND	0.0030	0.0004	1	B5C0368	03/16/2015	03/17/15 11:38	
Copper	**0.0030**	0.0090	0.0009	1	B5C0368	03/16/2015	03/17/15 11:37	J
Lead	ND	0.0050	0.0014	1	B5C0368	03/16/2015	03/17/15 11:38	
Molybdenum	ND	0.0050	0.0005	1	B5C0368	03/16/2015	03/17/15 11:38	
Nickel	**0.0005**	0.0050	0.0004	1	B5C0368	03/16/2015	03/17/15 11:38	J
...nium	ND	0.010	0.0040	1	B5C0368	03/16/2015	03/17/15 11:38	
...ver	ND	0.0030	0.0006	1	B5C0368	03/16/2015	03/17/15 11:37	
Thallium	ND	0.015	0.0026	1	B5C0368	03/16/2015	03/17/15 11:38	
Vanadium	ND	0.0030	0.0013	1	B5C0368	03/16/2015	03/17/15 11:37	
Zinc	**0.032**	0.025	0.0017	1	B5C0368	03/16/2015	03/17/15 11:38	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5C0309	03/12/2015	03/12/15 12:47	
C4-C8	ND	0.05	0.05	1	B5C0309	03/12/2015	03/12/15 12:47	
Surrogate: 4-Bromofluorobenzene	*93.7 %*	*70 - 130*			B5C0309	03/12/2015	*03/12/15 12:47*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5C0340	03/13/2015	03/16/15 16:15	
C23-C32	**0.05**	0.05	0.05	1	B5C0340	03/13/2015	03/16/15 16:15	
Surrogate: p-Terphenyl	*49.3 %*	*20 - 141*			B5C0340	03/13/2015	*03/16/15 16:15*	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0297	03/12/2015	03/12/15 11:22	
...1-Trichloroethane	ND	0.50	0.20	1	B5C0297	03/12/2015	03/12/15 11:22	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0297	03/12/2015	03/12/15 11:22	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5C0297	03/12/2015	03/12/15 11:22	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-1-031015
Lab ID: 1500894-11

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 11:22	
1,1-Dichloroethene	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 11:22	
1,1-Dichloropropene	ND	0.50	0.21	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2-Dibromoethane	ND	0.50	0.24	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2-Dichloroethane	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 11:22	
1,2-Dichloropropane	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 11:22	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 11:22	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5C0297	03/12/2015	03/12/15 11:22	
1,3-Dichloropropane	ND	0.50	0.34	1	B5C0297	03/12/2015	03/12/15 11:22	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5C0297	03/12/2015	03/12/15 11:22	
2,2-Dichloropropane	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 11:22	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5C0297	03/12/2015	03/12/15 11:22	
2-Chlorotoluene	ND	0.50	0.28	1	B5C0297	03/12/2015	03/12/15 11:22	
4-Chlorotoluene	ND	0.50	0.30	1	B5C0297	03/12/2015	03/12/15 11:22	
4-Isopropyltoluene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 11:22	
Benzene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 11:22	
Bromobenzene	ND	0.50	0.32	1	B5C0297	03/12/2015	03/12/15 11:22	
Bromochloromethane	ND	0.50	0.40	1	B5C0297	03/12/2015	03/12/15 11:22	
Bromodichloromethane	ND	0.50	0.20	1	B5C0297	03/12/2015	03/12/15 11:22	
Bromoform	ND	0.50	0.34	1	B5C0297	03/12/2015	03/12/15 11:22	
Bromomethane	ND	0.50	0.49	1	B5C0297	03/12/2015	03/12/15 11:22	
Carbon disulfide	ND	1.0	1.0	1	B5C0297	03/12/2015	03/12/15 11:22	
Carbon tetrachloride	ND	0.50	0.18	1	B5C0297	03/12/2015	03/12/15 11:22	
Chlorobenzene	ND	0.50	0.33	1	B5C0297	03/12/2015	03/12/15 11:22	
Chloroethane	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 11:22	
Chloroform	ND	0.50	0.32	1	B5C0297	03/12/2015	03/12/15 11:22	
Chloromethane	ND	0.50	0.30	1	B5C0297	03/12/2015	03/12/15 11:22	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5C0297	03/12/2015	03/12/15 11:22	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5C0297	03/12/2015	03/12/15 11:22	
Di-isopropyl ether	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 11:22	
Dibromochloromethane	ND	0.50	0.44	1	B5C0297	03/12/2015	03/12/15 11:22	
Dibromomethane	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 11:22	
Dichlorodifluoromethane	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 11:22	
Ethyl Acetate	ND	10	4.0	1	B5C0297	03/12/2015	03/12/15 11:22	
Ethyl Ether	ND	10	2.9	1	B5C0297	03/12/2015	03/12/15 11:22	

Certificate of Analysis

..itec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-1-031015
Lab ID: 1500894-11

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5C0297	03/12/2015	03/12/15 11:22	
Ethylbenzene	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 11:22	
Freon-113	ND	0.50	0.35	1	B5C0297	03/12/2015	03/12/15 11:22	
Hexachlorobutadiene	ND	0.50	0.47	1	B5C0297	03/12/2015	03/12/15 11:22	
Isopropylbenzene	ND	0.50	0.25	1	B5C0297	03/12/2015	03/12/15 11:22	
m,p-Xylene	ND	1.0	0.46	1	B5C0297	03/12/2015	03/12/15 11:22	
Methylene chloride	ND	1.0	1.0	1	B5C0297	03/12/2015	03/12/15 11:22	
MTBE	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 11:22	
n-Butylbenzene	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 11:22	
n-Propylbenzene	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 11:22	
Naphthalene	ND	0.50	0.40	1	B5C0297	03/12/2015	03/12/15 11:22	
..ylene	ND	0.50	0.29	1	B5C0297	03/12/2015	03/12/15 11:22	
..Butylbenzene	ND	0.50	0.36	1	B5C0297	03/12/2015	03/12/15 11:22	
Styrene	ND	0.50	0.29	1	B5C0297	03/12/2015	03/12/15 11:22	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 11:22	
tert-Butanol	ND	10	7.6	1	B5C0297	03/12/2015	03/12/15 11:22	
tert-Butylbenzene	ND	0.50	0.32	1	B5C0297	03/12/2015	03/12/15 11:22	
Tetrachloroethene	ND	0.50	0.28	1	B5C0297	03/12/2015	03/12/15 11:22	
Toluene	ND	0.50	0.21	1	B5C0297	03/12/2015	03/12/15 11:22	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 11:22	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 11:22	
Trichloroethene	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 11:22	
Trichlorofluoromethane	ND	0.50	0.28	1	B5C0297	03/12/2015	03/12/15 11:22	
Vinyl acetate	ND	10	2.6	1	B5C0297	03/12/2015	03/12/15 11:22	
Vinyl chloride	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 11:22	
Surrogate: 1,2-Dichloroethane-d4	*88.2 %*	*49 - 148*			B5C0297	03/12/2015	*03/12/15 11:22*	
Surrogate: 4-Bromofluorobenzene	*79.8 %*	*65 - 132*			B5C0297	03/12/2015	*03/12/15 11:22*	
Surrogate: Dibromofluoromethane	*94.8 %*	*55 - 138*			B5C0297	03/12/2015	*03/12/15 11:22*	
Surrogate: Toluene-d8	*86.8 %*	*60 - 120*			B5C0297	03/12/2015	*03/12/15 11:22*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-168-0
Lab ID: 1500894-12

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.41**	2.0	0.25	1	B5C0407	03/17/2015	03/18/15 10:47	J
Arsenic	**4.3**	1.0	0.19	1	B5C0407	03/17/2015	03/18/15 10:47	
Barium	**70**	1.0	0.14	1	B5C0407	03/17/2015	03/18/15 10:47	
Beryllium	**0.45**	1.0	0.04	1	B5C0407	03/17/2015	03/18/15 10:47	J
Cadmium	**2.0**	1.0	0.11	1	B5C0407	03/17/2015	03/18/15 10:47	
Chromium	**23**	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:47	
Cobalt	**6.3**	1.0	0.15	1	B5C0407	03/17/2015	03/18/15 10:47	
Copper	**23**	2.0	0.05	1	B5C0407	03/17/2015	03/18/15 10:47	
Lead	**68**	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:47	
Molybdenum	**2.8**	1.0	0.05	1	B5C0407	03/17/2015	03/18/15 10:47	
Nickel	**21**	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:47	
Selenium	ND	1.0	0.15	1	B5C0407	03/17/2015	03/18/15 10:47	
Silver	ND	1.0	0.06	1	B5C0407	03/17/2015	03/18/15 10:47	
Thallium	ND	1.0	0.20	1	B5C0407	03/17/2015	03/18/15 10:47	
Vanadium	**40**	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:47	
Zinc	**75**	1.0	0.11	1	B5C0407	03/17/2015	03/18/15 10:47	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0308	03/10/2015	03/12/15 17:41	
C4-C8	ND	1.0	0.20	1	B5C0308	03/10/2015	03/12/15 17:41	
Surrogate: 4-Bromofluorobenzene	*97.4 %*	*37 - 153*			B5C0308	03/10/2015	*03/12/15 17:41*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	3.2	1.0	1.0	1	B5C0391	03/16/2015	03/17/15 00:04	
C23-C32	9.7	1.0	1.0	1	B5C0391	03/16/2015	03/17/15 00:04	
Surrogate: p-Terphenyl	*52.5 %*	*26 - 123*			B5C0391	03/16/2015	*03/17/15 00:04*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
1,1,1-Trichloroethane	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5C0321	03/16/2015	03/16/15 12:04	

Certificate of Analysis

...utec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-168-0
Lab ID: 1500894-12

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
1,1-Dichloroethane	ND	4.4	0.86	1	B5C0321	03/16/2015	03/16/15 12:04	
1,1-Dichloroethene	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 12:04	
1,1-Dichloropropene	ND	4.4	1.4	1	B5C0321	03/16/2015	03/16/15 12:04	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5C0321	03/16/2015	03/16/15 12:04	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5C0321	03/16/2015	03/16/15 12:04	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5C0321	03/16/2015	03/16/15 12:04	
1,2,4-Trimethylbenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
1,2-Dibromo-3-chloropropane	ND	8.8	1.9	1	B5C0321	03/16/2015	03/16/15 12:04	
1,2-Dibromoethane	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 12:04	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 12:04	
...Dichloroethane	ND	4.4	0.77	1	B5C0321	03/16/2015	03/16/15 12:04	
...-Dichloropropane	ND	4.4	3.0	1	B5C0321	03/16/2015	03/16/15 12:04	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
1,3-Dichloropropane	ND	4.4	0.97	1	B5C0321	03/16/2015	03/16/15 12:04	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5C0321	03/16/2015	03/16/15 12:04	
2,2-Dichloropropane	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
2-Chlorotoluene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
4-Chlorotoluene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
4-Isopropyltoluene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
Benzene	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 12:04	
Bromobenzene	ND	4.4	1.4	1	B5C0321	03/16/2015	03/16/15 12:04	
Bromochloromethane	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
Bromodichloromethane	ND	4.4	1.4	1	B5C0321	03/16/2015	03/16/15 12:04	
Bromoform	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 12:04	
Bromomethane	ND	4.4	2.3	1	B5C0321	03/16/2015	03/16/15 12:04	
Carbon disulfide	7.3	4.4	2.0	1	B5C0321	03/16/2015	03/16/15 12:04	
Carbon tetrachloride	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 12:04	
Chlorobenzene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
Chloroethane	ND	4.4	4.4	1	B5C0321	03/16/2015	03/16/15 12:04	
Chloroform	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
Chloromethane	ND	4.4	0.65	1	B5C0321	03/16/2015	03/16/15 12:04	
cis-1,2-Dichloroethene	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 12:04	
cis-1,3-Dichloropropene	ND	4.4	2.0	1	B5C0321	03/16/2015	03/16/15 12:04	
Di-isopropyl ether	ND	4.4	0.89	1	B5C0321	03/16/2015	03/16/15 12:04	
Dibromochloromethane	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
...romomethane	ND	4.4	1.7	1	B5C0321	03/16/2015	03/16/15 12:04	
...lorodifluoromethane	ND	4.4	0.65	1	B5C0321	03/16/2015	03/16/15 12:04	
Ethyl Acetate	ND	44	12	1	B5C0321	03/16/2015	03/16/15 12:04	
Ethyl Ether	ND	44	11	1	B5C0321	03/16/2015	03/16/15 12:04	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-168-0

Lab ID: 1500894-12

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 12:04	
Ethylbenzene	ND	4.4	0.98	1	B5C0321	03/16/2015	03/16/15 12:04	
Freon-113	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
Hexachlorobutadiene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
Isopropylbenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
m,p-Xylene	ND	8.8	2.2	1	B5C0321	03/16/2015	03/16/15 12:04	
Methylene chloride	ND	4.4	4.4	1	B5C0321	03/16/2015	03/16/15 12:04	
MTBE	ND	4.4	0.79	1	B5C0321	03/16/2015	03/16/15 12:04	
n-Butylbenzene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
n-Propylbenzene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
Naphthalene	ND	4.4	2.8	1	B5C0321	03/16/2015	03/16/15 12:04	
o-Xylene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
sec-Butylbenzene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
Styrene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
tert-Amyl methyl ether	ND	4.4	0.90	1	B5C0321	03/16/2015	03/16/15 12:04	
tert-Butanol	ND	88	18	1	B5C0321	03/16/2015	03/16/15 12:04	
tert-Butylbenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 12:04	
Tetrachloroethene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
Toluene	ND	4.4	0.78	1	B5C0321	03/16/2015	03/16/15 12:04	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 12:04	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 12:04	
Trichloroethene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 12:04	
Trichlorofluoromethane	ND	4.4	1.6	1	B5C0321	03/16/2015	03/16/15 12:04	
Vinyl acetate	ND	44	9.4	1	B5C0321	03/16/2015	03/16/15 12:04	
Vinyl chloride	ND	4.4	0.90	1	B5C0321	03/16/2015	03/16/15 12:04	
Surrogate: 1,2-Dichloroethane-d4	*122 %*		*20 - 189*		B5C0321	03/16/2015	*03/16/15 12:04*	
Surrogate: 4-Bromofluorobenzene	*97.2 %*		*20 - 173*		B5C0321	03/16/2015	*03/16/15 12:04*	
Surrogate: Dibromofluoromethane	*116 %*		*26 - 178*		B5C0321	03/16/2015	*03/16/15 12:04*	
Surrogate: Toluene-d8	*99.2 %*		*31 - 166*		B5C0321	03/16/2015	*03/16/15 12:04*	

Certificate of Analysis

...tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-168-1.5
Lab ID: 1500894-13

Title 22 Metals by ICP-AES EPA 6010B — Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	0.25	1	B5C0407	03/17/2015	03/18/15 10:53	
Arsenic	4.7	1.0	0.19	1	B5C0407	03/17/2015	03/18/15 10:53	
Barium	81	1.0	0.14	1	B5C0407	03/17/2015	03/18/15 10:53	
Beryllium	0.20	1.0	0.04	1	B5C0407	03/17/2015	03/18/15 10:53	J
Cadmium	1.1	1.0	0.11	1	B5C0407	03/17/2015	03/18/15 10:53	
Chromium	23	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:53	
Cobalt	6.4	1.0	0.15	1	B5C0407	03/17/2015	03/18/15 10:53	
Copper	23	2.0	0.05	1	B5C0407	03/17/2015	03/18/15 10:53	
Lead	33	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:53	
Molybdenum	1.5	1.0	0.05	1	B5C0407	03/17/2015	03/18/15 10:53	
Nickel	20	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:53	
...nium	ND	1.0	0.15	1	B5C0407	03/17/2015	03/18/15 10:53	
Silver	ND	1.0	0.06	1	B5C0407	03/17/2015	03/18/15 10:53	
Thallium	ND	1.0	0.20	1	B5C0407	03/17/2015	03/18/15 10:53	
Vanadium	38	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:53	
Zinc	58	1.0	0.11	1	B5C0407	03/17/2015	03/18/15 10:53	

Gasoline Range Organics by EPA 8015B (Modified) — Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0325	03/10/2015	03/13/15 11:44	
C4-C8	ND	1.0	0.20	1	B5C0325	03/10/2015	03/13/15 11:44	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*37 - 153*			B5C0325	03/10/2015	*03/13/15 11:44*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	3.4	1.0	1.0	1	B5C0391	03/16/2015	03/17/15 00:20	
C23-C32	12	1.0	1.0	1	B5C0391	03/16/2015	03/17/15 00:20	
Surrogate: p-Terphenyl	*53.2 %*	*26 - 123*			B5C0391	03/16/2015	*03/17/15 00:20*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
...-Trichloroethane	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
1,1,2,2-Tetrachloroethane	ND	5.1	2.0	1	B5C0321	03/16/2015	03/16/15 12:23	
1,1,2-Trichloroethane	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-168-1.5
Lab ID: 1500894-13

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	5.1	0.99	1	B5C0321	03/16/2015	03/16/15 12:23	
1,1-Dichloroethene	ND	5.1	1.1	1	B5C0321	03/16/2015	03/16/15 12:23	
1,1-Dichloropropene	ND	5.1	1.6	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2,3-Trichloropropane	ND	5.1	1.8	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2,3-Trichlorobenzene	ND	5.1	2.7	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2,4-Trichlorobenzene	ND	5.1	2.1	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2,4-Trimethylbenzene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2-Dibromo-3-chloropropane	ND	10	2.2	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2-Dibromoethane	ND	5.1	1.5	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2-Dichlorobenzene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2-Dichloroethane	ND	5.1	0.88	1	B5C0321	03/16/2015	03/16/15 12:23	
1,2-Dichloropropane	ND	5.1	3.4	1	B5C0321	03/16/2015	03/16/15 12:23	
1,3,5-Trimethylbenzene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
1,3-Dichlorobenzene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
1,3-Dichloropropane	ND	5.1	1.1	1	B5C0321	03/16/2015	03/16/15 12:23	
1,4-Dichlorobenzene	ND	5.1	1.8	1	B5C0321	03/16/2015	03/16/15 12:23	
2,2-Dichloropropane	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
2-Chlorotoluene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
4-Chlorotoluene	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
4-Isopropyltoluene	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
Benzene	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
Bromobenzene	ND	5.1	1.7	1	B5C0321	03/16/2015	03/16/15 12:23	
Bromochloromethane	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
Bromodichloromethane	ND	5.1	1.6	1	B5C0321	03/16/2015	03/16/15 12:23	
Bromoform	ND	5.1	1.5	1	B5C0321	03/16/2015	03/16/15 12:23	
Bromomethane	ND	5.1	2.7	1	B5C0321	03/16/2015	03/16/15 12:23	
Carbon disulfide	**4.8**	5.1	2.3	1	B5C0321	03/16/2015	03/16/15 12:23	J
Carbon tetrachloride	ND	5.1	1.5	1	B5C0321	03/16/2015	03/16/15 12:23	
Chlorobenzene	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
Chloroethane	ND	5.1	5.0	1	B5C0321	03/16/2015	03/16/15 12:23	
Chloroform	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
Chloromethane	ND	5.1	0.75	1	B5C0321	03/16/2015	03/16/15 12:23	
cis-1,2-Dichloroethene	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
cis-1,3-Dichloropropene	ND	5.1	2.3	1	B5C0321	03/16/2015	03/16/15 12:23	
Di-isopropyl ether	ND	5.1	1.0	1	B5C0321	03/16/2015	03/16/15 12:23	
Dibromochloromethane	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
Dibromomethane	ND	5.1	2.0	1	B5C0321	03/16/2015	03/16/15 12:23	
Dichlorodifluoromethane	ND	5.1	0.75	1	B5C0321	03/16/2015	03/16/15 12:23	
Ethyl Acetate	ND	51	13	1	B5C0321	03/16/2015	03/16/15 12:23	
Ethyl Ether	ND	51	12	1	B5C0321	03/16/2015	03/16/15 12:23	
Ethyl tert-butyl ether	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	

Certificate of Analysis

..tec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-168-1.5
Lab ID: 1500894-13

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethylbenzene	ND	5.1	1.1	1	B5C0321	03/16/2015	03/16/15 12:23	
Freon-113	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
Hexachlorobutadiene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
Isopropylbenzene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
m,p-Xylene	ND	10	2.5	1	B5C0321	03/16/2015	03/16/15 12:23	
Methylene chloride	ND	5.1	5.1	1	B5C0321	03/16/2015	03/16/15 12:23	
MTBE	ND	5.1	0.91	1	B5C0321	03/16/2015	03/16/15 12:23	
n-Butylbenzene	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
n-Propylbenzene	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
Naphthalene	ND	5.1	3.2	1	B5C0321	03/16/2015	03/16/15 12:23	
o-Xylene	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
Butylbenzene	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
..ene	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
tert-Amyl methyl ether	ND	5.1	1.0	1	B5C0321	03/16/2015	03/16/15 12:23	
tert-Butanol	ND	100	20	1	B5C0321	03/16/2015	03/16/15 12:23	
tert-Butylbenzene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
Tetrachloroethene	ND	5.1	1.3	1	B5C0321	03/16/2015	03/16/15 12:23	
Toluene	ND	5.1	0.89	1	B5C0321	03/16/2015	03/16/15 12:23	
trans-1,2-Dichloroethene	ND	5.1	1.4	1	B5C0321	03/16/2015	03/16/15 12:23	
trans-1,3-Dichloropropene	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
Trichloroethene	ND	5.1	1.2	1	B5C0321	03/16/2015	03/16/15 12:23	
Trichlorofluoromethane	ND	5.1	1.8	1	B5C0321	03/16/2015	03/16/15 12:23	
Vinyl acetate	ND	51	11	1	B5C0321	03/16/2015	03/16/15 12:23	
Vinyl chloride	ND	5.1	1.0	1	B5C0321	03/16/2015	03/16/15 12:23	
Surrogate: 1,2-Dichloroethane-d4	*116 %*	*20 - 189*			B5C0321	03/16/2015	*03/16/15 12:23*	
Surrogate: 4-Bromofluorobenzene	*94.3 %*	*20 - 173*			B5C0321	03/16/2015	*03/16/15 12:23*	
Surrogate: Dibromofluoromethane	*116 %*	*26 - 178*			B5C0321	03/16/2015	*03/16/15 12:23*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5C0321	03/16/2015	*03/16/15 12:23*	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-169-0
Lab ID: 1500894-14

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**0.30**	2.0	0.25	1	B5C0407	03/17/2015	03/18/15 10:55	J
Arsenic	**5.0**	1.0	0.19	1	B5C0407	03/17/2015	03/18/15 10:55	
Barium	**98**	1.0	0.14	1	B5C0407	03/17/2015	03/18/15 10:55	
Beryllium	**0.26**	1.0	0.04	1	B5C0407	03/17/2015	03/18/15 10:55	J
Cadmium	**1.6**	1.0	0.11	1	B5C0407	03/17/2015	03/18/15 10:55	
Chromium	**28**	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:55	
Cobalt	**7.4**	1.0	0.15	1	B5C0407	03/17/2015	03/18/15 10:55	
Copper	**32**	2.0	0.05	1	B5C0407	03/17/2015	03/18/15 10:55	
Lead	270	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:55	
Molybdenum	**2.4**	1.0	0.05	1	B5C0407	03/17/2015	03/18/15 10:55	
Nickel	**25**	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:55	
Selenium	ND	1.0	0.15	1	B5C0407	03/17/2015	03/18/15 10:55	
Silver	ND	1.0	0.06	1	B5C0407	03/17/2015	03/18/15 10:55	
Thallium	ND	1.0	0.20	1	B5C0407	03/17/2015	03/18/15 10:55	
Vanadium	**41**	1.0	0.07	1	B5C0407	03/17/2015	03/18/15 10:55	
Zinc	**150**	1.0	0.11	1	B5C0407	03/17/2015	03/18/15 10:55	

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	0.20	1	B5C0308	03/10/2015	03/12/15 18:12	
C4-C8	ND	1.0	0.20	1	B5C0308	03/10/2015	03/12/15 18:12	
Surrogate: 4-Bromofluorobenzene	*98.6 %*	*37 - 153*			B5C0308	03/10/2015	*03/12/15 18:12*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**14**	4.0	4.0	2	B5C0391	03/16/2015	03/17/15 00:36	
C23-C32	**49**	4.0	4.0	2	B5C0391	03/16/2015	03/17/15 00:36	
Surrogate: p-Terphenyl	*55.0 %*	*26 - 123*			B5C0391	03/16/2015	*03/17/15 00:36*	

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
1,1,1-Trichloroethane	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
1,1,2,2-Tetrachloroethane	ND	6.0	2.3	1	B5C0321	03/16/2015	03/16/15 12:42	

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-169-0
Lab ID: 1500894-14

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
1,1-Dichloroethane	ND	6.0	1.2	1	B5C0321	03/16/2015	03/16/15 12:42	
1,1-Dichloroethene	ND	6.0	1.4	1	B5C0321	03/16/2015	03/16/15 12:42	
1,1-Dichloropropene	ND	6.0	1.8	1	B5C0321	03/16/2015	03/16/15 12:42	
1,2,3-Trichloropropane	ND	6.0	2.2	1	B5C0321	03/16/2015	03/16/15 12:42	
1,2,3-Trichlorobenzene	ND	6.0	3.3	1	B5C0321	03/16/2015	03/16/15 12:42	
1,2,4-Trichlorobenzene	ND	6.0	2.5	1	B5C0321	03/16/2015	03/16/15 12:42	
1,2,4-Trimethylbenzene	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
1,2-Dibromo-3-chloropropane	ND	12	2.6	1	B5C0321	03/16/2015	03/16/15 12:42	
1,2-Dibromoethane	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
1,2-Dichlorobenzene	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
...Dichloroethane	ND	6.0	1.0	1	B5C0321	03/16/2015	03/16/15 12:42	
...-Dichloropropane	ND	6.0	4.1	1	B5C0321	03/16/2015	03/16/15 12:42	
1,3,5-Trimethylbenzene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
1,3-Dichlorobenzene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
1,3-Dichloropropane	ND	6.0	1.3	1	B5C0321	03/16/2015	03/16/15 12:42	
1,4-Dichlorobenzene	ND	6.0	2.1	1	B5C0321	03/16/2015	03/16/15 12:42	
2,2-Dichloropropane	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
2-Chlorotoluene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
4-Chlorotoluene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
4-Isopropyltoluene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
Benzene	ND	6.0	1.4	1	B5C0321	03/16/2015	03/16/15 12:42	
Bromobenzene	ND	6.0	2.0	1	B5C0321	03/16/2015	03/16/15 12:42	
Bromochloromethane	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
Bromodichloromethane	ND	6.0	1.9	1	B5C0321	03/16/2015	03/16/15 12:42	
Bromoform	ND	6.0	1.8	1	B5C0321	03/16/2015	03/16/15 12:42	
Bromomethane	ND	6.0	3.2	1	B5C0321	03/16/2015	03/16/15 12:42	
Carbon disulfide	**7.8**	6.0	2.8	1	B5C0321	03/16/2015	03/16/15 12:42	
Carbon tetrachloride	ND	6.0	1.8	1	B5C0321	03/16/2015	03/16/15 12:42	
Chlorobenzene	ND	6.0	1.4	1	B5C0321	03/16/2015	03/16/15 12:42	
Chloroethane	ND	6.0	5.9	1	B5C0321	03/16/2015	03/16/15 12:42	
Chloroform	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
Chloromethane	ND	6.0	0.89	1	B5C0321	03/16/2015	03/16/15 12:42	
cis-1,2-Dichloroethene	ND	6.0	1.4	1	B5C0321	03/16/2015	03/16/15 12:42	
cis-1,3-Dichloropropene	ND	6.0	2.8	1	B5C0321	03/16/2015	03/16/15 12:42	
Di-isopropyl ether	ND	6.0	1.2	1	B5C0321	03/16/2015	03/16/15 12:42	
Dibromochloromethane	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
...romomethane	ND	6.0	2.4	1	B5C0321	03/16/2015	03/16/15 12:42	
...lorodifluoromethane	ND	6.0	0.89	1	B5C0321	03/16/2015	03/16/15 12:42	
Ethyl Acetate	ND	60	16	1	B5C0321	03/16/2015	03/16/15 12:42	
Ethyl Ether	ND	60	14	1	B5C0321	03/16/2015	03/16/15 12:42	

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Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-169-0
Lab ID: 1500894-14

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	6.0	1.4	1	B5C0321	03/16/2015	03/16/15 12:42	
Ethylbenzene	ND	6.0	1.3	1	B5C0321	03/16/2015	03/16/15 12:42	
Freon-113	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
Hexachlorobutadiene	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
Isopropylbenzene	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
m,p-Xylene	ND	12	3.0	1	B5C0321	03/16/2015	03/16/15 12:42	
Methylene chloride	ND	6.0	6.0	1	B5C0321	03/16/2015	03/16/15 12:42	
MTBE	ND	6.0	1.1	1	B5C0321	03/16/2015	03/16/15 12:42	
n-Butylbenzene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
n-Propylbenzene	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
Naphthalene	ND	6.0	3.8	1	B5C0321	03/16/2015	03/16/15 12:42	
o-Xylene	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
sec-Butylbenzene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
Styrene	ND	6.0	1.6	1	B5C0321	03/16/2015	03/16/15 12:42	
tert-Amyl methyl ether	ND	6.0	1.2	1	B5C0321	03/16/2015	03/16/15 12:42	
tert-Butanol	ND	120	24	1	B5C0321	03/16/2015	03/16/15 12:42	
tert-Butylbenzene	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
Tetrachloroethene	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
Toluene	ND	6.0	1.1	1	B5C0321	03/16/2015	03/16/15 12:42	
trans-1,2-Dichloroethene	ND	6.0	1.7	1	B5C0321	03/16/2015	03/16/15 12:42	
trans-1,3-Dichloropropene	ND	6.0	1.4	1	B5C0321	03/16/2015	03/16/15 12:42	
Trichloroethene	ND	6.0	1.5	1	B5C0321	03/16/2015	03/16/15 12:42	
Trichlorofluoromethane	ND	6.0	2.2	1	B5C0321	03/16/2015	03/16/15 12:42	
Vinyl acetate	ND	60	13	1	B5C0321	03/16/2015	03/16/15 12:42	
Vinyl chloride	ND	6.0	1.2	1	B5C0321	03/16/2015	03/16/15 12:42	
Surrogate: 1,2-Dichloroethane-d4	*123 %*	*20 - 189*			B5C0321	03/16/2015	*03/16/15 12:42*	
Surrogate: 4-Bromofluorobenzene	*96.8 %*	*20 - 173*			B5C0321	03/16/2015	*03/16/15 12:42*	
Surrogate: Dibromofluoromethane	*117 %*	*26 - 178*			B5C0321	03/16/2015	*03/16/15 12:42*	
Surrogate: Toluene-d8	*107 %*	*31 - 166*			B5C0321	03/16/2015	*03/16/15 12:42*	

Certificate of Analysis

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290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-169-1.5
Lab ID: 1500894-15

Title 22 Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	**1.2**	**2.0**	**0.25**	1	B5C0407	03/17/2015	03/18/15 10:56	J
Arsenic	**3.5**	**1.0**	**0.19**	1	B5C0407	03/17/2015	03/18/15 10:56	
Barium	**57**	**1.0**	**0.14**	1	B5C0407	03/17/2015	03/18/15 10:56	
Beryllium	**0.30**	**1.0**	**0.04**	1	B5C0407	03/17/2015	03/18/15 10:56	J
Cadmium	**2.2**	**1.0**	**0.11**	1	B5C0407	03/17/2015	03/18/15 10:56	
Chromium	**28**	**1.0**	**0.07**	1	B5C0407	03/17/2015	03/18/15 10:56	
Cobalt	**8.8**	**1.0**	**0.15**	1	B5C0407	03/17/2015	03/18/15 10:56	
Copper	**29**	**2.0**	**0.05**	1	B5C0407	03/17/2015	03/18/15 10:56	
Lead	**9.0**	**1.0**	**0.07**	1	B5C0407	03/17/2015	03/18/15 10:56	
Molybdenum	**4.7**	**1.0**	**0.05**	1	B5C0407	03/17/2015	03/18/15 10:56	
...ckel	**34**	**1.0**	**0.07**	1	B5C0407	03/17/2015	03/18/15 10:56	
...nium	ND	1.0	0.15	1	B5C0407	03/17/2015	03/18/15 10:56	
Silver	ND	1.0	0.06	1	B5C0407	03/17/2015	03/18/15 10:56	
Thallium	ND	1.0	0.20	1	B5C0407	03/17/2015	03/18/15 10:56	
Vanadium	**46**	**1.0**	**0.07**	1	B5C0407	03/17/2015	03/18/15 10:56	
Zinc	**62**	**1.0**	**0.11**	1	B5C0407	03/17/2015	03/18/15 10:56	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: BT/

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	**1.0**	**0.20**	1	B5C0308	03/10/2015	03/12/15 17:09	
C4-C8	ND	**1.0**	**0.20**	1	B5C0308	03/10/2015	03/12/15 17:09	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*37 - 153*			B5C0308	03/10/2015	*03/12/15 17:09*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified)

Analyst: CR

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	**2.3**	**1.0**	**1.0**	1	B5C0391	03/16/2015	03/16/15 23:47	
C23-C32	**6.9**	**1.0**	**1.0**	1	B5C0391	03/16/2015	03/16/15 23:47	
Surrogate: p-Terphenyl	*56.5 %*	*26 - 123*			B5C0391	03/16/2015	*03/16/15 23:47*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: AG

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
...1,2-Tetrachloroethane	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
...,1-Trichloroethane	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
1,1,2,2-Tetrachloroethane	ND	4.6	1.8	1	B5C0321	03/16/2015	03/16/15 13:00	

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Client Sample ID 1278-169-1.5
Lab ID: 1500894-15

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,2-Trichloroethane	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
1,1-Dichloroethane	ND	4.6	0.91	1	B5C0321	03/16/2015	03/16/15 13:00	
1,1-Dichloroethene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
1,1-Dichloropropene	ND	4.6	1.4	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2,3-Trichloropropane	ND	4.6	1.7	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2,3-Trichlorobenzene	ND	4.6	2.5	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2,4-Trichlorobenzene	ND	4.6	1.9	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2,4-Trimethylbenzene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2-Dibromo-3-chloropropane	ND	9.3	2.0	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2-Dibromoethane	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2-Dichlorobenzene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2-Dichloroethane	ND	4.6	0.81	1	B5C0321	03/16/2015	03/16/15 13:00	
1,2-Dichloropropane	ND	4.6	3.2	1	B5C0321	03/16/2015	03/16/15 13:00	
1,3,5-Trimethylbenzene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
1,3-Dichlorobenzene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
1,3-Dichloropropane	ND	4.6	1.0	1	B5C0321	03/16/2015	03/16/15 13:00	
1,4-Dichlorobenzene	ND	4.6	1.6	1	B5C0321	03/16/2015	03/16/15 13:00	
2,2-Dichloropropane	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
2-Chlorotoluene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
4-Chlorotoluene	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
4-Isopropyltoluene	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
Benzene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Bromobenzene	ND	4.6	1.5	1	B5C0321	03/16/2015	03/16/15 13:00	
Bromochloromethane	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
Bromodichloromethane	ND	4.6	1.4	1	B5C0321	03/16/2015	03/16/15 13:00	
Bromoform	ND	4.6	1.4	1	B5C0321	03/16/2015	03/16/15 13:00	
Bromomethane	ND	4.6	2.4	1	B5C0321	03/16/2015	03/16/15 13:00	
Carbon disulfide	2.3	4.6	2.1	1	B5C0321	03/16/2015	03/16/15 13:00	J
Carbon tetrachloride	ND	4.6	1.4	1	B5C0321	03/16/2015	03/16/15 13:00	
Chlorobenzene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Chloroethane	ND	4.6	4.6	1	B5C0321	03/16/2015	03/16/15 13:00	
Chloroform	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
Chloromethane	ND	4.6	0.69	1	B5C0321	03/16/2015	03/16/15 13:00	
cis-1,2-Dichloroethene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
cis-1,3-Dichloropropene	ND	4.6	2.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Di-isopropyl ether	ND	4.6	0.94	1	B5C0321	03/16/2015	03/16/15 13:00	
Dibromochloromethane	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Dibromomethane	ND	4.6	1.8	1	B5C0321	03/16/2015	03/16/15 13:00	
Dichlorodifluoromethane	ND	4.6	0.69	1	B5C0321	03/16/2015	03/16/15 13:00	
Ethyl Acetate	ND	46	12	1	B5C0321	03/16/2015	03/16/15 13:00	
Ethyl Ether	ND	46	11	1	B5C0321	03/16/2015	03/16/15 13:00	

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Client Sample ID 1278-169-1.5
Lab ID: 1500894-15

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Ethylbenzene	ND	4.6	1.0	1	B5C0321	03/16/2015	03/16/15 13:00	
Freon-113	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
Hexachlorobutadiene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
Isopropylbenzene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
m,p-Xylene	ND	9.3	2.3	1	B5C0321	03/16/2015	03/16/15 13:00	
Methylene chloride	ND	4.6	4.6	1	B5C0321	03/16/2015	03/16/15 13:00	
MTBE	ND	4.6	0.84	1	B5C0321	03/16/2015	03/16/15 13:00	
n-Butylbenzene	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
n-Propylbenzene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Naphthalene	ND	4.6	2.9	1	B5C0321	03/16/2015	03/16/15 13:00	
..ylene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
..-Butylbenzene	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
Styrene	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
tert-Amyl methyl ether	ND	4.6	0.95	1	B5C0321	03/16/2015	03/16/15 13:00	
tert-Butanol	ND	93	19	1	B5C0321	03/16/2015	03/16/15 13:00	
tert-Butylbenzene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
Tetrachloroethene	ND	4.6	1.2	1	B5C0321	03/16/2015	03/16/15 13:00	
Toluene	ND	4.6	0.82	1	B5C0321	03/16/2015	03/16/15 13:00	
trans-1,2-Dichloroethene	ND	4.6	1.3	1	B5C0321	03/16/2015	03/16/15 13:00	
trans-1,3-Dichloropropene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Trichloroethene	ND	4.6	1.1	1	B5C0321	03/16/2015	03/16/15 13:00	
Trichlorofluoromethane	ND	4.6	1.7	1	B5C0321	03/16/2015	03/16/15 13:00	
Vinyl acetate	ND	46	9.9	1	B5C0321	03/16/2015	03/16/15 13:00	
Vinyl chloride	ND	4.6	0.95	1	B5C0321	03/16/2015	03/16/15 13:00	
Surrogate: 1,2-Dichloroethane-d4	*121 %*	*20 - 189*			B5C0321	03/16/2015	*03/16/15 13:00*	
Surrogate: 4-Bromofluorobenzene	*92.9 %*	*20 - 173*			B5C0321	03/16/2015	*03/16/15 13:00*	
Surrogate: Dibromofluoromethane	*118 %*	*26 - 178*			B5C0321	03/16/2015	*03/16/15 13:00*	
Surrogate: Toluene-d8	*103 %*	*31 - 166*			B5C0321	03/16/2015	*03/16/15 13:00*	

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Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-2-031015
Lab ID: 1500894-17

Title 22 Metals by ICP-AES EPA 6010B — **Analyst: RR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	0.010	0.0026	1	B5C0368	03/16/2015	03/17/15 11:52	
Arsenic	ND	0.010	0.0024	1	B5C0368	03/16/2015	03/17/15 11:52	
Barium	ND	0.0030	0.0004	1	B5C0368	03/16/2015	03/17/15 11:52	
Beryllium	**0.0002**	0.0030	0.0002	1	B5C0368	03/16/2015	03/17/15 11:51	J
Cadmium	ND	0.0030	0.0001	1	B5C0368	03/16/2015	03/17/15 11:52	
Chromium	**0.0012**	0.0030	0.0003	1	B5C0368	03/16/2015	03/17/15 11:52	J
Cobalt	ND	0.0030	0.0004	1	B5C0368	03/16/2015	03/17/15 11:52	
Copper	**0.0031**	0.0090	0.0009	1	B5C0368	03/16/2015	03/17/15 11:52	J
Lead	ND	0.0050	0.0014	1	B5C0368	03/16/2015	03/17/15 11:52	
Molybdenum	ND	0.0050	0.0005	1	B5C0368	03/16/2015	03/17/15 11:52	
Nickel	ND	0.0050	0.0004	1	B5C0368	03/16/2015	03/17/15 11:52	
Selenium	ND	0.010	0.0040	1	B5C0368	03/16/2015	03/17/15 11:52	
Silver	**0.0008**	0.0030	0.0006	1	B5C0368	03/16/2015	03/17/15 11:52	J
Thallium	ND	0.015	0.0026	1	B5C0368	03/16/2015	03/17/15 11:52	
Vanadium	ND	0.0030	0.0013	1	B5C0368	03/16/2015	03/17/15 11:52	
Zinc	**0.0093**	0.025	0.0017	1	B5C0368	03/16/2015	03/17/15 11:52	J

Gasoline Range Organics by EPA 8015B (Modified) — **Analyst: BT/**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	0.05	1	B5C0309	03/12/2015	03/12/15 12:27	
C4-C8	ND	0.05	0.05	1	B5C0309	03/12/2015	03/12/15 12:27	
Surrogate: 4-Bromofluorobenzene	*94.6 %*	*70 - 130*			B5C0309	03/12/2015	*03/12/15 12:27*	

Hydrocarbon Chain Distribution by EPA 8015B (Modified) — **Analyst: CR**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
C9-C22	ND	0.05	0.05	1	B5C0340	03/13/2015	03/16/15 15:58	
C23-C32	ND	0.05	0.05	1	B5C0340	03/13/2015	03/16/15 15:58	
Surrogate: p-Terphenyl	*45.3 %*	*20 - 141*			B5C0340	03/13/2015	*03/16/15 15:58*	

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0297	03/12/2015	03/12/15 12:11	
1,1,1-Trichloroethane	ND	0.50	0.20	1	B5C0297	03/12/2015	03/12/15 12:11	
1,1,2,2-Tetrachloroethane	ND	0.50	0.38	1	B5C0297	03/12/2015	03/12/15 12:11	
1,1,2-Trichloroethane	ND	0.50	0.38	1	B5C0297	03/12/2015	03/12/15 12:11	

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Reported : 03/20/2015

Client Sample ID EB-2-031015
Lab ID: 1500894-17

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1-Dichloroethane	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 12:11	
1,1-Dichloroethene	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 12:11	
1,1-Dichloropropene	ND	0.50	0.21	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2,3-Trichlorobenzene	ND	0.50	0.47	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2,4-Trichlorobenzene	ND	0.50	0.44	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2,4-Trimethylbenzene	ND	0.50	0.24	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2-Dibromoethane	ND	0.50	0.24	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2-Dichlorobenzene	ND	0.50	0.35	1	B5C0297	03/12/2015	03/12/15 12:11	
1,2-Dichloroethane	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 12:11	
...Dichloropropane	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 12:11	
...,5-Trimethylbenzene	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 12:11	
1,3-Dichlorobenzene	ND	0.50	0.39	1	B5C0297	03/12/2015	03/12/15 12:11	
1,3-Dichloropropane	ND	0.50	0.34	1	B5C0297	03/12/2015	03/12/15 12:11	
1,4-Dichlorobenzene	ND	0.50	0.42	1	B5C0297	03/12/2015	03/12/15 12:11	
2,2-Dichloropropane	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 12:11	
2-Chloroethyl vinyl ether	ND	0.50	0.39	1	B5C0297	03/12/2015	03/12/15 12:11	
2-Chlorotoluene	ND	0.50	0.28	1	B5C0297	03/12/2015	03/12/15 12:11	
4-Chlorotoluene	ND	0.50	0.30	1	B5C0297	03/12/2015	03/12/15 12:11	
4-Isopropyltoluene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 12:11	
Benzene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 12:11	
Bromobenzene	ND	0.50	0.32	1	B5C0297	03/12/2015	03/12/15 12:11	
Bromochloromethane	ND	0.50	0.40	1	B5C0297	03/12/2015	03/12/15 12:11	
Bromodichloromethane	ND	0.50	0.20	1	B5C0297	03/12/2015	03/12/15 12:11	
Bromoform	ND	0.50	0.34	1	B5C0297	03/12/2015	03/12/15 12:11	
Bromomethane	ND	0.50	0.49	1	B5C0297	03/12/2015	03/12/15 12:11	
Carbon disulfide	ND	1.0	1.0	1	B5C0297	03/12/2015	03/12/15 12:11	
Carbon tetrachloride	ND	0.50	0.18	1	B5C0297	03/12/2015	03/12/15 12:11	
Chlorobenzene	ND	0.50	0.33	1	B5C0297	03/12/2015	03/12/15 12:11	
Chloroethane	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 12:11	
Chloroform	ND	0.50	0.32	1	B5C0297	03/12/2015	03/12/15 12:11	
Chloromethane	ND	0.50	0.30	1	B5C0297	03/12/2015	03/12/15 12:11	
cis-1,2-Dichloroethene	ND	0.50	0.25	1	B5C0297	03/12/2015	03/12/15 12:11	
cis-1,3-Dichloropropene	ND	0.50	0.30	1	B5C0297	03/12/2015	03/12/15 12:11	
Di-isopropyl ether	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 12:11	
Dibromochloromethane	ND	0.50	0.44	1	B5C0297	03/12/2015	03/12/15 12:11	
...romomethane	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 12:11	
...lorodifluoromethane	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 12:11	
Ethyl Acetate	ND	10	4.0	1	B5C0297	03/12/2015	03/12/15 12:11	
Ethyl Ether	ND	10	2.9	1	B5C0297	03/12/2015	03/12/15 12:11	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID EB-2-031015
Lab ID: 1500894-17

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ethyl tert-butyl ether	ND	0.50	0.24	1	B5C0297	03/12/2015	03/12/15 12:11	
Ethylbenzene	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 12:11	
Freon-113	ND	0.50	0.35	1	B5C0297	03/12/2015	03/12/15 12:11	
Hexachlorobutadiene	ND	0.50	0.47	1	B5C0297	03/12/2015	03/12/15 12:11	
Isopropylbenzene	ND	0.50	0.25	1	B5C0297	03/12/2015	03/12/15 12:11	
m,p-Xylene	ND	1.0	0.46	1	B5C0297	03/12/2015	03/12/15 12:11	
Methylene chloride	ND	1.0	1.0	1	B5C0297	03/12/2015	03/12/15 12:11	
MTBE	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 12:11	
n-Butylbenzene	ND	0.50	0.27	1	B5C0297	03/12/2015	03/12/15 12:11	
n-Propylbenzene	ND	0.50	0.26	1	B5C0297	03/12/2015	03/12/15 12:11	
Naphthalene	ND	0.50	0.40	1	B5C0297	03/12/2015	03/12/15 12:11	
o-Xylene	ND	0.50	0.29	1	B5C0297	03/12/2015	03/12/15 12:11	
sec-Butylbenzene	ND	0.50	0.36	1	B5C0297	03/12/2015	03/12/15 12:11	
Styrene	ND	0.50	0.29	1	B5C0297	03/12/2015	03/12/15 12:11	
tert-Amyl methyl ether	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 12:11	
tert-Butanol	ND	10	7.6	1	B5C0297	03/12/2015	03/12/15 12:11	
tert-Butylbenzene	ND	0.50	0.32	1	B5C0297	03/12/2015	03/12/15 12:11	
Tetrachloroethene	ND	0.50	0.28	1	B5C0297	03/12/2015	03/12/15 12:11	
Toluene	ND	0.50	0.21	1	B5C0297	03/12/2015	03/12/15 12:11	
trans-1,2-Dichloroethene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 12:11	
trans-1,3-Dichloropropene	ND	0.50	0.22	1	B5C0297	03/12/2015	03/12/15 12:11	
Trichloroethene	ND	0.50	0.31	1	B5C0297	03/12/2015	03/12/15 12:11	
Trichlorofluoromethane	ND	0.50	0.28	1	B5C0297	03/12/2015	03/12/15 12:11	
Vinyl acetate	ND	10	2.6	1	B5C0297	03/12/2015	03/12/15 12:11	
Vinyl chloride	ND	0.50	0.23	1	B5C0297	03/12/2015	03/12/15 12:11	
Surrogate: 1,2-Dichloroethane-d4	*89.2 %*	*49 - 148*			B5C0297	03/12/2015	*03/12/15 12:11*	
Surrogate: 4-Bromofluorobenzene	*79.5 %*	*65 - 132*			B5C0297	03/12/2015	*03/12/15 12:11*	
Surrogate: Dibromofluoromethane	*94.8 %*	*55 - 138*			B5C0297	03/12/2015	*03/12/15 12:11*	
Surrogate: Toluene-d8	*87.8 %*	*60 - 120*			B5C0297	03/12/2015	*03/12/15 12:11*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Client Sample ID 1278-134-0
Lab ID: 1500894-18

Volatile Organic Compounds by EPA 5035/EPA 8260B — **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
1,1,1-Trichloroethane	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
1,1,2,2-Tetrachloroethane	ND	4.4	1.7	1	B5C0321	03/16/2015	03/16/15 13:19	
1,1,2-Trichloroethane	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
1,1-Dichloroethane	ND	4.4	0.87	1	B5C0321	03/16/2015	03/16/15 13:19	
1,1-Dichloroethene	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 13:19	
1,1-Dichloropropene	ND	4.4	1.4	1	B5C0321	03/16/2015	03/16/15 13:19	
1,2,3-Trichloropropane	ND	4.4	1.6	1	B5C0321	03/16/2015	03/16/15 13:19	
1,2,3-Trichlorobenzene	ND	4.4	2.4	1	B5C0321	03/16/2015	03/16/15 13:19	
1,2,4-Trichlorobenzene	ND	4.4	1.8	1	B5C0321	03/16/2015	03/16/15 13:19	
1,2,4-Trimethylbenzene	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
...Dibromo-3-chloropropane	ND	8.9	1.9	1	B5C0321	03/16/2015	03/16/15 13:19	
...Dibromoethane	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
1,2-Dichlorobenzene	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
1,2-Dichloroethane	ND	4.4	0.77	1	B5C0321	03/16/2015	03/16/15 13:19	
1,2-Dichloropropane	ND	4.4	3.0	1	B5C0321	03/16/2015	03/16/15 13:19	
1,3,5-Trimethylbenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
1,3-Dichlorobenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
1,3-Dichloropropane	ND	4.4	0.98	1	B5C0321	03/16/2015	03/16/15 13:19	
1,4-Dichlorobenzene	ND	4.4	1.6	1	B5C0321	03/16/2015	03/16/15 13:19	
2,2-Dichloropropane	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
2-Chlorotoluene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
4-Chlorotoluene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
4-Isopropyltoluene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
Benzene	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 13:19	
Bromobenzene	ND	4.4	1.5	1	B5C0321	03/16/2015	03/16/15 13:19	
Bromochloromethane	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
Bromodichloromethane	ND	4.4	1.4	1	B5C0321	03/16/2015	03/16/15 13:19	
Bromoform	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
Bromomethane	ND	4.4	2.3	1	B5C0321	03/16/2015	03/16/15 13:19	
Carbon disulfide	ND	4.4	2.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Carbon tetrachloride	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
Chlorobenzene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Chloroethane	ND	4.4	4.4	1	B5C0321	03/16/2015	03/16/15 13:19	
Chloroform	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
Chloromethane	ND	4.4	0.66	1	B5C0321	03/16/2015	03/16/15 13:19	
cis-1,2-Dichloroethene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
...1,3-Dichloropropene	ND	4.4	2.0	1	B5C0321	03/16/2015	03/16/15 13:19	
...opropyl ether	ND	4.4	0.90	1	B5C0321	03/16/2015	03/16/15 13:19	
Dibromochloromethane	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Dibromomethane	ND	4.4	1.8	1	B5C0321	03/16/2015	03/16/15 13:19	

Certificate of Analysis

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Client Sample ID 1278-134-0
Lab ID: 1500894-18

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: AG**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dichlorodifluoromethane	ND	4.4	0.66	1	B5C0321	03/16/2015	03/16/15 13:19	
Ethyl Acetate	ND	44	12	1	B5C0321	03/16/2015	03/16/15 13:19	
Ethyl Ether	ND	44	11	1	B5C0321	03/16/2015	03/16/15 13:19	
Ethyl tert-butyl ether	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 13:19	
Ethylbenzene	ND	4.4	0.99	1	B5C0321	03/16/2015	03/16/15 13:19	
Freon-113	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Hexachlorobutadiene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
Isopropylbenzene	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
m,p-Xylene	ND	8.9	2.2	1	B5C0321	03/16/2015	03/16/15 13:19	
Methylene chloride	ND	4.4	4.4	1	B5C0321	03/16/2015	03/16/15 13:19	
MTBE	ND	4.4	0.80	1	B5C0321	03/16/2015	03/16/15 13:19	
n-Butylbenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
n-Propylbenzene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Naphthalene	ND	4.4	2.8	1	B5C0321	03/16/2015	03/16/15 13:19	
o-Xylene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
sec-Butylbenzene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Styrene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
tert-Amyl methyl ether	ND	4.4	0.91	1	B5C0321	03/16/2015	03/16/15 13:19	
tert-Butanol	ND	89	18	1	B5C0321	03/16/2015	03/16/15 13:19	
tert-Butylbenzene	ND	4.4	1.2	1	B5C0321	03/16/2015	03/16/15 13:19	
Tetrachloroethene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Toluene	ND	4.4	0.79	1	B5C0321	03/16/2015	03/16/15 13:19	
trans-1,2-Dichloroethene	ND	4.4	1.3	1	B5C0321	03/16/2015	03/16/15 13:19	
trans-1,3-Dichloropropene	ND	4.4	1.0	1	B5C0321	03/16/2015	03/16/15 13:19	
Trichloroethene	ND	4.4	1.1	1	B5C0321	03/16/2015	03/16/15 13:19	
Trichlorofluoromethane	ND	4.4	1.6	1	B5C0321	03/16/2015	03/16/15 13:19	
Vinyl acetate	ND	44	9.5	1	B5C0321	03/16/2015	03/16/15 13:19	
Vinyl chloride	ND	4.4	0.91	1	B5C0321	03/16/2015	03/16/15 13:19	
Surrogate: 1,2-Dichloroethane-d4	*126 %*		*20 - 189*		B5C0321	03/16/2015	*03/16/15 13:19*	
Surrogate: 4-Bromofluorobenzene	*95.4 %*		*20 - 173*		B5C0321	03/16/2015	*03/16/15 13:19*	
Surrogate: Dibromofluoromethane	*117 %*		*26 - 178*		B5C0321	03/16/2015	*03/16/15 13:19*	
Surrogate: Toluene-d8	*104 %*		*31 - 166*		B5C0321	03/16/2015	*03/16/15 13:19*	

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0368 - EPA 3010A_W									
Blank (B5C0368-BLK1)					Prepared: 3/16/2015 Analyzed: 3/17/2015				
Antimony	ND	0.010			NR				
Arsenic	ND	0.010			NR				
Barium	ND	0.0030			NR				
Beryllium	ND	0.0030			NR				
Cadmium	ND	0.0030			NR				
Chromium	0.000923	0.0030			NR				J
Cobalt	ND	0.0030			NR				
Copper	2.8607E-3	0.0090			NR				J
Lead	ND	0.0050			NR				
Molybdenum	ND	0.0050			NR				
Nickel	ND	0.0050			NR				
[illegible]nium	ND	0.010			NR				
[illegible]	ND	0.0030			NR				
Thallium	ND	0.015			NR				
Vanadium	ND	0.0030			NR				
Zinc	0.008850	0.025			NR				J
LCS (B5C0368-BS1)					Prepared: 3/16/2015 Analyzed: 3/17/2015				
Antimony	0.968150	0.010	1.00000		96.8	80 - 120			
Arsenic	0.911408	0.010	1.00000		91.1	80 - 120			
Barium	1.02192	0.0030	1.00000		102	80 - 120			
Beryllium	1.03566	0.0030	1.00000		104	80 - 120			
Cadmium	0.986213	0.0030	1.00000		98.6	80 - 120			
Chromium	1.01430	0.0030	1.00000		101	80 - 120			
Cobalt	1.00877	0.0030	1.00000		101	80 - 120			
Copper	0.996769	0.0090	1.00000		99.7	80 - 120			
Lead	1.01467	0.0050	1.00000		101	80 - 120			
Molybdenum	0.984747	0.0050	1.00000		98.5	80 - 120			
Nickel	0.989416	0.0050	1.00000		98.9	80 - 120			
Selenium	0.970659	0.010	1.00000		97.1	80 - 120			
Silver	1.01198	0.0030	1.00000		101	80 - 120			
Thallium	0.977436	0.015	1.00000		97.7	80 - 120			
Vanadium	1.03980	0.0030	1.00000		104	80 - 120			
Zinc	0.975540	0.025	1.00000		97.6	80 - 120			
Duplicate (B5C0368-DUP1)		Source: 1500894-11			Prepared: 3/16/2015 Analyzed: 3/17/2015				
Antimony	ND	0.010		ND	NR			20	
Arsenic	ND	0.010		ND	NR			20	
Barium	ND	0.0030		0.000439	NR			20	
Beryllium	ND	0.0030		ND	NR			20	
[illegible]um	ND	0.0030		0.000299	NR			20	
[illegible]nium	0.001101	0.0030		0.001451	NR		27.4	20	R, J
Cobalt	ND	0.0030		ND	NR			20	

Stantec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
290 Conejo Ridge Avenue, Suite 200	Report To : Anne Perez/Kristy Edblad
Thousand Oaks , CA 91361	Reported : 03/20/2015

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0368 - EPA 3010A_W (continued)									
Duplicate (B5C0368-DUP1) - Continued		**Source: 1500894-11**			Prepared: 3/16/2015 Analyzed: 3/17/2015				
Copper	0.002143	0.0090		0.002953	NR		31.8	20	R, J
Lead	ND	0.0050		ND	NR			20	
Molybdenum	ND	0.0050		ND	NR			20	
Nickel	ND	0.0050		4.748E-4	NR			20	
Selenium	ND	0.010		ND	NR			20	
Silver	ND	0.0030		ND	NR			20	
Thallium	ND	0.015		ND	NR			20	
Vanadium	ND	0.0030		ND	NR			20	
Zinc	0.008265	0.025		0.032381	NR		119	20	R, J
Matrix Spike (B5C0368-MS1)		**Source: 1500894-11**			Prepared: 3/16/2015 Analyzed: 3/17/2015				
Antimony	2.46812	0.010	2.50000	ND	98.7	71 - 129			
Arsenic	2.31041	0.010	2.50000	ND	92.4	80 - 128			
Barium	2.55046	0.0030	2.50000	0.000439	102	77 - 124			
Beryllium	2.58897	0.0030	2.50000	ND	104	88 - 116			
Cadmium	2.46617	0.0030	2.50000	0.000299	98.6	83 - 116			
Chromium	2.54151	0.0030	2.50000	0.001451	102	86 - 116			
Cobalt	2.51025	0.0030	2.50000	ND	100	83 - 117			
Copper	2.55549	0.0090	2.50000	0.002953	102	87 - 121			
Lead	2.47328	0.0050	2.50000	ND	98.9	85 - 114			
Molybdenum	2.51213	0.0050	2.50000	ND	100	81 - 117			
Nickel	2.49640	0.0050	2.50000	4.748E-4	99.8	76 - 121			
Selenium	2.46514	0.010	2.50000	ND	98.6	77 - 125			
Silver	2.55476	0.0030	2.50000	ND	102	77 - 129			
Thallium	2.48102	0.015	2.50000	ND	99.2	51 - 140			
Vanadium	2.63755	0.0030	2.50000	ND	106	86 - 120			
Zinc	2.43793	0.025	2.50000	0.032381	96.2	75 - 123			
Matrix Spike Dup (B5C0368-MSD1)		**Source: 1500894-11**			Prepared: 3/16/2015 Analyzed: 3/17/2015				
Antimony	2.55306	0.010	2.50000	ND	102	71 - 129	3.38	20	
Arsenic	2.39085	0.010	2.50000	ND	95.6	80 - 128	3.42	20	
Barium	2.65841	0.0030	2.50000	0.000439	106	77 - 124	4.14	20	
Beryllium	2.71193	0.0030	2.50000	ND	108	88 - 116	4.64	20	
Cadmium	2.57102	0.0030	2.50000	0.000299	103	83 - 116	4.16	20	
Chromium	2.64323	0.0030	2.50000	0.001451	106	86 - 116	3.92	20	
Cobalt	2.60995	0.0030	2.50000	ND	104	83 - 117	3.89	20	
Copper	2.64773	0.0090	2.50000	0.002953	106	87 - 121	3.55	20	
Lead	2.57951	0.0050	2.50000	ND	103	85 - 114	4.20	20	
Molybdenum	2.62025	0.0050	2.50000	ND	105	81 - 117	4.21	20	
Nickel	2.59302	0.0050	2.50000	4.748E-4	104	76 - 121	3.80	20	
Selenium	2.54870	0.010	2.50000	ND	102	77 - 125	3.33	20	
Silver	2.65324	0.0030	2.50000	ND	106	77 - 129	3.78	20	
Thallium	2.56150	0.015	2.50000	ND	102	51 - 140	3.19	20	
Vanadium	2.74393	0.0030	2.50000	ND	110	86 - 120	3.95	20	
Zinc	2.54590	0.025	2.50000	0.032381	101	75 - 123	4.33	20	
Batch B5C0406 - EPA 3050B_S									

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Project Number : 185832023, 200.0003, Caltrans 07A3322-23
Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0406 - EPA 3050B_S (continued)									
Blank (B5C0406-BLK1)					Prepared: 3/17/2015 Analyzed: 3/18/2015				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.222415	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.314029	2.0			NR				J
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	0.114412	1.0			NR				J
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
	0.334794	1.0			NR				J
LCS (B5C0406-BS1)					Prepared: 3/17/2015 Analyzed: 3/18/2015				
Antimony	47.2396	2.0	50.0000		94.5	80 - 120			
Arsenic	45.0982	1.0	50.0000		90.2	80 - 120			
Barium	48.0241	1.0	50.0000		96.0	80 - 120			
Beryllium	47.3665	1.0	50.0000		94.7	80 - 120			
Cadmium	45.7708	1.0	50.0000		91.5	80 - 120			
Chromium	49.1766	1.0	50.0000		98.4	80 - 120			
Cobalt	48.4428	1.0	50.0000		96.9	80 - 120			
Copper	47.8891	2.0	50.0000		95.8	80 - 120			
Lead	47.8384	1.0	50.0000		95.7	80 - 120			
Molybdenum	49.3445	1.0	50.0000		98.7	80 - 120			
Nickel	46.9074	1.0	50.0000		93.8	80 - 120			
Selenium	43.1287	1.0	50.0000		86.3	80 - 120			
Silver	45.3562	1.0	50.0000		90.7	80 - 120			
Thallium	47.6115	1.0	50.0000		95.2	80 - 120			
Vanadium	47.4289	1.0	50.0000		94.9	80 - 120			
Zinc	43.4460	1.0	50.0000		86.9	80 - 120			
Duplicate (B5C0406-DUP1)		**Source: 1500894-01**			Prepared: 3/17/2015 Analyzed: 3/18/2015				
Antimony	ND	2.0		0.385022	NR			20	
Arsenic	ND	1.0		0.195499	NR			20	
Barium	122.498	1.0		100.042	NR		20.2	20	R
Beryllium	ND	1.0		ND	NR			20	
Cadmium	0.582348	1.0		0.697109	NR		17.9	20	J
Chromium	8.84177	1.0		10.4931	NR		17.1	20	
Cobalt	5.10757	1.0		4.89141	NR		4.32	20	
Copper	17.2973	2.0		18.6601	NR		7.58	20	
	224.796	1.0		251.240	NR		11.1	20	
Molybdenum	ND	1.0		0.768141	NR			20	
Nickel	7.12981	1.0		8.15518	NR		13.4	20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0406 - EPA 3050B_S (continued)									
Duplicate (B5C0406-DUP1) - Continued		**Source: 1500894-01**			**Prepared: 3/17/2015 Analyzed: 3/18/2015**				
Selenium	ND	1.0		ND	NR			20	
Silver	ND	1.0		ND	NR			20	
Thallium	ND	1.0		ND	NR			20	
Vanadium	28.8824	1.0		26.4316	NR		8.86	20	
Zinc	92.6434	1.0		125.064	NR		29.8	20	R
Matrix Spike (B5C0406-MS1)		**Source: 1500894-01**			**Prepared: 3/17/2015 Analyzed: 3/18/2015**				
Antimony	93.8544	2.0	125.000	0.385022	74.8	28 - 106			
Arsenic	102.166	1.0	125.000	0.195499	81.6	57 - 109			
Barium	204.196	1.0	125.000	100.042	83.3	18 - 159			
Beryllium	107.014	1.0	125.000	ND	85.6	61 - 107			
Cadmium	98.1960	1.0	125.000	0.697109	78.0	53 - 104			
Chromium	114.573	1.0	125.000	10.4931	83.3	53 - 121			
Cobalt	103.103	1.0	125.000	4.89141	78.6	55 - 109			
Copper	129.950	2.0	125.000	18.6601	89.0	58 - 124			
Lead	296.777	1.0	125.000	251.240	36.4	35 - 129			
Molybdenum	106.526	1.0	125.000	0.768141	84.6	57 - 108			
Nickel	105.775	1.0	125.000	8.15518	78.1	44 - 122			
Selenium	96.9086	1.0	125.000	ND	77.5	54 - 104			
Silver	104.624	1.0	125.000	ND	83.7	60 - 112			
Thallium	89.2783	1.0	125.000	ND	71.4	50 - 103			
Vanadium	129.620	1.0	125.000	26.4316	82.6	54 - 123			
Zinc	198.722	1.0	125.000	125.064	58.9	29 - 132			
Matrix Spike Dup (B5C0406-MSD1)		**Source: 1500894-01**			**Prepared: 3/17/2015 Analyzed: 3/18/2015**				
Antimony	95.0249	2.0	125.000	0.385022	75.7	28 - 106	1.24	20	
Arsenic	101.776	1.0	125.000	0.195499	81.3	57 - 109	0.382	20	
Barium	192.089	1.0	125.000	100.042	73.6	18 - 159	6.11	20	
Beryllium	105.508	1.0	125.000	ND	84.4	61 - 107	1.42	20	
Cadmium	98.7185	1.0	125.000	0.697109	78.4	53 - 104	0.531	20	
Chromium	113.796	1.0	125.000	10.4931	82.6	53 - 121	0.680	20	
Cobalt	103.468	1.0	125.000	4.89141	78.9	55 - 109	0.354	20	
Copper	127.526	2.0	125.000	18.6601	87.1	58 - 124	1.88	20	
Lead	337.641	1.0	125.000	251.240	69.1	35 - 129	12.9	20	
Molybdenum	106.562	1.0	125.000	0.768141	84.6	57 - 108	0.0329	20	
Nickel	105.266	1.0	125.000	8.15518	77.7	44 - 122	0.483	20	
Selenium	96.7102	1.0	125.000	ND	77.4	54 - 104	0.205	20	
Silver	101.523	1.0	125.000	ND	81.2	60 - 112	3.01	20	
Thallium	91.0096	1.0	125.000	ND	72.8	50 - 103	1.92	20	
Vanadium	126.484	1.0	125.000	26.4316	80.0	54 - 123	2.45	20	
Zinc	207.931	1.0	125.000	125.064	66.3	29 - 132	4.53	20	
Batch B5C0407 - EPA 3050B_S									
Blank (B5C0407-BLK1)					**Prepared: 3/17/2015 Analyzed: 3/18/2015**				
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0407 - EPA 3050B_S (continued)									
Blank (B5C0407-BLK1) - Continued					Prepared: 3/17/2015 Analyzed: 3/18/2015				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	0.172530	1.0			NR				J
Cobalt	ND	1.0			NR				
Copper	0.0573	2.0			NR				J
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	0.089774	1.0			NR				J
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	0.761194	1.0			NR				J
[illegible] (B5C0407-BS1)					Prepared: 3/17/2015 Analyzed: 3/18/2015				
[illegible]mony	44.2208	2.0	50.0000		88.4	80 - 120			
Arsenic	42.2343	1.0	50.0000		84.5	80 - 120			
Barium	45.7980	1.0	50.0000		91.6	80 - 120			
Beryllium	44.4503	1.0	50.0000		88.9	80 - 120			
Cadmium	43.5355	1.0	50.0000		87.1	80 - 120			
Chromium	46.4280	1.0	50.0000		92.9	80 - 120			
Cobalt	46.2779	1.0	50.0000		92.6	80 - 120			
Copper	44.9665	2.0	50.0000		89.9	80 - 120			
Lead	44.3307	1.0	50.0000		88.7	80 - 120			
Molybdenum	45.8204	1.0	50.0000		91.6	80 - 120			
Nickel	44.5036	1.0	50.0000		89.0	80 - 120			
Selenium	40.4268	1.0	50.0000		80.9	80 - 120			
Silver	42.5754	1.0	50.0000		85.2	80 - 120			
Thallium	44.6604	1.0	50.0000		89.3	80 - 120			
Vanadium	45.0903	1.0	50.0000		90.2	80 - 120			
Zinc	42.9426	1.0	50.0000		85.9	80 - 120			
Duplicate (B5C0407-DUP1)		Source: 1500894-12			Prepared: 3/17/2015 Analyzed: 3/18/2015				
Antimony	0.849302	2.0		0.408926	NR		70.0	20	R, J
Arsenic	4.69006	1.0		4.34784	NR		7.57	20	
Barium	81.3637	1.0		69.5729	NR		15.6	20	
Beryllium	0.378627	1.0		0.453485	NR		18.0	20	J
Cadmium	1.51842	1.0		1.98805	NR		26.8	20	R
Chromium	24.2169	1.0		23.0967	NR		4.74	20	
Cobalt	7.13699	1.0		6.32825	NR		12.0	20	
Copper	25.1248	2.0		22.7022	NR		10.1	20	
Lead	113.209	1.0		68.1754	NR		49.7	20	R
[illegible]bdenum	2.43079	1.0		2.75115	NR		12.4	20	
[illegible]l	21.9372	1.0		21.0292	NR		4.23	20	
Selenium	ND	1.0		ND	NR			20	
Silver	ND	1.0		ND	NR			20	

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Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0407 - EPA 3050B_S (continued)									
Duplicate (B5C0407-DUP1) - Continued		**Source: 1500894-12**			Prepared: 3/17/2015 Analyzed: 3/18/2015				
Thallium	ND	1.0		ND	NR			20	
Vanadium	37.9728	1.0		40.2864	NR		5.91	20	
Zinc	93.0360	1.0		75.1570	NR		21.3	20	R
Matrix Spike (B5C0407-MS1)		**Source: 1500894-12**			Prepared: 3/17/2015 Analyzed: 3/18/2015				
Antimony	89.0678	2.0	125.000	0.408926	70.9	28 - 106			
Arsenic	106.539	1.0	125.000	4.34784	81.8	57 - 109			
Barium	175.621	1.0	125.000	69.5729	84.8	18 - 159			
Beryllium	104.268	1.0	125.000	0.453485	83.1	61 - 107			
Cadmium	96.6013	1.0	125.000	1.98805	75.7	53 - 104			
Chromium	129.768	1.0	125.000	23.0967	85.3	53 - 121			
Cobalt	104.273	1.0	125.000	6.32825	78.4	55 - 109			
Copper	132.956	2.0	125.000	22.7022	88.2	58 - 124			
Lead	199.400	1.0	125.000	68.1754	105	35 - 129			
Molybdenum	105.258	1.0	125.000	2.75115	82.0	57 - 108			
Nickel	117.082	1.0	125.000	21.0292	76.8	44 - 122			
Selenium	96.6504	1.0	125.000	ND	77.3	54 - 104			
Silver	102.701	1.0	125.000	ND	82.2	60 - 112			
Thallium	92.7953	1.0	125.000	ND	74.2	50 - 103			
Vanadium	139.133	1.0	125.000	40.2864	79.1	54 - 123			
Zinc	168.690	1.0	125.000	75.1570	74.8	29 - 132			
Matrix Spike Dup (B5C0407-MSD1)		**Source: 1500894-12**			Prepared: 3/17/2015 Analyzed: 3/18/2015				
Antimony	87.1158	2.0	125.000	0.408926	69.4	28 - 106	2.22	20	
Arsenic	101.468	1.0	125.000	4.34784	77.7	57 - 109	4.88	20	
Barium	175.334	1.0	125.000	69.5729	84.6	18 - 159	0.163	20	
Beryllium	99.4501	1.0	125.000	0.453485	79.2	61 - 107	4.73	20	
Cadmium	94.5574	1.0	125.000	1.98805	74.1	53 - 104	2.14	20	
Chromium	125.010	1.0	125.000	23.0967	81.5	53 - 121	3.73	20	
Cobalt	101.550	1.0	125.000	6.32825	76.2	55 - 109	2.65	20	
Copper	132.935	2.0	125.000	22.7022	88.2	58 - 124	0.0157	20	
Lead	192.836	1.0	125.000	68.1754	99.7	35 - 129	3.35	20	
Molybdenum	102.071	1.0	125.000	2.75115	79.5	57 - 108	3.07	20	
Nickel	113.474	1.0	125.000	21.0292	74.0	44 - 122	3.13	20	
Selenium	93.3705	1.0	125.000	ND	74.7	54 - 104	3.45	20	
Silver	100.073	1.0	125.000	ND	80.1	60 - 112	2.59	20	
Thallium	90.3513	1.0	125.000	ND	72.3	50 - 103	2.67	20	
Vanadium	135.973	1.0	125.000	40.2864	76.5	54 - 123	2.30	20	
Zinc	181.022	1.0	125.000	75.1570	84.7	29 - 132	7.05	20	

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Mercury by AA (Cold Vapor) EPA 7470A - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0372 - EPA 245.1/7470_W									
Blank (B5C0372-BLK1)					Prepared: 3/16/2015 Analyzed: 3/16/2015				
Mercury	ND	0.20			NR				
LCS (B5C0372-BS1)					Prepared: 3/16/2015 Analyzed: 3/16/2015				
Mercury	11.5958	0.20	10.0000		116	80 - 120			
Duplicate (B5C0372-DUP1)		Source: 1500894-11			Prepared: 3/16/2015 Analyzed: 3/16/2015				
Mercury	ND	0.20		ND	NR			20	
Matrix Spike (B5C0372-MS1)		Source: 1500894-11			Prepared: 3/16/2015 Analyzed: 3/16/2015				
Mercury	11.5833	0.20	10.0000	ND	116	70 - 130			
Matrix Spike Dup (B5C0372-MSD1)		Source: 1500894-11			Prepared: 3/16/2015 Analyzed: 3/16/2015				
Mercury	11.4845	0.20	10.0000	ND	115	70 - 130	0.857	20	
Post Spike (B5C0372-PS1)		Source: 1500894-11			Prepared: 3/16/2015 Analyzed: 3/16/2015				
...cury	5.85621		5.00000	0.016452	117	85 - 115			MI

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Mercury by AA (Cold Vapor) EPA 7471A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0411 - EPA 7471_S									
Blank (B5C0411-BLK1)					Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	ND	0.10			NR				
LCS (B5C0411-BS1)					Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.814207	0.10	0.833333		97.7	80 - 120			
Duplicate (B5C0411-DUP1)		Source: 1500894-01			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.023809	0.10		0.021147	NR		11.8	20	J
Matrix Spike (B5C0411-MS1)		Source: 1500894-01			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.902617	0.10	0.833333	0.021147	106	70 - 130			
Matrix Spike Dup (B5C0411-MSD1)		Source: 1500894-01			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.901432	0.10	0.833333	0.021147	106	70 - 130	0.131	20	
Post Spike (B5C0411-PS1)		Source: 1500894-01			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.006175		5.00000E-3	0.000254	118	85 - 115			M1
Batch B5C0412 - EPA 7471_S									
Blank (B5C0412-BLK1)					Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	ND	0.10			NR				
LCS (B5C0412-BS1)					Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.851067	0.10	0.833333		102	80 - 120			
Duplicate (B5C0412-DUP1)		Source: 1500894-12			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.043199	0.10		0.039771	NR		8.26	20	J
Matrix Spike (B5C0412-MS1)		Source: 1500894-12			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.966573	0.10	0.833333	0.039771	111	70 - 130			
Matrix Spike Dup (B5C0412-MSD1)		Source: 1500894-12			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.970882	0.10	0.847458	0.039771	110	70 - 130	0.445	20	
Post Spike (B5C0412-PS1)		Source: 1500894-12			Prepared: 3/17/2015 Analyzed: 3/17/2015				
Mercury	0.006866		5.00000E-3	0.000477	128	85 - 115			M1

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0307 - GCVOA_S									
Blank (B5C0307-BLK1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1916*		*0.200000*		*95.8*	*37 - 153*			
LCS (B5C0307-BS1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	4.69400	1.0	5.00000		93.9	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2082*		*0.200000*		*104*	*37 - 153*			
Duplicate (B5C0307-DUP1)		**Source: 1500894-03**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.1927*		*0.200000*		*96.4*	*37 - 153*			
Matrix Spike (B5C0307-MS1)		**Source: 1500894-03**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	4.16100	1.0	5.00000	ND	83.2	20 - 130			
;ate: 4-Bromofluorobenzene	*0.2180*		*0.200000*		*109*	*37 - 153*			
Matrix Spike Dup (B5C0307-MSD1)		**Source: 1500894-03**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	4.07200	1.0	5.00000	ND	81.4	20 - 130	2.16	20	
Surrogate: 4-Bromofluorobenzene	*0.2069*		*0.200000*		*103*	*37 - 153*			
Batch B5C0308 - GCVOA_S									
Blank (B5C0308-BLK1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1904*		*0.200000*		*95.2*	*37 - 153*			
LCS (B5C0308-BS1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	4.74900	1.0	5.00000		95.0	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1997*		*0.200000*		*99.8*	*37 - 153*			
Duplicate (B5C0308-DUP1)		**Source: 1500894-15**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.2029*		*0.200000*		*101*	*37 - 153*			
Matrix Spike (B5C0308-MS1)		**Source: 1500894-15**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	4.74300	1.0	5.00000	ND	94.9	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.2068*		*0.200000*		*103*	*37 - 153*			
Matrix Spike Dup (B5C0308-MSD1)		**Source: 1500894-15**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	4.55200	1.0	5.00000	ND	91.0	20 - 130	4.11	20	
'ate: 4-Bromofluorobenzene	*0.2031*		*0.200000*		*102*	*37 - 153*			
Batch B5C0309 - GCVOA_W									

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0309 - GCVOA_W (continued)									
Blank (B5C0309-BLK1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	ND	0.05			NR				
C4-C8	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09669*		*0.100000*		*96.7*	*70 - 130*			
LCS (B5C0309-BS1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	0.972000	0.05	1.00000		97.2	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1026*		*0.100000*		*103*	*70 - 130*			
LCS Dup (B5C0309-BSD1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	0.917000	0.05	1.00000		91.7	70 - 130	5.82	20	
Surrogate: 4-Bromofluorobenzene	*0.1009*		*0.100000*		*101*	*70 - 130*			
Duplicate (B5C0309-DUP1)		**Source: 1500894-17**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
Gasoline Range Organics	ND	0.05		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.09200*		*0.100000*		*92.0*	*70 - 130*			
Batch B5C0325 - GCVOA_S									
Blank (B5C0325-BLK1)					Prepared: 3/13/2015 Analyzed: 3/13/2015				
Gasoline Range Organics	ND	1.0			NR				
C4-C8	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1953*		*0.200000*		*97.7*	*37 - 153*			
LCS (B5C0325-BS1)					Prepared: 3/13/2015 Analyzed: 3/13/2015				
Gasoline Range Organics	4.48700	1.0	5.00000		89.7	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1980*		*0.200000*		*99.0*	*37 - 153*			
Duplicate (B5C0325-DUP1)		**Source: 1500894-13**			Prepared: 3/13/2015 Analyzed: 3/13/2015				
Gasoline Range Organics	ND	1.0		ND	NR			20	
Surrogate: 4-Bromofluorobenzene	*0.1923*		*0.200000*		*96.2*	*37 - 153*			
Matrix Spike (B5C0325-MS1)		**Source: 1500918-03**			Prepared: 3/13/2015 Analyzed: 3/13/2015				
Gasoline Range Organics	3.20700	1.0	5.00000	ND	64.1	20 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1908*		*0.200000*		*95.4*	*37 - 153*			
Matrix Spike Dup (B5C0325-MSD1)		**Source: 1500918-03**			Prepared: 3/13/2015 Analyzed: 3/13/2015				
Gasoline Range Organics	3.12500	1.0	5.00000	ND	62.5	20 - 130	2.59	20	
Surrogate: 4-Bromofluorobenzene	*0.1958*		*0.200000*		*97.9*	*37 - 153*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0340 - GCSEMI_DRO_W									
Blank (B5C0340-BLK1)					Prepared: 3/13/2015 Analyzed: 3/14/2015				
C9-C22	ND	0.05			NR				
C23-C32	ND	0.05			NR				
Surrogate: p-Terphenyl	*0.07152*		*8.00000E-2*		*89.4*	*20 - 141*			
LCS (B5C0340-BS1)					Prepared: 3/13/2015 Analyzed: 3/14/2015				
DRO	0.549310	0.05	1.00000		54.9	29 - 135			
Surrogate: p-Terphenyl	*0.07132*		*8.00000E-2*		*89.2*	*20 - 141*			
LCS Dup (B5C0340-BSD1)					Prepared: 3/13/2015 Analyzed: 3/14/2015				
DRO	0.580850	0.05	1.00000		58.1	29 - 135	5.58	20	
Surrogate: p-Terphenyl	*0.07507*		*8.00000E-2*		*93.8*	*20 - 141*			
Batch B5C0390 - GCSEMI_DRO_LL_S									
Blank (B5C0390-BLK1)					Prepared: 3/16/2015 Analyzed: 3/17/2015				
...22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*2.617*		*2.66667*		*98.1*	*26 - 123*			
LCS (B5C0390-BS1)					Prepared: 3/16/2015 Analyzed: 3/17/2015				
DRO	18.9473	1.0	33.3333		56.8	47 - 127			
Surrogate: p-Terphenyl	*1.604*		*2.66667*		*60.2*	*26 - 123*			
Duplicate (B5C0390-DUP1)		**Source: 1500894-03**			Prepared: 3/16/2015 Analyzed: 3/17/2015				
DRO	21.3423	1.0		23.0117	NR		7.53	20	
Surrogate: p-Terphenyl	*1.941*		*2.66667*		*72.8*	*26 - 123*			
Matrix Spike (B5C0390-MS1)		**Source: 1500894-03**			Prepared: 3/16/2015 Analyzed: 3/17/2015				
DRO	29.5667	1.0	33.3333	23.0117	19.7	16 - 123			
Surrogate: p-Terphenyl	*1.571*		*2.66667*		*58.9*	*26 - 123*			
Matrix Spike Dup (B5C0390-MSD1)		**Source: 1500894-03**			Prepared: 3/16/2015 Analyzed: 3/17/2015				
DRO	31.3827	1.0	33.3333	23.0117	25.1	16 - 123	5.96	20	
Surrogate: p-Terphenyl	*1.606*		*2.66667*		*60.2*	*26 - 123*			
Batch B5C0391 - GCSEMI_DRO_LL_S									
Blank (B5C0391-BLK1)					Prepared: 3/16/2015 Analyzed: 3/16/2015				
C9-C22	ND	1.0			NR				
C23-C32	ND	1.0			NR				
Surrogate: p-Terphenyl	*1.761*		*2.66667*		*66.0*	*26 - 123*			
(B5C0391-BS1)					Prepared: 3/16/2015 Analyzed: 3/16/2015				
DRO	18.8363	1.0	33.3333		56.5	47 - 127			
Surrogate: p-Terphenyl	*1.328*		*2.66667*		*49.8*	*26 - 123*			

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Hydrocarbon Chain Distribution by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0391 - GCSEMI_DRO_LL_S (continued)									
Duplicate (B5C0391-DUP1)		**Source: 1500894-15**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
DRO	5.99167	1.0		7.82833	NR		26.6	20	R
Surrogate: p-Terphenyl	*0.9600*		*2.66667*		*36.0*	*26 - 123*			
Matrix Spike (B5C0391-MS1)		**Source: 1500894-15**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
DRO	20.7527	1.0	33.3333	7.82833	38.8	16 - 123			
Surrogate: p-Terphenyl	*1.469*		*2.66667*		*55.1*	*26 - 123*			
Matrix Spike Dup (B5C0391-MSD1)		**Source: 1500894-15**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
DRO	21.8253	1.0	33.3333	7.82833	42.0	16 - 123	5.04	20	
Surrogate: p-Terphenyl	*1.397*		*2.66667*		*52.4*	*26 - 123*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0297 - MSVOA_LL_W									
Blank (B5C0297-BLK1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
ichloropropane	ND	0.50			NR				
,-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Acetate	ND	10			NR				
Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0297 - MSVOA_LL_W (continued)									
Blank (B5C0297-BLK1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*22.66*		*25.0000*		*90.6*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*20.97*		*25.0000*		*83.9*	*65 - 132*			
Surrogate: Dibromofluoromethane	*24.11*		*25.0000*		*96.4*	*55 - 138*			
Surrogate: Toluene-d8	*22.30*		*25.0000*		*89.2*	*60 - 120*			
LCS (B5C0297-BS1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,1,1,2-Tetrachloroethane	22.5500	0.50	20.0000		113	71 - 142			
1,1,1-Trichloroethane	20.3500	0.50	20.0000		102	68 - 141			
1,1,2,2-Tetrachloroethane	19.8500	0.50	20.0000		99.2	72 - 123			
1,1,2-Trichloroethane	18.8400	0.50	20.0000		94.2	63 - 129			
1,1-Dichloroethane	19.4800	0.50	20.0000		97.4	65 - 133			
1,1-Dichloroethene	18.2100	0.50	20.0000		91.0	61 - 136			
1,1-Dichloropropene	22.2200	0.50	20.0000		111	62 - 137			
1,2,3-Trichloropropane	19.3600	0.50	20.0000		96.8	71 - 128			
1,2,3-Trichlorobenzene	25.9200	0.50	20.0000		130	47 - 187			
1,2,4-Trichlorobenzene	20.9300	0.50	20.0000		105	53 - 154			
1,2,4-Trimethylbenzene	22.8000	0.50	20.0000		114	80 - 139			
1,2-Dibromo-3-chloropropane	23.1100	0.50	20.0000		116	53 - 166			
1,2-Dibromoethane	20.1900	0.50	20.0000		101	58 - 134			
1,2-Dichlorobenzene	21.0100	0.50	20.0000		105	75 - 130			
1,2-Dichloroethane	16.9400	0.50	20.0000		84.7	71 - 131			
1,2-Dichloropropane	18.9700	0.50	20.0000		94.8	69 - 130			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0297 - MSVOA_LL_W (continued)									
LCS (B5C0297-BS1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,3,5-Trimethylbenzene	22.9200	0.50	20.0000		115	80 - 139			
1,3-Dichlorobenzene	20.7000	0.50	20.0000		104	76 - 129			
1,3-Dichloropropane	20.1000	0.50	20.0000		100	75 - 124			
1,4-Dichlorobenzene	20.1500	0.50	20.0000		101	76 - 123			
2,2-Dichloropropane	26.2000	0.50	20.0000		131	60 - 149			
2-Chloroethyl vinyl ether	13.5200	0.50	20.0000		67.6	29 - 144			
2-Chlorotoluene	20.7200	0.50	20.0000		104	78 - 137			
4-Chlorotoluene	19.8700	0.50	20.0000		99.4	78 - 136			
4-Isopropyltoluene	24.0300	0.50	20.0000		120	75 - 146			
Benzene	36.9700	0.50	40.0000		92.4	72 - 127			
Bromobenzene	19.5100	0.50	20.0000		97.6	74 - 123			
Bromochloromethane	20.4200	0.50	20.0000		102	67 - 120			
Bromodichloromethane	17.8200	0.50	20.0000		89.1	74 - 130			
Bromoform	22.1400	0.50	20.0000		111	74 - 135			
Bromomethane	11.2300	0.50	20.0000		56.2	14 - 166			
...n disulfide	19.4600	1.0	20.0000		97.3	46 - 150			
...on tetrachloride	22.3500	0.50	20.0000		112	57 - 162			
Chlorobenzene	20.9700	0.50	20.0000		105	78 - 125			
Chloroethane	16.7900	0.50	20.0000		84.0	54 - 144			
Chloroform	19.8300	0.50	20.0000		99.2	66 - 132			
Chloromethane	13.3400	0.50	20.0000		66.7	31 - 128			
cis-1,2-Dichloroethene	19.9900	0.50	20.0000		100	68 - 124			
cis-1,3-Dichloropropene	20.9800	0.50	20.0000		105	63 - 139			
Di-isopropyl ether	19.5900	0.50	20.0000		98.0	61 - 142			
Dibromochloromethane	20.6000	0.50	20.0000		103	78 - 132			
Dibromomethane	17.5800	0.50	20.0000		87.9	76 - 122			
Dichlorodifluoromethane	21.4000	0.50	20.0000		107	17 - 171			
Ethyl Acetate	198.290	10	200.000		99.1	41 - 137			
Ethyl Ether	183.940	10	200.000		92.0	54 - 146			
Ethyl tert-butyl ether	19.8000	0.50	20.0000		99.0	61 - 133			
Ethylbenzene	40.3100	0.50	40.0000		101	71 - 142			
Freon-113	21.3300	0.50	20.0000		107	59 - 150			
Hexachlorobutadiene	21.7800	0.50	20.0000		109	54 - 169			
Isopropylbenzene	22.6400	0.50	20.0000		113	76 - 146			
m,p-Xylene	44.0300	1.0	40.0000		110	75 - 150			
Methylene chloride	20.4500	1.0	20.0000		102	66 - 130			
MTBE	15.3000	0.50	20.0000		76.5	60 - 132			
n-Butylbenzene	22.5800	0.50	20.0000		113	76 - 151			
n-Propylbenzene	21.2300	0.50	20.0000		106	76 - 147			
Naphthalene	23.6500	0.50	20.0000		118	36 - 180			
o-Xylene	42.7000	0.50	40.0000		107	75 - 143			
sec-Butylbenzene	23.6000	0.50	20.0000		118	77 - 147			
Styrene	21.9000	0.50	20.0000		110	75 - 133			
...myl methyl ether	19.1000	0.50	20.0000		95.5	63 - 125			
...Butanol	122.520	10	100.000		123	11 - 192			
tert-Butylbenzene	23.7400	0.50	20.0000		119	75 - 143			
Tetrachloroethene	22.3400	0.50	20.0000		112	58 - 139			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0297 - MSVOA_LL_W (continued)									
LCS (B5C0297-BS1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Toluene	39.3100	0.50	40.0000		98.3	59 - 140			
trans-1,2-Dichloroethene	17.8600	0.50	20.0000		89.3	63 - 128			
trans-1,3-Dichloropropene	19.1000	0.50	20.0000		95.5	54 - 142			
Trichloroethene	20.9700	0.50	20.0000		105	67 - 130			
Trichlorofluoromethane	19.4200	0.50	20.0000		97.1	56 - 168			
Vinyl acetate	216.580	10	200.000		108	23 - 151			
Vinyl chloride	19.0900	0.50	20.0000		95.4	49 - 146			
Surrogate: 1,2-Dichloroethane-d4	*24.56*		*25.0000*		*98.2*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*22.65*		*25.0000*		*90.6*	*65 - 132*			
Surrogate: Dibromofluoromethane	*26.10*		*25.0000*		*104*	*55 - 138*			
Surrogate: Toluene-d8	*24.91*		*25.0000*		*99.6*	*60 - 120*			
LCS Dup (B5C0297-BSD1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,1,1,2-Tetrachloroethane	22.6800	0.50	20.0000		113	71 - 142	0.575	20	
1,1,1-Trichloroethane	21.5000	0.50	20.0000		108	68 - 141	5.50	20	
1,1,2,2-Tetrachloroethane	20.5800	0.50	20.0000		103	72 - 123	3.61	20	
1,1,2-Trichloroethane	19.6000	0.50	20.0000		98.0	63 - 129	3.95	20	
1,1-Dichloroethane	20.4500	0.50	20.0000		102	65 - 133	4.86	20	
1,1-Dichloroethene	18.0600	0.50	20.0000		90.3	61 - 136	0.827	20	
1,1-Dichloropropene	23.4800	0.50	20.0000		117	62 - 137	5.51	20	
1,2,3-Trichloropropane	19.9700	0.50	20.0000		99.8	71 - 128	3.10	20	
1,2,3-Trichlorobenzene	27.0300	0.50	20.0000		135	47 - 187	4.19	20	
1,2,4-Trichlorobenzene	22.0200	0.50	20.0000		110	53 - 154	5.08	20	
1,2,4-Trimethylbenzene	23.7000	0.50	20.0000		118	80 - 139	3.87	20	
1,2-Dibromo-3-chloropropane	23.5800	0.50	20.0000		118	53 - 166	2.01	20	
1,2-Dibromoethane	20.4800	0.50	20.0000		102	58 - 134	1.43	20	
1,2-Dichlorobenzene	21.6000	0.50	20.0000		108	75 - 130	2.77	20	
1,2-Dichloroethane	17.7300	0.50	20.0000		88.6	71 - 131	4.56	20	
1,2-Dichloropropane	19.6700	0.50	20.0000		98.4	69 - 130	3.62	20	
1,3,5-Trimethylbenzene	23.9600	0.50	20.0000		120	80 - 139	4.44	20	
1,3-Dichlorobenzene	21.6900	0.50	20.0000		108	76 - 129	4.67	20	
1,3-Dichloropropane	21.8000	0.50	20.0000		109	75 - 124	8.11	20	
1,4-Dichlorobenzene	20.9900	0.50	20.0000		105	76 - 123	4.08	20	
2,2-Dichloropropane	27.4400	0.50	20.0000		137	60 - 149	4.62	20	
2-Chloroethyl vinyl ether	12.3400	0.50	20.0000		61.7	29 - 144	9.13	20	
2-Chlorotoluene	21.7400	0.50	20.0000		109	78 - 137	4.80	20	
4-Chlorotoluene	20.7200	0.50	20.0000		104	78 - 136	4.19	20	
4-Isopropyltoluene	25.4000	0.50	20.0000		127	75 - 146	5.54	20	
Benzene	38.7700	0.50	40.0000		96.9	72 - 127	4.75	20	
Bromobenzene	20.4000	0.50	20.0000		102	74 - 123	4.46	20	
Bromochloromethane	21.2800	0.50	20.0000		106	67 - 120	4.12	20	
Bromodichloromethane	18.2400	0.50	20.0000		91.2	74 - 130	2.33	20	
Bromoform	24.2900	0.50	20.0000		121	74 - 135	9.26	20	
Bromomethane	13.1600	0.50	20.0000		65.8	14 - 166	15.8	20	
Carbon disulfide	18.7000	1.0	20.0000		93.5	46 - 150	3.98	20	
Carbon tetrachloride	23.3800	0.50	20.0000		117	57 - 162	4.50	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0297 - MSVOA_LL_W (continued)									
LCS Dup (B5C0297-BSD1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Chlorobenzene	22.6000	0.50	20.0000		113	78 - 125	7.48	20	
Chloroethane	20.0900	0.50	20.0000		100	54 - 144	17.9	20	
Chloroform	20.4500	0.50	20.0000		102	66 - 132	3.08	20	
Chloromethane	13.9800	0.50	20.0000		69.9	31 - 128	4.69	20	
cis-1,2-Dichloroethene	20.6100	0.50	20.0000		103	68 - 124	3.05	20	
cis-1,3-Dichloropropene	21.8300	0.50	20.0000		109	63 - 139	3.97	20	
Di-isopropyl ether	20.3700	0.50	20.0000		102	61 - 142	3.90	20	
Dibromochloromethane	22.6000	0.50	20.0000		113	78 - 132	9.26	20	
Dibromomethane	18.2500	0.50	20.0000		91.2	76 - 122	3.74	20	
Dichlorodifluoromethane	22.1100	0.50	20.0000		111	17 - 171	3.26	20	
Ethyl Acetate	203.620	10	200.000		102	41 - 137	2.65	20	
Ethyl Ether	182.840	10	200.000		91.4	54 - 146	0.600	20	
Ethyl tert-butyl ether	20.7000	0.50	20.0000		104	61 - 133	4.44	20	
Ethylbenzene	41.0500	0.50	40.0000		103	71 - 142	1.82	20	
Freon-113	21.0300	0.50	20.0000		105	59 - 150	1.42	20	
...chlorobutadiene	24.3400	0.50	20.0000		122	54 - 169	11.1	20	
...propylbenzene	23.8800	0.50	20.0000		119	76 - 146	5.33	20	
m,p-Xylene	46.8000	1.0	40.0000		117	75 - 150	6.10	20	
Methylene chloride	21.7100	1.0	20.0000		109	66 - 130	5.98	20	
MTBE	15.9300	0.50	20.0000		79.6	60 - 132	4.03	20	
n-Butylbenzene	24.3200	0.50	20.0000		122	76 - 151	7.42	20	
n-Propylbenzene	22.2600	0.50	20.0000		111	76 - 147	4.74	20	
Naphthalene	23.9800	0.50	20.0000		120	36 - 180	1.39	20	
o-Xylene	47.3100	0.50	40.0000		118	75 - 143	10.2	20	
sec-Butylbenzene	25.2500	0.50	20.0000		126	77 - 147	6.76	20	
Styrene	24.2100	0.50	20.0000		121	75 - 133	10.0	20	
tert-Amyl methyl ether	20.2300	0.50	20.0000		101	63 - 125	5.75	20	
tert-Butanol	132.640	10	100.000		133	11 - 192	7.93	20	
tert-Butylbenzene	24.7900	0.50	20.0000		124	75 - 143	4.33	20	
Tetrachloroethene	24.7700	0.50	20.0000		124	58 - 139	10.3	20	
Toluene	41.0100	0.50	40.0000		103	59 - 140	4.23	20	
trans-1,2-Dichloroethene	18.8800	0.50	20.0000		94.4	63 - 128	5.55	20	
trans-1,3-Dichloropropene	19.4000	0.50	20.0000		97.0	54 - 142	1.56	20	
Trichloroethene	22.2200	0.50	20.0000		111	67 - 130	5.79	20	
Trichlorofluoromethane	19.8500	0.50	20.0000		99.2	56 - 168	2.19	20	
Vinyl acetate	218.550	10	200.000		109	23 - 151	0.905	20	
Vinyl chloride	20.2600	0.50	20.0000		101	49 - 146	5.95	20	
Surrogate: 1,2-Dichloroethane-d4	*21.05*		*25.0000*		*84.2*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*21.79*		*25.0000*		*87.2*	*65 - 132*			
Surrogate: Dibromofluoromethane	*22.69*		*25.0000*		*90.8*	*55 - 138*			
Surrogate: Toluene-d8	*22.30*		*25.0000*		*89.2*	*60 - 120*			
Duplicate (B5C0297-DUP1)		Source: 1500894-11			Prepared: 3/12/2015 Analyzed: 3/12/2015				
...2-Tetrachloroethane	ND	0.50		ND	NR			20	
...-Trichloroethane	ND	0.50		ND	NR			20	
1,1,2,2-Tetrachloroethane	ND	0.50		ND	NR			20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0297 - MSVOA_LL_W (continued)									
Duplicate (B5C0297-DUP1) - Continued		**Source: 1500894-11**			Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,1,2-Trichloroethane	ND	0.50		ND	NR			20	
1,1-Dichloroethane	ND	0.50		ND	NR			20	
1,1-Dichloroethene	ND	0.50		ND	NR			20	
1,1-Dichloropropene	ND	0.50		ND	NR			20	
1,2,3-Trichloropropane	ND	0.50		ND	NR			20	
1,2,3-Trichlorobenzene	ND	0.50		ND	NR			20	
1,2,4-Trichlorobenzene	ND	0.50		ND	NR			20	
1,2,4-Trimethylbenzene	ND	0.50		ND	NR			20	
1,2-Dibromo-3-chloropropane	ND	0.50		ND	NR			20	
1,2-Dibromoethane	ND	0.50		ND	NR			20	
1,2-Dichlorobenzene	ND	0.50		ND	NR			20	
1,2-Dichloroethane	ND	0.50		ND	NR			20	
1,2-Dichloropropane	ND	0.50		ND	NR			20	
1,3,5-Trimethylbenzene	ND	0.50		ND	NR			20	
1,3-Dichlorobenzene	ND	0.50		ND	NR			20	
1,3-Dichloropropane	ND	0.50		ND	NR			20	
1,4-Dichlorobenzene	ND	0.50		ND	NR			20	
2,2-Dichloropropane	ND	0.50		ND	NR			20	
2-Chloroethyl vinyl ether	ND	0.50		ND	NR			20	
2-Chlorotoluene	ND	0.50		ND	NR			20	
4-Chlorotoluene	ND	0.50		ND	NR			20	
4-Isopropyltoluene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Bromobenzene	ND	0.50		ND	NR			20	
Bromochloromethane	ND	0.50		ND	NR			20	
Bromodichloromethane	ND	0.50		ND	NR			20	
Bromoform	ND	0.50		ND	NR			20	
Bromomethane	ND	0.50		ND	NR			20	
Carbon disulfide	ND	1.0		ND	NR			20	
Carbon tetrachloride	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
Chloroethane	ND	0.50		ND	NR			20	
Chloroform	ND	0.50		ND	NR			20	
Chloromethane	ND	0.50		ND	NR			20	
cis-1,2-Dichloroethene	ND	0.50		ND	NR			20	
cis-1,3-Dichloropropene	ND	0.50		ND	NR			20	
Di-isopropyl ether	ND	0.50		ND	NR			20	
Dibromochloromethane	ND	0.50		ND	NR			20	
Dibromomethane	ND	0.50		ND	NR			20	
Dichlorodifluoromethane	ND	0.50		ND	NR			20	
Ethyl Acetate	ND	10		ND	NR			20	
Ethyl Ether	ND	10		ND	NR			20	
Ethyl tert-butyl ether	ND	0.50		ND	NR			20	
Ethylbenzene	ND	0.50		ND	NR			20	
Freon-113	ND	0.50		ND	NR			20	
Hexachlorobutadiene	ND	0.50		ND	NR			20	
Isopropylbenzene	ND	0.50		ND	NR			20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0297 - MSVOA_LL_W (continued)									
Duplicate (B5C0297-DUP1) - Continued		Source: I500894-11			Prepared: 3/12/2015 Analyzed: 3/12/2015				
m,p-Xylene	ND	1.0		ND	NR			20	
Methylene chloride	ND	1.0		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
n-Butylbenzene	ND	0.50		ND	NR			20	
n-Propylbenzene	ND	0.50		ND	NR			20	
Naphthalene	ND	0.50		ND	NR			20	
o-Xylene	ND	0.50		ND	NR			20	
sec-Butylbenzene	ND	0.50		ND	NR			20	
Styrene	ND	0.50		ND	NR			20	
tert-Amyl methyl ether	ND	0.50		ND	NR			20	
tert-Butanol	ND	10		ND	NR			20	
tert-Butylbenzene	ND	0.50		ND	NR			20	
Tetrachloroethene	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
...s-1,2-Dichloroethene	ND	0.50		ND	NR			20	
...1,3-Dichloropropene	ND	0.50		ND	NR			20	
...richloroethene	ND	0.50		ND	NR			20	
Trichlorofluoromethane	ND	0.50		ND	NR			20	
Vinyl acetate	ND	10		ND	NR			20	
Vinyl chloride	ND	0.50		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*23.23*		*25.0000*		*92.9*	*49 - 148*			
Surrogate: 4-Bromofluorobenzene	*19.99*		*25.0000*		*80.0*	*65 - 132*			
Surrogate: Dibromofluoromethane	*23.57*		*25.0000*		*94.3*	*55 - 138*			
Surrogate: Toluene-d8	*21.86*		*25.0000*		*87.4*	*60 - 120*			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0298 - MSVOA_S									
Blank (B5C0298-BLK1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0298 - MSVOA_S (continued)									
Blank (B5C0298-BLK1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
...-Butylbenzene	ND	5.0			NR				
...hloroethene	ND	5.0			NR				
...luene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*48.34*		*50.0000*		*96.7*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*47.99*		*50.0000*		*96.0*	*20 - 173*			
Surrogate: Dibromofluoromethane	*49.10*		*50.0000*		*98.2*	*26 - 178*			
Surrogate: Toluene-d8	*48.52*		*50.0000*		*97.0*	*31 - 166*			
LCS (B5C0298-BS1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,1,1,2-Tetrachloroethane	49.2600	5.0	50.0000		98.5	74 - 117			
1,1,1-Trichloroethane	46.0100	5.0	50.0000		92.0	65 - 130			
1,1,2,2-Tetrachloroethane	50.8600	5.0	50.0000		102	63 - 123			
1,1,2-Trichloroethane	48.3500	5.0	50.0000		96.7	66 - 122			
1,1-Dichloroethane	48.7700	5.0	50.0000		97.5	65 - 124			
1,1-Dichloroethene	31.4200	5.0	50.0000		62.8	60 - 130			
1,1-Dichloropropene	43.8100	5.0	50.0000		87.6	75 - 121			
1,2,3-Trichloropropane	51.4000	5.0	50.0000		103	62 - 126			
1,2,3-Trichlorobenzene	53.3500	5.0	50.0000		107	72 - 120			
1,2,4-Trichlorobenzene	54.7900	5.0	50.0000		110	75 - 121			
1,2,4-Trimethylbenzene	53.4600	5.0	50.0000		107	82 - 118			
1,2-Dibromo-3-chloropropane	52.3200	10	50.0000		105	67 - 121			
1,2-Dibromoethane	49.8200	5.0	50.0000		99.6	69 - 123			
1,2-Dichlorobenzene	51.8700	5.0	50.0000		104	81 - 114			
...ichloroethane	49.5000	5.0	50.0000		99.0	71 - 119			
...Dichloropropane	48.7000	5.0	50.0000		97.4	71 - 118			
1,3,5-Trimethylbenzene	52.9600	5.0	50.0000		106	81 - 120			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0298 - MSVOA_S (continued)									
LCS (B5C0298-BS1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,3-Dichlorobenzene	50.7800	5.0	50.0000		102	80 - 115			
1,3-Dichloropropane	51.7300	5.0	50.0000		103	77 - 117			
1,4-Dichlorobenzene	51.1400	5.0	50.0000		102	80 - 115			
2,2-Dichloropropane	47.9300	5.0	50.0000		95.9	58 - 141			
2-Chlorotoluene	52.2800	5.0	50.0000		105	78 - 120			
4-Chlorotoluene	52.7700	5.0	50.0000		106	79 - 119			
4-Isopropyltoluene	55.4000	5.0	50.0000		111	81 - 125			
Benzene	88.4700	5.0	100.000		88.5	73 - 116			
Bromobenzene	50.3400	5.0	50.0000		101	78 - 115			
Bromochloromethane	48.4900	5.0	50.0000		97.0	66 - 121			
Bromodichloromethane	48.6800	5.0	50.0000		97.4	73 - 120			
Bromoform	48.8300	5.0	50.0000		97.7	68 - 124			
Bromomethane	35.3200	5.0	50.0000		70.6	26 - 163			
Carbon disulfide	38.4600	5.0	50.0000		76.9	43 - 142			
Carbon tetrachloride	45.1900	5.0	50.0000		90.4	67 - 130			
Chlorobenzene	48.5800	5.0	50.0000		97.2	82 - 114			
Chloroethane	36.8600	5.0	50.0000		73.7	40 - 151			
Chloroform	47.9500	5.0	50.0000		95.9	68 - 124			
Chloromethane	41.1600	5.0	50.0000		82.3	18 - 144			
cis-1,2-Dichloroethene	47.1400	5.0	50.0000		94.3	66 - 125			
cis-1,3-Dichloropropene	53.9600	5.0	50.0000		108	77 - 120			
Di-isopropyl ether	51.5700	5.0	50.0000		103	56 - 132			
Dibromochloromethane	49.2500	5.0	50.0000		98.5	76 - 118			
Dibromomethane	50.9900	5.0	50.0000		102	69 - 122			
Dichlorodifluoromethane	44.1400	5.0	50.0000		88.3	0 - 155			
Ethyl Acetate	517.390	50	500.000		103	31 - 137			
Ethyl Ether	488.580	50	500.000		97.7	47 - 150			
Ethyl tert-butyl ether	53.5600	5.0	50.0000		107	63 - 134			
Ethylbenzene	96.7100	5.0	100.000		96.7	79 - 115			
Freon-113	32.7400	5.0	50.0000		65.5	62 - 134			
Hexachlorobutadiene	52.2900	5.0	50.0000		105	71 - 121			
Isopropylbenzene	53.9900	5.0	50.0000		108	78 - 126			
m,p-Xylene	103.830	10	100.000		104	80 - 119			
Methylene chloride	52.0700	5.0	50.0000		104	56 - 129			
MTBE	51.0100	5.0	50.0000		102	61 - 124			
n-Butylbenzene	55.6100	5.0	50.0000		111	78 - 127			
n-Propylbenzene	54.1700	5.0	50.0000		108	77 - 128			
Naphthalene	72.7000	5.0	50.0000		145	61 - 141			L4
o-Xylene	102.070	5.0	100.000		102	81 - 116			
sec-Butylbenzene	54.4300	5.0	50.0000		109	81 - 125			
Styrene	51.2700	5.0	50.0000		103	82 - 120			
tert-Amyl methyl ether	52.4300	5.0	50.0000		105	52 - 149			
tert-Butanol	271.470	100	250.000		109	26 - 160			
tert-Butylbenzene	55.5700	5.0	50.0000		111	80 - 123			
Tetrachloroethene	46.1100	5.0	50.0000		92.2	75 - 123			
Toluene	94.8200	5.0	100.000		94.8	75 - 119			
trans-1,2-Dichloroethene	46.1000	5.0	50.0000		92.2	62 - 127			

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Report To : Anne Perez/Kristy Edblad
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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0298 - MSVOA_S (continued)									
LCS (B5C0298-BS1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
trans-1,3-Dichloropropene	52.0400	5.0	50.0000		104	68 - 121			
Trichloroethene	47.6400	5.0	50.0000		95.3	73 - 119			
Trichlorofluoromethane	38.0100	5.0	50.0000		76.0	47 - 157			
Vinyl acetate	497.620	50	500.000		99.5	20 - 136			
Vinyl chloride	39.9400	5.0	50.0000		79.9	27 - 147			
Surrogate: 1,2-Dichloroethane-d4	*49.88*		*50.0000*		*99.8*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.00*		*50.0000*		*106*	*20 - 173*			
Surrogate: Dibromofluoromethane	*51.48*		*50.0000*		*103*	*26 - 178*			
Surrogate: Toluene-d8	*52.70*		*50.0000*		*105*	*31 - 166*			
LCS Dup (B5C0298-BSD1)					Prepared: 3/12/2015 Analyzed: 3/12/2015				
1,1,1,2-Tetrachloroethane	50.0400	5.0	50.0000		100	74 - 117	1.57	20	
1,1,1-Trichloroethane	49.8000	5.0	50.0000		99.6	65 - 130	7.91	20	
1,1,2,2-Tetrachloroethane	47.9600	5.0	50.0000		95.9	63 - 123	5.87	20	
...2-Trichloroethane	49.0800	5.0	50.0000		98.2	66 - 122	1.50	20	
...ichloroethane	51.3900	5.0	50.0000		103	65 - 124	5.23	20	
...-Dichloroethene	32.9700	5.0	50.0000		65.9	60 - 130	4.81	20	
1,1-Dichloropropene	46.8000	5.0	50.0000		93.6	75 - 121	6.50	20	
1,2,3-Trichloropropane	48.9200	5.0	50.0000		97.8	62 - 126	4.94	20	
1,2,3-Trichlorobenzene	54.6600	5.0	50.0000		109	72 - 120	2.43	20	
1,2,4-Trichlorobenzene	56.7400	5.0	50.0000		113	75 - 121	3.50	20	
1,2,4-Trimethylbenzene	53.4700	5.0	50.0000		107	82 - 118	0.0187	20	
1,2-Dibromo-3-chloropropane	49.9500	10	50.0000		99.9	67 - 121	4.63	20	
1,2-Dibromoethane	51.1700	5.0	50.0000		102	69 - 123	2.67	20	
1,2-Dichlorobenzene	51.0700	5.0	50.0000		102	81 - 114	1.55	20	
1,2-Dichloroethane	50.8900	5.0	50.0000		102	71 - 119	2.77	20	
1,2-Dichloropropane	51.1000	5.0	50.0000		102	71 - 118	4.81	20	
1,3,5-Trimethylbenzene	53.0200	5.0	50.0000		106	81 - 120	0.113	20	
1,3-Dichlorobenzene	50.2300	5.0	50.0000		100	80 - 115	1.09	20	
1,3-Dichloropropane	51.4400	5.0	50.0000		103	77 - 117	0.562	20	
1,4-Dichlorobenzene	50.1700	5.0	50.0000		100	80 - 115	1.91	20	
2,2-Dichloropropane	52.8900	5.0	50.0000		106	58 - 141	9.84	20	
2-Chlorotoluene	52.1800	5.0	50.0000		104	78 - 120	0.191	20	
4-Chlorotoluene	52.7500	5.0	50.0000		106	79 - 119	0.0379	20	
4-Isopropyltoluene	55.2400	5.0	50.0000		110	81 - 125	0.289	20	
Benzene	91.9100	5.0	100.000		91.9	73 - 116	3.81	20	
Bromobenzene	48.7200	5.0	50.0000		97.4	78 - 115	3.27	20	
Bromochloromethane	50.2700	5.0	50.0000		101	66 - 121	3.60	20	
Bromodichloromethane	50.1500	5.0	50.0000		100	73 - 120	2.97	20	
Bromoform	47.7000	5.0	50.0000		95.4	68 - 124	2.34	20	
Bromomethane	41.2100	5.0	50.0000		82.4	26 - 163	15.4	20	
Carbon disulfide	39.5300	5.0	50.0000		79.1	43 - 142	2.74	20	
Carbon tetrachloride	45.7000	5.0	50.0000		91.4	67 - 130	1.12	20	
...obenzene	49.6900	5.0	50.0000		99.4	82 - 114	2.26	20	
...oroethane	36.9100	5.0	50.0000		73.8	40 - 151	0.136	20	
Chloroform	51.2600	5.0	50.0000		103	68 - 124	6.67	20	

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0298 - MSVOA_S (continued)									
LCS Dup (B5C0298-BSD1) - Continued					Prepared: 3/12/2015 Analyzed: 3/12/2015				
Chloromethane	45.1000	5.0	50.0000		90.2	18 - 144	9.14	20	
cis-1,2-Dichloroethene	52.2000	5.0	50.0000		104	66 - 125	10.2	20	
cis-1,3-Dichloropropene	57.1100	5.0	50.0000		114	77 - 120	5.67	20	
Di-isopropyl ether	54.4400	5.0	50.0000		109	56 - 132	5.41	20	
Dibromochloromethane	49.7700	5.0	50.0000		99.5	76 - 118	1.05	20	
Dibromomethane	48.1800	5.0	50.0000		96.4	69 - 122	5.67	20	
Dichlorodifluoromethane	46.4400	5.0	50.0000		92.9	0 - 155	5.08	20	
Ethyl Acetate	544.140	50	500.000		109	31 - 137	5.04	20	
Ethyl Ether	526.950	50	500.000		105	47 - 150	7.56	20	
Ethyl tert-butyl ether	56.9600	5.0	50.0000		114	63 - 134	6.15	20	
Ethylbenzene	99.4400	5.0	100.000		99.4	79 - 115	2.78	20	
Freon-113	34.2400	5.0	50.0000		68.5	62 - 134	4.48	20	
Hexachlorobutadiene	54.3000	5.0	50.0000		109	71 - 121	3.77	20	
Isopropylbenzene	53.3300	5.0	50.0000		107	78 - 126	1.23	20	
m,p-Xylene	106.310	10	100.000		106	80 - 119	2.36	20	
Methylene chloride	59.5700	5.0	50.0000		119	56 - 129	13.4	20	
MTBE	53.6100	5.0	50.0000		107	61 - 124	4.97	20	
n-Butylbenzene	56.1500	5.0	50.0000		112	78 - 127	0.966	20	
n-Propylbenzene	53.9400	5.0	50.0000		108	77 - 128	0.425	20	
Naphthalene	73.2900	5.0	50.0000		147	61 - 141	0.808	20	L4
o-Xylene	106.010	5.0	100.000		106	81 - 116	3.79	20	
sec-Butylbenzene	53.9300	5.0	50.0000		108	81 - 125	0.923	20	
Styrene	53.2400	5.0	50.0000		106	82 - 120	3.77	20	
tert-Amyl methyl ether	55.3500	5.0	50.0000		111	52 - 149	5.42	20	
tert-Butanol	288.120	100	250.000		115	26 - 160	5.95	20	
tert-Butylbenzene	54.2300	5.0	50.0000		108	80 - 123	2.44	20	
Tetrachloroethene	47.5300	5.0	50.0000		95.1	75 - 123	3.03	20	
Toluene	99.8300	5.0	100.000		99.8	75 - 119	5.15	20	
trans-1,2-Dichloroethene	49.2100	5.0	50.0000		98.4	62 - 127	6.53	20	
trans-1,3-Dichloropropene	53.8100	5.0	50.0000		108	68 - 121	3.34	20	
Trichloroethene	50.1500	5.0	50.0000		100	73 - 119	5.13	20	
Trichlorofluoromethane	40.4800	5.0	50.0000		81.0	47 - 157	6.29	20	
Vinyl acetate	521.130	50	500.000		104	20 - 136	4.62	20	
Vinyl chloride	44.5600	5.0	50.0000		89.1	27 - 147	10.9	20	
Surrogate: 1,2-Dichloroethane-d4	*58.83*		*50.0000*		*118*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*53.27*		*50.0000*		*107*	*20 - 173*			
Surrogate: Dibromofluoromethane	*55.71*		*50.0000*		*111*	*26 - 178*			
Surrogate: Toluene-d8	*54.19*		*50.0000*		*108*	*31 - 166*			
Batch B5C0321 - MSVOA_S									
Blank (B5C0321-BLK1)					Prepared: 3/16/2015 Analyzed: 3/16/2015				
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
Blank (B5C0321-BLK1) - Continued					Prepared: 3/16/2015 Analyzed: 3/16/2015				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
...ichloropropane	ND	5.0			NR				
...nlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
...opylbenzene	ND	5.0			NR				
...Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
Blank (B5C0321-BLK1) - Continued					Prepared: 3/16/2015 Analyzed: 3/16/2015				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*49.11*		*50.0000*		*98.2*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*45.87*		*50.0000*		*91.7*	*20 - 173*			
Surrogate: Dibromofluoromethane	*53.69*		*50.0000*		*107*	*26 - 178*			
Surrogate: Toluene-d8	*50.45*		*50.0000*		*101*	*31 - 166*			
LCS (B5C0321-BS1)					Prepared: 3/16/2015 Analyzed: 3/16/2015				
1,1,1,2-Tetrachloroethane	50.3300	5.0	50.0000		101	74 - 117			
1,1,1-Trichloroethane	51.5500	5.0	50.0000		103	65 - 130			
1,1,2,2-Tetrachloroethane	49.1400	5.0	50.0000		98.3	63 - 123			
1,1,2-Trichloroethane	46.9900	5.0	50.0000		94.0	66 - 122			
1,1-Dichloroethane	52.5500	5.0	50.0000		105	65 - 124			
1,1-Dichloroethene	70.1000	5.0	50.0000		140	60 - 130			L4
1,1-Dichloropropene	50.0200	5.0	50.0000		100	75 - 121			
1,2,3-Trichloropropane	48.4800	5.0	50.0000		97.0	62 - 126			
1,2,3-Trichlorobenzene	41.5100	5.0	50.0000		83.0	72 - 120			
1,2,4-Trichlorobenzene	44.1500	5.0	50.0000		88.3	75 - 121			
1,2,4-Trimethylbenzene	55.3500	5.0	50.0000		111	82 - 118			
1,2-Dibromo-3-chloropropane	44.1500	10	50.0000		88.3	67 - 121			
1,2-Dibromoethane	47.1600	5.0	50.0000		94.3	69 - 123			
1,2-Dichlorobenzene	51.5900	5.0	50.0000		103	81 - 114			
1,2-Dichloroethane	49.1400	5.0	50.0000		98.3	71 - 119			
1,2-Dichloropropane	49.1600	5.0	50.0000		98.3	71 - 118			
1,3,5-Trimethylbenzene	55.3000	5.0	50.0000		111	81 - 120			
1,3-Dichlorobenzene	54.0600	5.0	50.0000		108	80 - 115			
1,3-Dichloropropane	48.9600	5.0	50.0000		97.9	77 - 117			
1,4-Dichlorobenzene	53.0100	5.0	50.0000		106	80 - 115			
2,2-Dichloropropane	54.5100	5.0	50.0000		109	58 - 141			
2-Chlorotoluene	55.2700	5.0	50.0000		111	78 - 120			
4-Chlorotoluene	55.6800	5.0	50.0000		111	79 - 119			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
LCS (B5C0321-BS1) - Continued					Prepared: 3/16/2015 Analyzed: 3/16/2015				
4-Isopropyltoluene	56.6600	5.0	50.0000		113	81 - 125			
Benzene	95.7000	5.0	100.000		95.7	73 - 116			
Bromobenzene	52.7700	5.0	50.0000		106	78 - 115			
Bromochloromethane	51.0100	5.0	50.0000		102	66 - 121			
Bromodichloromethane	49.7500	5.0	50.0000		99.5	73 - 120			
Bromoform	47.8500	5.0	50.0000		95.7	68 - 124			
Bromomethane	48.5200	5.0	50.0000		97.0	26 - 163			
Carbon disulfide	52.6500	5.0	50.0000		105	43 - 142			
Carbon tetrachloride	52.5300	5.0	50.0000		105	67 - 130			
Chlorobenzene	51.6400	5.0	50.0000		103	82 - 114			
Chloroethane	51.3700	5.0	50.0000		103	40 - 151			
Chloroform	52.9100	5.0	50.0000		106	68 - 124			
Chloromethane	41.0500	5.0	50.0000		82.1	18 - 144			
cis-1,2-Dichloroethene	52.7400	5.0	50.0000		105	66 - 125			
...1,3-Dichloropropene	52.1000	5.0	50.0000		104	77 - 120			
...propyl ether	48.2600	5.0	50.0000		96.5	56 - 132			
...bromochloromethane	48.0800	5.0	50.0000		96.2	76 - 118			
Dibromomethane	49.7800	5.0	50.0000		99.6	69 - 122			
Dichlorodifluoromethane	43.6100	5.0	50.0000		87.2	0 - 155			
Ethyl Acetate	444.110	50	500.000		88.8	31 - 137			
Ethyl Ether	496.840	50	500.000		99.4	47 - 150			
Ethyl tert-butyl ether	48.5100	5.0	50.0000		97.0	63 - 134			
Ethylbenzene	101.880	5.0	100.000		102	79 - 115			
Freon-113	56.9200	5.0	50.0000		114	62 - 134			
Hexachlorobutadiene	49.1400	5.0	50.0000		98.3	71 - 121			
Isopropylbenzene	56.9700	5.0	50.0000		114	78 - 126			
m,p-Xylene	108.450	10	100.000		108	80 - 119			
Methylene chloride	59.1200	5.0	50.0000		118	56 - 129			
MTBE	44.5500	5.0	50.0000		89.1	61 - 124			
n-Butylbenzene	56.2700	5.0	50.0000		113	78 - 127			
n-Propylbenzene	57.7400	5.0	50.0000		115	77 - 128			
Naphthalene	39.0800	5.0	50.0000		78.2	61 - 141			
o-Xylene	101.240	5.0	100.000		101	81 - 116			
sec-Butylbenzene	56.8700	5.0	50.0000		114	81 - 125			
Styrene	54.4700	5.0	50.0000		109	82 - 120			
tert-Amyl methyl ether	45.2000	5.0	50.0000		90.4	52 - 149			
tert-Butanol	191.010	100	250.000		76.4	26 - 160			
tert-Butylbenzene	57.0300	5.0	50.0000		114	80 - 123			
Tetrachloroethene	52.2900	5.0	50.0000		105	75 - 123			
Toluene	98.6300	5.0	100.000		98.6	75 - 119			
trans-1,2-Dichloroethene	49.8300	5.0	50.0000		99.7	62 - 127			
trans-1,3-Dichloropropene	52.0400	5.0	50.0000		104	68 - 121			
Trichloroethene	51.1800	5.0	50.0000		102	73 - 119			
...orofluoromethane	52.4900	5.0	50.0000		105	47 - 157			
...yl acetate	434.150	50	500.000		86.8	20 - 136			
Vinyl chloride	46.2900	5.0	50.0000		92.6	27 - 147			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
LCS (B5C0321-BS1) - Continued					Prepared: 3/16/2015 Analyzed: 3/16/2015				
Surrogate: 1,2-Dichloroethane-d4	*48.92*		*50.0000*		*97.8*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*50.81*		*50.0000*		*102*	*20 - 173*			
Surrogate: Dibromofluoromethane	*54.75*		*50.0000*		*110*	*26 - 178*			
Surrogate: Toluene-d8	*51.71*		*50.0000*		*103*	*31 - 166*			
Duplicate (B5C0321-DUP1)		**Source: 1500918-03**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
1,1,1,2-Tetrachloroethane	ND	5.0		ND	NR			20	
1,1,1-Trichloroethane	ND	5.0		ND	NR			20	
1,1,2,2-Tetrachloroethane	ND	5.0		ND	NR			20	
1,1,2-Trichloroethane	ND	5.0		ND	NR			20	
1,1-Dichloroethane	ND	5.0		ND	NR			20	
1,1-Dichloroethene	ND	5.0		ND	NR			20	
1,1-Dichloropropene	ND	5.0		ND	NR			20	
1,2,3-Trichloropropane	ND	5.0		ND	NR			20	
1,2,3-Trichlorobenzene	ND	5.0		ND	NR			20	
1,2,4-Trichlorobenzene	ND	5.0		ND	NR			20	
1,2,4-Trimethylbenzene	ND	5.0		ND	NR			20	
1,2-Dibromo-3-chloropropane	ND	10		ND	NR			20	
1,2-Dibromoethane	ND	5.0		ND	NR			20	
1,2-Dichlorobenzene	ND	5.0		ND	NR			20	
1,2-Dichloroethane	ND	5.0		ND	NR			20	
1,2-Dichloropropane	ND	5.0		ND	NR			20	
1,3,5-Trimethylbenzene	ND	5.0		ND	NR			20	
1,3-Dichlorobenzene	ND	5.0		ND	NR			20	
1,3-Dichloropropane	ND	5.0		ND	NR			20	
1,4-Dichlorobenzene	ND	5.0		ND	NR			20	
2,2-Dichloropropane	ND	5.0		ND	NR			20	
2-Chlorotoluene	ND	5.0		ND	NR			20	
4-Chlorotoluene	ND	5.0		ND	NR			20	
4-Isopropyltoluene	ND	5.0		ND	NR			20	
Benzene	ND	5.0		ND	NR			20	
Bromobenzene	ND	5.0		ND	NR			20	
Bromochloromethane	ND	5.0		ND	NR			20	
Bromodichloromethane	ND	5.0		ND	NR			20	
Bromoform	ND	5.0		ND	NR			20	
Bromomethane	ND	5.0		ND	NR			20	
Carbon disulfide	ND	5.0		ND	NR			20	
Carbon tetrachloride	ND	5.0		ND	NR			20	
Chlorobenzene	ND	5.0		ND	NR			20	
Chloroethane	ND	5.0		ND	NR			20	
Chloroform	ND	5.0		ND	NR			20	
Chloromethane	ND	5.0		ND	NR			20	
cis-1,2-Dichloroethene	ND	5.0		ND	NR			20	
cis-1,3-Dichloropropene	ND	5.0		ND	NR			20	
Di-isopropyl ether	ND	5.0		ND	NR			20	
Dibromochloromethane	ND	5.0		ND	NR			20	
Dibromomethane	ND	5.0		ND	NR			20	

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Report To : Anne Perez/Kristy Edblad
Reported : 03/20/2015

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
Duplicate (B5C0321-DUP1) - Continued		**Source: 1500918-03**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
Dichlorodifluoromethane	ND	5.0		ND	NR			20	
Ethyl Acetate	ND	50		ND	NR			20	
Ethyl Ether	ND	50		ND	NR			20	
Ethyl tert-butyl ether	ND	5.0		ND	NR			20	
Ethylbenzene	ND	5.0		ND	NR			20	
Freon-113	ND	5.0		ND	NR			20	
Hexachlorobutadiene	ND	5.0		ND	NR			20	
Isopropylbenzene	ND	5.0		ND	NR			20	
m,p-Xylene	ND	10		ND	NR			20	
Methylene chloride	ND	5.0		ND	NR			20	
MTBE	ND	5.0		ND	NR			20	
n-Butylbenzene	ND	5.0		ND	NR			20	
n-Propylbenzene	ND	5.0		ND	NR			20	
Naphthalene	ND	5.0		ND	NR			20	
o-Xylene	ND	5.0		ND	NR			20	
...atylbenzene	ND	5.0		ND	NR			20	
...ene	ND	5.0		ND	NR			20	
tert-Amyl methyl ether	ND	5.0		ND	NR			20	
tert-Butanol	ND	100		ND	NR			20	
tert-Butylbenzene	ND	5.0		ND	NR			20	
Tetrachloroethene	ND	5.0		ND	NR			20	
Toluene	ND	5.0		ND	NR			20	
trans-1,2-Dichloroethene	ND	5.0		ND	NR			20	
trans-1,3-Dichloropropene	ND	5.0		ND	NR			20	
Trichloroethene	ND	5.0		ND	NR			20	
Trichlorofluoromethane	ND	5.0		ND	NR			20	
Vinyl acetate	ND	50		ND	NR			20	
Vinyl chloride	ND	5.0		ND	NR			20	
Surrogate: 1,2-Dichloroethane-d4	*52.37*		*50.0000*		*105*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*45.44*		*50.0000*		*90.9*	*20 - 173*			
Surrogate: Dibromofluoromethane	*51.33*		*50.0000*		*103*	*26 - 178*			
Surrogate: Toluene-d8	*49.51*		*50.0000*		*99.0*	*31 - 166*			
Matrix Spike (B5C0321-MS1)		**Source: 1500917-03**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
1,1,1,2-Tetrachloroethane	49.4400	5.0	50.0000	ND	98.9	45 - 122			
1,1,1-Trichloroethane	53.8300	5.0	50.0000	ND	108	46 - 131			
1,1,2,2-Tetrachloroethane	49.5500	5.0	50.0000	ND	99.1	34 - 133			
1,1,2-Trichloroethane	48.2900	5.0	50.0000	ND	96.6	40 - 133			
1,1-Dichloroethane	54.4600	5.0	50.0000	ND	109	50 - 120			
1,1-Dichloroethene	65.8600	5.0	50.0000	ND	132	42 - 130			M1
1,1-Dichloropropene	48.6600	5.0	50.0000	ND	97.3	49 - 125			
1,2,3-Trichloropropane	50.9700	5.0	50.0000	ND	102	42 - 130			
1,2,3-Trichlorobenzene	37.7700	5.0	50.0000	ND	75.5	2 - 136			
...Trichlorobenzene	39.6600	5.0	50.0000	ND	79.3	6 - 137			
...-Trimethylbenzene	50.0800	5.0	50.0000	ND	100	37 - 129			
1,2-Dibromo-3-chloropropane	47.9300	10	50.0000	ND	95.9	36 - 135			

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
Matrix Spike (B5C0321-MS1) - Continued		Source: 1500917-03			Prepared: 3/16/2015 Analyzed: 3/16/2015				
1,2-Dibromoethane	50.1600	5.0	50.0000	ND	100	43 - 129			
1,2-Dichlorobenzene	48.7200	5.0	50.0000	ND	97.4	31 - 129			
1,2-Dichloroethane	50.0100	5.0	50.0000	ND	100	50 - 122			
1,2-Dichloropropane	48.6800	5.0	50.0000	ND	97.4	51 - 119			
1,3,5-Trimethylbenzene	50.5900	5.0	50.0000	ND	101	38 - 130			
1,3-Dichlorobenzene	49.6500	5.0	50.0000	ND	99.3	31 - 128			
1,3-Dichloropropane	50.4700	5.0	50.0000	ND	101	52 - 122			
1,4-Dichlorobenzene	50.1000	5.0	50.0000	ND	100	31 - 128			
2,2-Dichloropropane	55.7700	5.0	50.0000	ND	112	42 - 140			
2-Chlorotoluene	51.4500	5.0	50.0000	ND	103	38 - 129			
4-Chlorotoluene	51.3200	5.0	50.0000	ND	103	38 - 128			
4-Isopropyltoluene	51.3600	5.0	50.0000	ND	103	31 - 137			
Benzene	93.2500	5.0	100.000	ND	93.2	51 - 117			
Bromobenzene	50.6200	5.0	50.0000	ND	101	41 - 125			
Bromochloromethane	53.3100	5.0	50.0000	ND	107	47 - 123			
Bromodichloromethane	50.0100	5.0	50.0000	ND	100	50 - 122			
Bromoform	50.0900	5.0	50.0000	ND	100	39 - 131			
Bromomethane	52.0200	5.0	50.0000	ND	104	10 - 154			
Carbon disulfide	51.2800	5.0	50.0000	ND	103	24 - 138			
Carbon tetrachloride	52.2100	5.0	50.0000	ND	104	44 - 131			
Chlorobenzene	48.3300	5.0	50.0000	ND	96.7	46 - 123			
Chloroethane	54.1400	5.0	50.0000	ND	108	27 - 143			
Chloroform	54.5800	5.0	50.0000	ND	109	50 - 124			
Chloromethane	40.9900	5.0	50.0000	ND	82.0	8 - 139			
cis-1,2-Dichloroethene	54.7700	5.0	50.0000	ND	110	48 - 125			
cis-1,3-Dichloropropene	52.8400	5.0	50.0000	ND	106	51 - 123			
Di-isopropyl ether	50.3600	5.0	50.0000	ND	101	45 - 125			
Dibromochloromethane	49.6900	5.0	50.0000	ND	99.4	48 - 124			
Dibromomethane	49.9100	5.0	50.0000	ND	99.8	48 - 124			
Dichlorodifluoromethane	45.6300	5.0	50.0000	ND	91.3	0 - 150			
Ethyl Acetate	505.860	50	500.000	ND	101	0 - 140			
Ethyl Ether	541.850	50	500.000	ND	108	36 - 142			
Ethyl tert-butyl ether	52.0300	5.0	50.0000	ND	104	46 - 133			
Ethylbenzene	96.7700	5.0	100.000	ND	96.8	46 - 123			
Freon-113	56.0900	5.0	50.0000	ND	112	38 - 137			
Hexachlorobutadiene	39.9300	5.0	50.0000	ND	79.9	5 - 132			
Isopropylbenzene	52.7700	5.0	50.0000	ND	106	43 - 132			
m,p-Xylene	100.710	10	100.000	ND	101	45 - 128			
Methylene chloride	59.1300	5.0	50.0000	ND	118	37 - 126			
MTBE	49.3200	5.0	50.0000	ND	98.6	46 - 125			
n-Butylbenzene	49.7300	5.0	50.0000	ND	99.5	24 - 138			
n-Propylbenzene	52.9900	5.0	50.0000	ND	106	40 - 133			
Naphthalene	38.5000	5.0	50.0000	ND	77.0	10 - 149			
o-Xylene	95.0800	5.0	100.000	ND	95.1	45 - 125			
sec-Butylbenzene	51.8800	5.0	50.0000	ND	104	33 - 136			
Styrene	50.8100	5.0	50.0000	ND	102	43 - 128			
tert-Amyl methyl ether	49.8800	5.0	50.0000	ND	99.8	35 - 147			

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Report To : Anne Perez/Kristy Edblad
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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
Matrix Spike (B5C0321-MS1) - Continued		**Source: 1500917-03**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
tert-Butanol	231.340	100	250.000	ND	92.5	0 - 208			
tert-Butylbenzene	52.7900	5.0	50.0000	ND	106	36 - 133			
Tetrachloroethene	49.8000	5.0	50.0000	ND	99.6	41 - 129			
Toluene	94.8200	5.0	100.000	ND	94.8	49 - 124			
trans-1,2-Dichloroethene	50.7200	5.0	50.0000	ND	101	44 - 126			
trans-1,3-Dichloropropene	53.1800	5.0	50.0000	ND	106	42 - 125			
Trichloroethene	52.3500	5.0	50.0000	ND	105	38 - 139			
Trichlorofluoromethane	52.8400	5.0	50.0000	ND	106	30 - 157			
Vinyl acetate	417.210	50	500.000	ND	83.4	0 - 132			
Vinyl chloride	46.4800	5.0	50.0000	ND	93.0	19 - 142			
Surrogate: 1,2-Dichloroethane-d4	*61.46*		*50.0000*		*123*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*50.27*		*50.0000*		*101*	*20 - 173*			
Surrogate: Dibromofluoromethane	*60.85*		*50.0000*		*122*	*26 - 178*			
Surrogate: Toluene-d8	*52.60*		*50.0000*		*105*	*31 - 166*			
...ix Spike Dup (B5C0321-MSD1)		**Source: 1500917-03**			Prepared: 3/16/2015 Analyzed: 3/16/2015				
1,1,1,2-Tetrachloroethane	44.4500	5.0	50.0000	ND	88.9	45 - 122	10.6	20	
1,1,1-Trichloroethane	47.7900	5.0	50.0000	ND	95.6	46 - 131	11.9	20	
1,1,2,2-Tetrachloroethane	44.6800	5.0	50.0000	ND	89.4	34 - 133	10.3	20	
1,1,2-Trichloroethane	44.2900	5.0	50.0000	ND	88.6	40 - 133	8.64	20	
1,1-Dichloroethane	48.9600	5.0	50.0000	ND	97.9	50 - 120	10.6	20	
1,1-Dichloroethene	50.2900	5.0	50.0000	ND	101	42 - 130	26.8	20	R
1,1-Dichloropropene	44.5100	5.0	50.0000	ND	89.0	49 - 125	8.91	20	
1,2,3-Trichloropropane	46.5300	5.0	50.0000	ND	93.1	42 - 130	9.11	20	
1,2,3-Trichlorobenzene	32.7400	5.0	50.0000	ND	65.5	2 - 136	14.3	20	
1,2,4-Trichlorobenzene	34.8100	5.0	50.0000	ND	69.6	6 - 137	13.0	20	
1,2,4-Trimethylbenzene	44.4700	5.0	50.0000	ND	88.9	37 - 129	11.9	20	
1,2-Dibromo-3-chloropropane	44.4000	10	50.0000	ND	88.8	36 - 135	7.65	20	
1,2-Dibromoethane	44.3800	5.0	50.0000	ND	88.8	43 - 129	12.2	20	
1,2-Dichlorobenzene	43.7200	5.0	50.0000	ND	87.4	31 - 129	10.8	20	
1,2-Dichloroethane	46.2600	5.0	50.0000	ND	92.5	50 - 122	7.79	20	
1,2-Dichloropropane	44.8900	5.0	50.0000	ND	89.8	51 - 119	8.10	20	
1,3,5-Trimethylbenzene	46.0100	5.0	50.0000	ND	92.0	38 - 130	9.48	20	
1,3-Dichlorobenzene	45.4100	5.0	50.0000	ND	90.8	31 - 128	8.92	20	
1,3-Dichloropropane	46.1100	5.0	50.0000	ND	92.2	52 - 122	9.03	20	
1,4-Dichlorobenzene	44.9500	5.0	50.0000	ND	89.9	31 - 128	10.8	20	
2,2-Dichloropropane	49.4000	5.0	50.0000	ND	98.8	42 - 140	12.1	20	
2-Chlorotoluene	46.4100	5.0	50.0000	ND	92.8	38 - 129	10.3	20	
4-Chlorotoluene	46.6200	5.0	50.0000	ND	93.2	38 - 128	9.60	20	
4-Isopropyltoluene	45.8400	5.0	50.0000	ND	91.7	31 - 137	11.4	20	
Benzene	85.3900	5.0	100.000	ND	85.4	51 - 117	8.80	20	
Bromobenzene	45.7200	5.0	50.0000	ND	91.4	41 - 125	10.2	20	
Bromochloromethane	48.0400	5.0	50.0000	ND	96.1	47 - 123	10.4	20	
...dichloromethane	45.0000	5.0	50.0000	ND	90.0	50 - 122	10.5	20	
...noform	46.1100	5.0	50.0000	ND	92.2	39 - 131	8.27	20	
Bromomethane	46.4900	5.0	50.0000	ND	93.0	10 - 154	11.2	20	

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Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B5C0321 - MSVOA_S (continued)									
Matrix Spike Dup (B5C0321-MSD1) - Continued		Source: 1500917-03			Prepared: 3/16/2015 Analyzed: 3/16/2015				
Carbon disulfide	45.0100	5.0	50.0000	ND	90.0	24 - 138	13.0	20	
Carbon tetrachloride	47.2400	5.0	50.0000	ND	94.5	44 - 131	9.99	20	
Chlorobenzene	44.5600	5.0	50.0000	ND	89.1	46 - 123	8.12	20	
Chloroethane	48.3900	5.0	50.0000	ND	96.8	27 - 143	11.2	20	
Chloroform	48.4500	5.0	50.0000	ND	96.9	50 - 124	11.9	20	
Chloromethane	36.8500	5.0	50.0000	ND	73.7	8 - 139	10.6	20	
cis-1,2-Dichloroethene	48.2900	5.0	50.0000	ND	96.6	48 - 125	12.6	20	
cis-1,3-Dichloropropene	47.3800	5.0	50.0000	ND	94.8	51 - 123	10.9	20	
Di-isopropyl ether	44.9700	5.0	50.0000	ND	89.9	45 - 125	11.3	20	
Dibromochloromethane	45.2500	5.0	50.0000	ND	90.5	48 - 124	9.35	20	
Dibromomethane	45.9400	5.0	50.0000	ND	91.9	48 - 124	8.28	20	
Dichlorodifluoromethane	40.1700	5.0	50.0000	ND	80.3	0 - 150	12.7	20	
Ethyl Acetate	446.020	50	500.000	ND	89.2	0 - 140	12.6	20	
Ethyl Ether	493.510	50	500.000	ND	98.7	36 - 142	9.34	20	
Ethyl tert-butyl ether	46.2300	5.0	50.0000	ND	92.5	46 - 133	11.8	20	
Ethylbenzene	88.5700	5.0	100.000	ND	88.6	46 - 123	8.85	20	
Freon-113	45.6900	5.0	50.0000	ND	91.4	38 - 137	20.4	20	R
Hexachlorobutadiene	33.6600	5.0	50.0000	ND	67.3	5 - 132	17.0	20	
Isopropylbenzene	48.1600	5.0	50.0000	ND	96.3	43 - 132	9.14	20	
m,p-Xylene	91.2400	10	100.000	ND	91.2	45 - 128	9.87	20	
Methylene chloride	52.1800	5.0	50.0000	ND	104	37 - 126	12.5	20	
MTBE	43.7200	5.0	50.0000	ND	87.4	46 - 125	12.0	20	
n-Butylbenzene	43.3100	5.0	50.0000	ND	86.6	24 - 138	13.8	20	
n-Propylbenzene	48.0600	5.0	50.0000	ND	96.1	40 - 133	9.76	20	
Naphthalene	33.5900	5.0	50.0000	ND	67.2	10 - 149	13.6	20	
o-Xylene	87.3000	5.0	100.000	ND	87.3	45 - 125	8.53	20	
sec-Butylbenzene	46.2300	5.0	50.0000	ND	92.5	33 - 136	11.5	20	
Styrene	46.6400	5.0	50.0000	ND	93.3	43 - 128	8.56	20	
tert-Amyl methyl ether	43.6300	5.0	50.0000	ND	87.3	35 - 147	13.4	20	
tert-Butanol	210.360	100	250.000	ND	84.1	0 - 208	9.50	20	
tert-Butylbenzene	47.4900	5.0	50.0000	ND	95.0	36 - 133	10.6	20	
Tetrachloroethene	44.8200	5.0	50.0000	ND	89.6	41 - 129	10.5	20	
Toluene	86.6600	5.0	100.000	ND	86.7	49 - 124	8.99	20	
trans-1,2-Dichloroethene	44.5800	5.0	50.0000	ND	89.2	44 - 126	12.9	20	
trans-1,3-Dichloropropene	48.7400	5.0	50.0000	ND	97.5	42 - 125	8.71	20	
Trichloroethene	48.1100	5.0	50.0000	ND	96.2	38 - 139	8.44	20	
Trichlorofluoromethane	47.8600	5.0	50.0000	ND	95.7	30 - 157	9.89	20	
Vinyl acetate	314.170	50	500.000	ND	62.8	0 - 132	28.2	20	R
Vinyl chloride	42.7800	5.0	50.0000	ND	85.6	19 - 142	8.29	20	
Surrogate: 1,2-Dichloroethane-d4	*53.59*		*50.0000*		*107*	*20 - 189*			
Surrogate: 4-Bromofluorobenzene	*49.29*		*50.0000*		*98.6*	*20 - 173*			
Surrogate: Dibromofluoromethane	*57.47*		*50.0000*		*115*	*26 - 178*			
Surrogate: Toluene-d8	*51.38*		*50.0000*		*103*	*31 - 166*			

Certificate of Analysis

...utec	Project Number : 185832023, 200.0003, Caltrans 07A3322-23
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Thousand Oaks , CA 91361	Reported : 03/20/2015

Notes and Definitions

S4	Surrogate was diluted out.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
L4	Laboratory Control Sample outside of control limit but within Marginal Exceedance (ME) limit.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
D6	Sample required dilution due to high concentration of target analyte.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

American Environmental Testing Laboratory Inc.
2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755-5225

Number of Pages	5
Date Received	03/12/2015
Date Reported	03/20/2015

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76278	03/12/2015	ATL

Project ID: 1500894
Project Name: PO# SC09417

Enclosed please find results of analyses of 2 water and 2 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

American Environmental Testing Laboratory Inc.
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Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attention: Rachelle Arada

Project ID: 1500894
Date Received 03/12/2015
Date Reported 03/20/2015

Job Number	Order Date	Client
76278	03/12/2015	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 4 samples with the following specification on 03/12/2015.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76278.02	1500984-11	03/10/2015	Aqueous	1
76278.04	1500984-17	03/10/2015	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
8151A	03/19/2015	2	Normal	ug/L

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76278.01	1500894-05	03/10/2015	Soil	1
76278.03	1500894-12	03/10/2015	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8151A)	03/19/2015	2	Normal	ug/Kg

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

American Environmental Testing Laboratory Inc.

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 2

Project ID: 1500894
Project Name: PO# SC09417

AETL Job Number	Submitted	Client
76278	03/12/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 031715

Our Lab I.D.			Method Blank	76278.01	76278.03		
Client Sample I.D.				1500894-05	1500894-12		
Date Sampled				03/10/2015	03/10/2015		
Date Prepared			03/17/2015	03/17/2015	03/17/2015		
Preparation Method			3550B	3550B	3550B		
Date Analyzed			03/18/2015	03/18/2015	03/18/2015		
Matrix			Soil	Soil	Soil		
Units			ug/Kg	ug/Kg	ug/Kg		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Acifluorfen	20	20	ND	ND	ND		
Bentazon	10	10	ND	ND	ND		
Chloramben	10	10	ND	ND	ND		
2,4-D	10	10	ND	ND	ND		
Dalapon	20	20	ND	ND	ND		
2,4-DB	10	10	ND	ND	ND		
DCPA diacid	20	20	ND	ND	ND		
Dicamba	10	10	ND	ND	ND		
3,5-Dichlorobenzoic acid	10	10	ND	ND	ND		
Dichloroprop	10	10	ND	ND	ND		
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND	ND		
MCPA	2000	2000	ND	ND	ND		
MCPP	2000	2000	ND	ND	ND		
4-Nitrophenol	10	10	ND	ND	ND		
Pentachlorophenol (PCP)	10	10	ND	ND	ND		
Picloram	10	10	ND	ND	ND		
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND	ND		
2,4,5-TP	10	10	ND	ND	ND		
Our Lab I.D.			Method Blank	76278.01	76278.03		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
DCAA	40-150		59.7	86.5	67.1		

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 3

Project ID: 1500894
Project Name: PO# SC09417

AETL Job Number	Submitted	Client
76278	03/12/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 031715

Our Lab I.D.			Method Blank	76278.02	76278.04		
Client Sample I.D.				1500984-11	1500984-17		
Date Sampled				03/10/2015	03/10/2015		
Date Prepared			03/17/2015	03/17/2015	03/17/2015		
Preparation Method			3510C	3510C	3510C		
Date Analyzed			03/18/2015	03/18/2015	03/18/2015		
Matrix			Aqueous	Aqueous	Aqueous		
Units			ug/L	ug/L	ug/L		
Dilution Factor			1	1	1		
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**		
Acifluorfen	1.0	1.0	ND	ND	ND		
Bentazon	0.5	0.5	ND	ND	ND		
Chloramben	0.5	0.5	ND	ND	ND		
2,4-D	0.5	0.5	ND	ND	ND		
Dalapon	1.0	1.0	ND	ND	ND		
2,4-DB	0.5	0.5	ND	ND	ND		
DCPA diacid	1.0	1.0	ND	ND	ND		
Dicamba	0.5	0.5	ND	ND	ND		
3,5-Dichlorobenzoic acid	0.5	0.5	ND	ND	ND		
Dichloroprop	0.5	0.5	ND	ND	ND		
Dinoseb	0.5	0.5	ND	ND	ND		
MCPA	100	100	ND	ND	ND		
MCPP	100	100	ND	ND	ND		
4-Nitrophenol	0.5	0.5	ND	ND	ND		
Pentachlorophenol (PCP)	0.5	0.5	ND	ND	ND		
Picloram	0.5	0.5	ND	ND	ND		
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.5	0.5	ND	ND	ND		
2,4,5-TP	0.5	0.5	ND	ND	ND		
Our Lab I.D.			Method Blank	76278.02	76278.04		
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**	**% Rec.**		
DCAA	50-150		61.7	109	66.2		

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 4

Project ID: 1500894
Project Name: PO# SC09417

AETL Job Number	Submitted	Client
76278	03/12/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 031715; LCS: Clean Water; LCS Prepared: 03/17/2015; LCS Analyzed: 03/18/2015; Units: ug/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	35.6	71.2	50.0	64.0	128	57.0	50-150	<50	
Dalapon	50.0	47.8	95.6	50.0	48.2	96.4	<1	50-150	<50	
2,4-DB	50.0	39.7	79.4	50.0	31.1	62.2	24.3	50-150	<50	
Dicamba	50.0	28.8	57.6	50.0	41.6	83.2	36.4	50-150	<50	
Dinoseb	50.0	36.2	72.4	50.0	27.9	55.8	25.9	50-150	<50	
MCPA	5,000	5,450	109	5,000	4,710	94.1	14.7	50-150	<50	
MCPP	5,000	4,610	92.2	5,000	7,050	141	41.9	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	27.5	55.0	50.0	28.8	57.6	4.6	50-150	<50	
2,4,5-TP	50.0	26.1	52.2	50.0	32.5	65.0	21.8	50-150	<50	
Surrogates										
DCAA	100	84.9	84.9	100	95.7	95.7	12.0	50-150	<20	

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 5

Project ID: 1500894
Project Name: PO# SC09417

AETL Job Number	Submitted	Client
76278	03/12/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 031715; Dup or Spiked Sample: 75278.03; LCS: Clean Sand; QC Prepared: 03/17/2015; QC Analyzed: 03/18/2015; Units: ug/Kg

Analytes	Sample Result	MS Concen	MS Recov	MS % REC	MS DUP Concen	MS DUP Recov	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit
2,4-D	0.00	50.0	35.8	71.6	50.0	29.3	58.6	20.0	50-150	<40
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	0.00	50.0	32.0	64.0	50.0	29.1	58.2	9.5	50-150	<40
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.00	50.0	26.1	52.2	50.0	25.6	51.1	2.1	50-150	<40
Surrogates										
DCAA	0.00	100	63.5	63.5	100	66.2	66.2	4.2	50-150	<40

QC Batch No: 031715; Dup or Spiked Sample: 75278.03; LCS: Clean Sand; QC Prepared: 03/17/2015; QC Analyzed: 03/18/2015; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS/LCSD % Limit						
2,4-D	50.0	26.0	52.0	50-150						
Dalapon	50.0	25.8	51.6	50-150						
2,4-DB	50.0	31.3	62.6	50-150						
Dicamba	50.0	25.0	50.0	50-150						
Dichloroprop	50.0	26.7	53.4	50-150						
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	26.1	52.2	50-150						
MCPA	5,000	3,340	66.8	50-150						
MCPP	5,000	5,950	119	50-150						
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	29.1	58.2	50-150						
2,4,5-TP	50.0	25.2	50.4	50-150						
Surrogates										
DCAA	100	62.8	62.8	50-150						

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY LABORATORIES

76278

SUBCONTRACT ORDER

Work Order: 1500894

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09417- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500894-05 / **1278-165-0**		**Soil**	**03/10/15 09:09**	76278.01
8151_SUB	**03/19/15 17:00**	03/24/15 09:09		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500894-11 / **EB-1-031015**		**Aqueous**	**03/10/15 13:05**	76278.02
8151_SUB	**03/17/15 17:00**	03/17/15 13:05		
[Chlorinated Herbicides]				
Amber Unpres - 1000mL				
ATL Lab#: 1500894-12 / **1278-168-0**		**Soil**	**03/10/15 13:36**	76278.03
8151_SUB	**03/19/15 17:00**	03/24/15 13:36		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500894-17 / **EB-2-031015**		**Aqueous**	**03/10/15 15:11**	76278.04
8151_SUB	**03/17/15 17:00**	03/17/15 15:11		
[Chlorinated Herbicides]				
Amber Unpres - 1000mL				

Released By	Date	Received By	Date
	3/12/15 1238	Sarqis-P	3/12/15 1238
Released By	Date	Received By	Date
	3/12/15 1630	Jean Laude	03/12/15 1630

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 1 of 2

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A
1278-167-0	3/10/15	0739	SO	8oz jar 40ml VOAs	NaHSO4/ MeOH	4	X	X			X			
1278-167-1.5		0800												
1278-166-0		0834												
1278-166-1.5		0842		↓		↓								
1278-165-0		0909		8oz jar 40ml VOAs		5								X
1278-165-1.5		0929		8oz jar 40ml VOAs		4								
1278-164-0		0951												
1278-163-0		1012												
1278-163-1.5		1041												
1278-162-0		1117	↓	↓	↓									
EB-1-031015	↓	1305	AQ	1L Amber 500mL PSD 40ml VOAs	HCl	9	↓	↓			↓			X

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Sawant / S. Edblad *Shipment Method:* Lab Pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a)	*Relinquished by:*	Anuja Sawant	Stantec Consulting	3-11-15	14:10
1(b)	*Received by:*	Edward Rodriguez	ATL	3-11-15	14:10
2(a)	*Relinquished by:*	Edward Rodriguez	ATL	3-11-15	1846
2(b)	*Received by:*	F. P. Dura	ATL	3-11-15	1846
3(a)	*Relinquished by:*				
3(b)	*Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 2 of 2

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides- 8151A	REMARKS / PRECAUTIONS
1278-168-0	3/10/15	1336	SO	8oz jar 40mL VOA	NaHSO4 MeOH	5	X	X			X			X	
1278-168-1.5		1354		8oz jar 40mL VOA		4									
1278-169-0		1418													
1278-169-1.5		1426													
1278-169-3.5		1432													On Hold
EB-2-031015		1511	AQ	1L Amber 500mL poly unpreserved	HCl	9								X	
1278-134-0		1613	SO	8oz jar 40mL VOA	NaHSO4, MeOH	4									

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Sawant / S. Edblad Shipment Method: Lab Pickup Airbill Number:

	Signature	Print Name	Company	Date	Time
1(a)	Relinquished by:	Anuya Sawant	Stantec Consulting	3-11-15	14:10
1(b)	Received by:	Edvard Rodriguez	ATL	3-11-15	14:10
2(a)	Relinquished by:	Edvard Rodriguez	ATL	3-11-15	1840
2(b)	Received by:	F.P. Pick	ATL	3-11-15	1840
3(a)	Relinquished by:				
3(b)	Received by:				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500894

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Report To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone: (805) 230-1266
Fax: (805) 230-1277

Invoice To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone :(805) 230-1266
Fax: (805) 230-1277

Date Due:	03/18/15 17:00 (5 day TAT)	Date Received:	03/11/15 14:10
Received By:	Ron Diwa	Date Logged In:	03/11/15 14:30
Logged In By:	Carmen Aguila	Shipped by:	ATL

Please review the checklist below. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues. If you have any questions or further instructions, please contact your Project Manager at (526) 989-4045.

Sample(s) received on ice?	Yes	☐	No	☑	Default Cooler Temp: 5.5 °C
Sample(s) received on blue ice?	Yes	☑	No	☐	
Cooler temperature within acceptance limit?	Yes	☑	No	☐	
Shipping container received in good condition?	Not Applicable				
Custody seals present on shipping container?	Yes	☐	No	☑	
Custody seals intact on shipping container?	Not Applicable				
Custody seals present on sample bottles?	Yes	☐	No	☑	
Custody seals intact on sample bottles?	Not Applicable				
Chain of Custody (COC) present?	Yes	☑	No	☐	
Sampler name present in COC?	Yes	☑	No	☐	
COC signed when relinquished and received?	Yes	☑	No	☐	
COC agrees with sample labels?	Yes	☑	No	☐	
Samples in proper container/bottle?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample amount for indicated tests?	Yes	☑	No	☐	
All samples received within holding time?	Yes	☑	No	☐	
Water for VOC -- Were VOA vials submitted?	Yes	☑	No	☐	
Water samples submitted?	Yes	☑	No	☐	
VOA vials for VOC meet headspace criteria?	Yes	☑	No	☐	
Water samples meet preservation criteria?	Yes	☑	No	☐	

Sample Receipt Comments:
Water sample for metals- filter and preserve per client's instruction.

ADVANCED TECHNOLOGY
LABORATORIES

March 09, 2015

Anne Perez/Kristy Edblad
Stantec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Tel: (805) 230-1266
Fax:(805) 230-1277

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500725
Client Reference : 185832023, 200.0003, Caltrans 07A3322-23

Enclosed are the results for sample(s) received on February 25, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

...itec
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks , CA 91361

Project Number : 185832023, 200.0003, Caltrans 07A3322-
Report To : Anne Perez/Kristy Edblad
Reported : 03/09/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1278-153-0	1500725-16	Soil	2/24/15 14:30	2/25/15 13:50
EBB-3-022415	1500725-19	Aqueous	2/24/15 15:00	2/25/15 13:50

CASE NARRATIVE

The samples for EPA 8151 (Chlorinated Herbicides) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

Documentation pertaining to additional analyses/change order available upon request.

American Environmental Testing Laboratory Inc.
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Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755-5225

Number of Pages	6
Date Received	02/26/2015
Date Reported	03/06/2015

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76122	02/26/2015	ATL

Project ID: 1500725
Project Name: PO# SC09377

Enclosed please find results of analyses of 1 water and 8 soil samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Director

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Ordered By

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755-5225

Project ID: 1500725 Date Received 02/26/2015 Date Reported 03/06/2015

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
76122	02/26/2015	ATL

CERTIFICATE OF ANALYSIS
CASE NARRATIVE

AETL received 9 samples with the following specification on 02/26/2015.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76122.07	1500725-19	02/24/2015	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
8151A	03/05/2015	2	Normal	ug/L

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
76122.01	1500725-11	02/24/2015	Soil	1
76122.02	1500725-12	02/24/2015	Soil	1
76122.03	1500725-14	02/24/2015	Soil	1
76122.04	1500725-15	02/24/2015	Soil	1
76122.05	1500725-16	02/24/2015	Soil	1
76122.06	1500725-17	02/24/2015	Soil	1
76122.08	1500725-20	02/24/2015	Soil	1
76122.09	1500725-21	02/24/2015	Soil	1

Method ^ Submethod	Req Date	Priority	TAT	Units
(8151A)	03/05/2015	2	Normal	ug/Kg

The samples were analyzed as specified on the enclosed chain of custody. Analytical non-conformances have been noted on the report.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

Checked By: _____ Approved By: C. Razmara

Cyrus Razmara, Ph.D.
Laboratory Dire

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 2

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215

Our Lab I.D.			Method Blank	76122.01	76122.02	76122.03	76122.04
Client Sample I.D.				1500725-11	1500725-12	1500725-14	1500725-15
Date Sampled				02/24/2015	02/24/2015	02/24/2015	02/24/2015
Date Prepared			03/02/2015	03/02/2015	03/02/2015	03/02/2015	03/02/2015
Preparation Method			3550B	3550B	3550B	3550B	3550B
Date Analyzed			03/03/2015	03/03/2015	03/03/2015	03/03/2015	03/03/2015
Matrix			Soil	Soil	Soil	Soil	Soil
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Acifluorfen	20	20	ND	ND	ND	ND	ND
Bentazon	10	10	ND	ND	ND	ND	ND
Chloramben	10	10	ND	ND	ND	ND	ND
2,4-D	10	10	ND	ND	ND	ND	ND
Dalapon	20	20	ND	ND	ND	ND	ND
2,4-DB	10	10	ND	ND	ND	ND	ND
DCPA diacid	20	20	ND	ND	ND	ND	ND
Dicamba	10	10	ND	ND	ND	ND	ND
3,5-Dichlorobenzoic acid	10	10	ND	ND	ND	ND	ND
Dichloroprop	10	10	ND	ND	ND	ND	ND
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND	ND	ND	ND
MCPA	2000	2000	ND	ND	ND	ND	ND
MCPP	2000	2000	ND	ND	ND	ND	ND
4-Nitrophenol	10	10	ND	ND	ND	ND	ND
Pentachlorophenol (PCP)	10	10	ND	ND	ND	ND	ND
Picloram	10	10	ND	ND	ND	ND	ND
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND	ND	ND	ND
2,4,5-TP	10	10	ND	ND	ND	ND	ND
Our Lab I.D.			Method Blank	76122.01	76122.02	76122.03	76122.04
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
DCAA	50-150		64.4	64.6	58.3	52.2	52.4

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ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 3

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215

Our Lab I.D.			76122.05	76122.06	76122.08	76122.09	
Client Sample I.D.			1500725-16	1500725-17	1500725-20	1500725-21	
Date Sampled			02/24/2015	02/24/2015	02/24/2015	02/24/2015	
Date Prepared			03/02/2015	03/02/2015	03/02/2015	03/02/2015	
Preparation Method			3550B	3550B	3550B	3550B	
Date Analyzed			03/03/2015	03/03/2015	03/03/2015	03/03/2015	
Matrix			Soil	Soil	Soil	Soil	
Units			ug/Kg	ug/Kg	ug/Kg	ug/Kg	
Dilution Factor			1	1	1	1	
Analytes	**MDL**	**PQL**	**Results**	**Results**	**Results**	**Results**	
Acifluorfen	20	20	ND	ND	ND	ND	
Bentazon	10	10	ND	ND	ND	ND	
Chloramben	10	10	ND	ND	ND	ND	
2,4-D	10	10	ND	ND	ND	ND	
Dalapon	20	20	ND	ND	ND	ND	
2,4-DB	10	10	ND	ND	ND	ND	
DCPA diacid	20	20	ND	ND	ND	ND	
Dicamba	10	10	ND	ND	ND	ND	
3,5-Dichlorobenzoic acid	10	10	ND	ND	ND	ND	
Dichloroprop	10	10	ND	ND	ND	ND	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	20	20	ND	ND	ND	ND	
MCPA	2000	2000	ND	ND	ND	ND	
MCPP	2000	2000	ND	ND	ND	ND	
4-Nitrophenol	10	10	ND	ND	ND	ND	
Pentachlorophenol (PCP)	10	10	ND	ND	ND	ND	
Picloram	10	10	ND	ND	ND	ND	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	10	10	ND	ND	ND	ND	
2,4,5-TP	10	10	ND	ND	ND	ND	
Our Lab I.D.			76122.05	76122.06	76122.08	76122.09	
Surrogates	%Rec.Limit		% Rec.	% Rec.	% Rec.	% Rec.	
DCAA	50-150		54.3	66.7	54.0	54.3	

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ANALYTICAL RESULTS

Ordered By

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Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 4

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315

Our Lab I.D.			Method Blank	76122.07			
Client Sample I.D.				1500725-19			
Date Sampled				02/24/2015			
Date Prepared			03/03/2015	03/03/2015			
Preparation Method			3510C	3510C			
Date Analyzed			03/04/2015	03/04/2015			
Matrix			Aqueous	Aqueous			
Units			ug/L	ug/L			
Dilution Factor			1	1			
Analytes	**MDL**	**PQL**	**Results**	**Results**			
Acifluorfen	1.0	1.0	ND	ND			
Bentazon	0.5	0.5	ND	ND			
Chloramben	0.5	0.5	ND	ND			
2,4-D	0.5	0.5	ND	ND			
Dalapon	1.0	1.0	ND	ND			
2,4-DB	0.5	0.5	ND	ND			
DCPA diacid	1.0	1.0	ND	ND			
Dicamba	0.5	0.5	ND	ND			
3,5-Dichlorobenzoic acid	0.5	0.5	ND	ND			
Dichloroprop	0.5	0.5	ND	ND			
Dinoseb	0.5	0.5	ND	ND			
MCPA	100	100	ND	ND			
MCPP	100	100	ND	ND			
4-Nitrophenol	0.5	0.5	ND	ND			
Pentachlorophenol (PCP)	0.5	0.5	ND	ND			
Picloram	0.5	0.5	ND	ND			
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	0.5	0.5	ND	ND			
2,4,5-TP	0.5	0.5	ND	ND			
Our Lab I.D.			Method Blank	76122.07			
Surrogates	**%Rec.Limit**		**% Rec.**	**% Rec.**			
DCAA	50-150		65.6	77.9			

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 5

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: 8151A, Chlorinated Herbicides by GC/ECD

QC Batch No: 030315; LCS: Clean Water; LCS Prepared: 03/03/2015; LCS Analyzed: 03/04/2015; Units: ug/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	72.0	144	50.0	72.5	145	<1	50-150	<50	
Dalapon	50.0	54.5	109	50.0	36.3	72.6	40.1	50-150	<50	
2,4-DB	50.0	43.1	86.2	50.0	26.9	53.8	46.3	50-150	<50	
Dicamba	50.0	56.5	113	50.0	43.4	86.8	26.2	50-150	<50	
Dinoseb	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<50	
MCPA	5,000	4,280	85.6	5,000	5,850	117	31.0	50-150	<50	
MCPP	5,000	5,900	118	5,000	2,540	50.8	79.6	50-150	<50	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	42.8	85.6	50.0	29.9	59.8	35.5	50-150	<50	
2,4,5-TP	50.0	27.0	53.9	50.0	46.4	92.8	53.0	50-150	<50	
Surrogates										
DCAA	100	65.6	65.6	100	57.9	57.9	12.5	50-150	<20	

American Environmental Testing Laboratory Inc.

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QUALITY CONTROL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045
Attn: Rachelle Arada
Page: 6

Project ID: 1500725
Project Name: PO# SC09377

AETL Job Number	Submitted	Client
76122	02/26/2015	ATL

Method: (8151A), Chlorinated Herbicides by GC/ECD

QC Batch No: 030215; Dup or Spiked Sample: B030215; LCS: Clean Sand; LCS Prepared: 03/02/2015; LCS Analyzed: 03/03/2015; Units: ug/Kg

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
2,4-D	50.0	29.3	58.6	50.0	26.0	52.0	11.9	50-150	<40	
Dalapon	50.0	57.0	114	50.0	34.4	68.8	49.5	50-150	<40	
2,4-DB	50.0	35.7	71.4	50.0	33.8	67.6	5.5	50-150	<40	
Dicamba	50.0	30.1	60.2	50.0	27.2	54.4	10.1	50-150	<40	
Dichloroprop	50.0	28.3	56.6	50.0	28.7	57.4	1.4	50-150	<40	
Dinoseb (DNBP, 2-sec-Butyl-4, 6-dinitrophenol)	50.0	26.7	53.4	50.0	31.0	62.0	14.9	50-150	<40	
MCPA	5,000	5,000	100	5,000	2,550	51.0	64.9	50-150	<40	
MCPP	5,000	3,680	73.6	5,000	3,610	72.2	1.9	50-150	<40	
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50.0	29.2	58.4	50.0	33.6	67.2	14.0	50-150	<40	
2,4,5-TP	50.0	29.3	58.6	50.0	29.3	58.6	<1	50-150	<40	
Surrogates										
DCAA	100	76.4	76.4	100	75.4	75.4	1.3	50-150	<40	

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Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6;	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.

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Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725 76122

SENDING LABORATORY:	RECEIVING LABORATORY:
Advanced Technology Laboratories	AETL
3275 Walnut Avenue	2834 North Naomi Street
Signal Hill, CA 90755	Burbank, CA 91504
Phone: 562.989.4045	Phone :(818) 845-8200
Fax: 562.989.6348	Fax: (818) 845-8840
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)	PO#: SC09377- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500725-11 / 1278-155-0		Soil	02/24/15 13:20	76122.01
8151_SUB	03/05/15 17:00	03/10/15 13:20		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500725-12 / 1278-155-1.5		Soil	02/24/15 13:30	76122.02
8151_SUB	03/05/15 17:00	03/10/15 13:30		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500725-14 / 1278-154-0		Soil	02/24/15 13:45	76122.03
8151_SUB	03/05/15 17:00	03/10/15 13:45		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500725-15 / 1278-154-1.5		Soil	02/24/15 13:55	76122.04
8151_SUB	03/05/15 17:00	03/10/15 13:55		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				
ATL Lab#: 1500725-16 / 1278-153-0		Soil	02/24/15 14:30	76122.05
8151_SUB	03/05/15 17:00	03/10/15 14:30		
[Chlorinated Herbicides]				
Glass Jar - 4 oz				

Released By	Date	Received By	Date
	02/26/15 1200		02/26/15 1200
	02/26/15 1405		02/26/15 1405

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500725 76122

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500725-17 / 1278-153-1.5		Soil	02/24/15 14:40	76122.06
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 14:40		
ATL Lab#: 1500725-19 / EBB-3-022415		Aqueous	02/24/15 15:00	76122.07
8151_SUB [Chlorinated Herbicides] Amber Unpres - 1000mL	03/05/15 17:00	03/03/15 15:00		
ATL Lab#: 1500725-20 / 1278-152-0		Soil	02/24/15 15:05	76122.08
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 15:05		
ATL Lab#: 1500725-21 / 1278-152-1.5		Soil	02/24/15 15:20	76122.09
8151_SUB [Chlorinated Herbicides] Glass Jar - 4 oz	03/05/15 17:00	03/10/15 15:20		

Released By	02/26/15 1206 Date	Received By	02/26/15 Date	
Released By	02/26/15 1405 Date	Received By	02/26/15 1405 Date	

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____ Page 1 of 2

FIELD OFFICE INFORMATION	PROJECT INFORMATION
OFFICE: Stantec - Thousand Oaks	Project No.: 185832023 Task: 200.0003
Send Report to: Stantec, 290 Conejo Ridge Avenue, Thousand Oaks, CA 91361	Project Name: Caltrans 07A3322-23
Telephone: (805) 230-1266	Project Manager: Anne Perez/Kristy Edblad
Fax/E-Mail: kristy.edblad@stantec.com, anne.perez@stantec.com	Laboratory: Advanced Technology Laboratories, 3275 Walnut Avenue, Signal Hill, CA 90755

REMARKS/ PRECAUTIONS

TAT: ☐ Normal ☐ Rush ☒ Other: 5 days

REPORTING REQUIREMENTS: ☐ MB & SURGS ☐ Dup/MS/MSD ☐ Raw Data ☐ CLP Rpt ☒ EDD ☐ Other

Sample No. / Identification	SAMPLE Date	Time	Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A	
1278-117-0	2/24/15	0815	SO	40mL VOA(3) 8oz jar(1)	MeOH / NaHSO4	4	X			X	X	X	X		
EBB-1-022415		0835	AQ	32oz Amber(1) 40mL VOA(3)	HCl	8	X			X	X	X	X		
1278-118-0		0900	SO	40mL VOA(3) 8oz jar(1)	MeOH / NaHSO4	4	X			X	X	X	X		
1278-116-0		0920	SO			4	X			X	X	X	X		
1278-115-0		0935	SO			4	X			X	X	X	X		
1278-114-0		1005	SO			4	X			X	X	X	X		
1278-113-0		1040	SO			4	X			X	X	X	X		
1278-112-0		1100	SO			4	X			X	X	X	X		
1278-111-0		1120	SO	↓	↓	4	X			X	X	X	X		
EBB-2-022415		1150	AQ	32oz Amber(1) 40mL VOA(3)	HCl	8	X			X	X	X	X		
1278-155-0	↓	1320	SO	40mL VOA(3) 8oz jar(1)	MeOH / NaHSO4	4	X	X			X			X	Paint flecs observed (new paint)

Possible Hazard Identification: ☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Savoart / J. Stayno / T. Walsh *Shipment Method:* Lab Pickup *Airbill Number:*

	Signature	Print Name	Company	Date	Time
1(a) *Relinquished by:*		Tonya Savoart	Stantec Consulting	2-24-15	
1(b) *Received by:*		Edvald Rodriguez	ATL	2-25-15	1350
2(a) *Relinquished by:*		Edvard Rodriguez	ATL	2-25	1810
2(b) *Received by:*		FEDEX	ATL	2/26/15	1810
3(a) *Relinquished by:*					
3(b) *Received by:*					

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

STANTEC CHAIN-OF-CUSTODY RECORD

COC # _____

Page 2 of 2

FIELD OFFICE INFORMATION

OFFICE: Stantec - Thousand Oaks

Send Report to:
Stantec
290 Conejo Ridge Avenue
Thousand Oaks, CA 91361

Telephone: (805) 230-1266

Fax/E-Mail: kristy.edblad@stantec.com
anne.perez@stantec.com

PROJECT INFORMATION

Project No.: 185832023 Task: 200.0003

Project Name: Caltrans 07A3322-23

Project Manager: Anne Perez/Kristy Edblad

Laboratory: Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755

ANALYSES / METHOD REQUEST

REMARKS/ PRECAUTIONS

TAT
☐ Normal
☐ Rush
☒ Other: 5 days

REPORTING REQUIREMENTS
☐ MB & SURGS
☐ Dup/MS/MSD
☐ Raw Data
☐ CLP Rpt
☒ EDD
☐ Other

Sample No. / Identification	SAMPLE Date	SAMPLE Time	SAMPLE Matrix *	Container & Size **	Preservative	Number of Containers	TPH-GRO and CC - 8015M	VOCs - 8260B/5035	Total Lead - 6010B	SVOCs - 8270B	Title 22 Metals - 6010/7000	PCBs - 8081A	Asbestos - PLM	Chlorinated Herbicides - 8151A		REMARKS/ PRECAUTIONS
1278-155-1.5	2/24/15	1330	SO	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	4	X	X			X			X		
1278-155-3.5	↓	1335	↓	↓	↓	↓	X	X			X			X		On Hold
1278-154-0	↓	1345	↓	↓	↓	↓	X	X			X			X		Paint flux observed (new paint)
1278-154-1.5	↓	1355	↓	↓	↓	↓	X	X			X			X		
1278-153-0	↓	1430	↓	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	5	X	X			X			X		Paint flux observed (new paint)
1278-153-1.5	↓	1440	↓	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	4	X	X			X			X		
1278-153-3.5	↓	1450	↓	↓	↓	4	X	X			X			X		On Hold
EBB-3-022415	↓	1500	AQ	32oz Amber/ 1 poly 500mL	~~HCl~~ HCl	9	X	X			X			X		
1278-152-0	↓	1505	SO	40mL VOA/3 8oz glass jar	MeOH/ NaHSO4	4	X	X			X			X		
1278-152-1.5	↓	1520	↓	↓	↓	4	X	X			X			X		
1278-152-3.5	↓	1530	↓	↓	↓	4	X	X			X			X		On Hold

Possible Hazard Identification
☐ Non-Hazardous ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Sampled by: A. Sawant / J. Stagno / T. Walsh *Shipment Method:* Lab Pickup *Airbill Number:*

Signature	Print Name	Company	Date	Time
1(a) *Relinquished by:* Anuya	Anuya Sawant	Stantec consulting	2-24-15	
1(b) *Received by:* [signature]	Edward Rodriguez	ATL	2-25-15	1350
2(a) *Relinquished by:* [signature]	Edward Rodriguez	ATL	2-25-15	1810
2(b) *Received by:* [signature]	FPDown	ATL	2/25/15	1810
3(a) *Relinquished by:*				
3(b) *Received by:*				

*Matrix Key: AQ = Aqueous AR = Air SO = Soil WA = Waste OT = Other **Container: A = Amber C = Clear Glass V = VOA S = Soil Jar O = Orbo T = Tedlar B = Brass P = Plastic OT = Other

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500725

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Report To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone: (805) 230-1266
Fax: (805) 230-1277

Invoice To:
Stantec - Thousand Oaks
Anne Perez/Kristy Edblad
290 Conejo Ridge Avenue, Suite 200
Thousand Oaks, CA 91361
Phone :(805) 230-1266
Fax: (805) 230-1277

Date Due:	03/04/15 17:00 (5 day TAT)	Date Received:	02/25/15 13:50
Received By:	Ron Diwa	Date Logged In:	02/25/15 15:02
Logged In By:	Carmen Aguila	Shipped by:	ATL

Please review the checklist below. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues. If you have any questions or further instructions, please contact your Project Manager at (526) 989-4045.

Sample(s) received on ice?	Yes	☐	No	☑
Sample(s) received on blue ice?	Yes	☑	No	☐
Cooler temperature within acceptance limit?	Yes	☑	No	☐
Shipping container received in good condition?	Not Applicable			
Custody seals present on shipping container?	Yes	☐	No	☑
Custody seals intact on shipping container?	Not Applicable			
Custody seals present on sample bottles?	Yes	☐	No	☑
Custody seals intact on sample bottles?	Not Applicable			
Chain of Custody (COC) present?	Yes	☑	No	☐
Sampler name present in COC?	Yes	☑	No	☐
COC signed when relinquished and received?	Yes	☑	No	☐
COC agrees with sample labels?	Yes	☐	No	☑
Samples in proper container/bottle?	Yes	☑	No	☐
Sample containers intact?	Yes	☑	No	☐
Sufficient sample amount for indicated tests?	Yes	☑	No	☐
All samples received within holding time?	Yes	☑	No	☐
Water for VOC -- Were VOA vials submitted?	Yes	☑	No	☐
Water samples submitted?	Yes	☑	No	☐
VOA vials for VOC meet headspace criteria?	Yes	☑	No	☐
Water samples meet preservation criteria?	Yes	☑	No	☐

cooler #1	Temp: 5.5 °C
cooler #2	Temp: 5.2 °C

Sample Receipt Comments:

ADVANCED TECHNOLOGY LABORATORIES

Sample Receipt Acknowledgement

Work Order # 1500725

Client:	**Stantec - Thousand Oaks**	**Project Manager:**	**Rachelle Arada**
Project:	**185832023, 200.0003, Caltrans 07A3322-23**	**Project Number:**	**185832023, 200.0003, Caltrans 07A3322-23**

Water sample for metals- filter and preserve per client's instruction.
Sample for metals for EBB-2-022415 received unlabeled bagged together with voas labeled EBB-2-022415.
Received 3-voa vials unlabeled bagged together with samples EBB-3-022415.

APPENDIX E
DATA VALIDATION RECORDS

APPENDIX E

DATA VALIDATION REPORT

SITE INVESTIGATION REPORT
HOV LANE PROJECT
LA-405, PM 28.8/39.0,
Caltrans Contract Number 07A3322, Task Order #23
EA Number: 07-120301
Los Angeles County, California

The data validation procedure is based on the principles of the *U.S. EPA National Functional Guidelines* and U.S. EPA Region 9 requirements and is designed to ensure completeness and adequacy of the data set. Samples were collected and submitted for analysis to Advanced Technology Laboratories (ATL) in Signal Hill, California. Samples were analyzed for Total Title 22 Metals by SW 846 6010B; Mercury by 7471A/7470A; Volatile Organic Compounds (VOCs) by 8260B; Semivolatile Organic Compounds (SVOCs) by 8270C; Gasoline, Diesel, and Oil Range Organics by 8015B modified; Chlorinated Herbicides by 8151A; Polychlorinated Biphenyls (PCBs) by 8082; and Asbestos by Transmission Electron Microscopy.

The Data Validation Reports/Checklists summarize compounds that were qualified and are attached to this summary. Data was validated based on Regional EPA and *U.S. EPA National Functional Guidelines*. Data validation was performed in accordance with the Scope of Work. Data validation was performed to ensure the quality of project data. Six analytical reports and associated addenda were validated:

- 1500725;
- 1500726;
- 1500744;
- 1500747;
- 1500855 and
- 1500894.

The data were validated and reviewed for the following:

- Completeness of data deliverables (chain of custody records, laboratory data, laboratory quality assurance and quality control (QA/QC) data);
- Sample holding time;
- Sample preservation;
- Blank data (method, trip, and equipment);
- Laboratory control sample (LCS) recovery;
- Surrogate recoveries;
- Laboratory duplicate sample precision;
- Matrix spike/matrix spike duplicate (MS/MSD) recovery; and
- Overall data assessment.

The following summarizes the results of the validation:

1. Data Completeness: Data for 98 solid samples and 16 equipment blanks were collected February 24, 2015 through March 10, 2015 were validated. Samples specified for analysis on the chain of custodies were analyzed as specified. The project goal of 90 percent completeness was achieved.

2. Sample Hold Times: All samples were analyzed within sample hold times.

3. Sample Preservation: All samples were preserved in appropriate containers and preservative.

4. Method Blanks: Several metals analytes (chromium, copper, lead, nickel and zinc) were reported in the method blank at very low concentrations. Associated sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit is changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action.

5. Equipment Blanks: Several metals were reported in equipment blanks at very low levels, and may be reflective of laboratory method blank detections, field artifact associated with dust, incomplete decontamination or artifact from contact with metal sampling equipment.

6. Laboratory Control Samples: LCS samples reported percent recoveries outside of method and/or laboratory limits for the following.

    a. Laboratory report 1500725; 8270C batch B5C0043 - %Rs below 60% limit for 4-Nitrophenol (54%) and Phenol (42%).

    b. 8015B modified batch B5C0704, B5C0723 and B5C0725 - %RS below ±30% project limit for GRO C4-C8 at 41%, 69% and 61%.

    c. Laboratory report 1500744; 8016B modified batch B5B0751 - %R below ±40% project limit for DRO at 57%. Associated sample results flagged "J" if positive or "UJ" if non-detect.

    d. Laboratory report 1500747; 8015B modified batch B5C0081 - %R below ±40% project limit for DRO. Associated sample results flagged "J" if positive or "UJ" if non-detect.

    e. Laboratory report 1500894; 8015B modified batches B5C0340, B5C0390 and B5C0391 - %Rs below ±40% limit for DRO at 55%, 57% and 56%. Associated sample results flagged "J" if positive or "UJ" if non-detect.

f. 8260B batch B5C0297 - %Rs below ±30% limit for 2-CVE at 62%, Bromomethane at 56% and Chloromethane at 68%. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code - LCS

5. Surrogate recoveries are outside limits for the following:

   a. Laboratory report 1500725; 8015B modified - %R below ±40% project limit for Hydrocarbon Chain Distribution for EBB-1, EBB-2, 1278-155-1.5 and EBB-3.

   b. 8270C - %Rs for 2 of 4 acid surrogates below ±40% project limits for EBB-1 and EBB-3. %Rs for 8 of 8 surrogates are below limits for 1278-117-0 and 1278-115-0.

   c. Laboratory report 1500726; 8015B modified - %R below ±40% project limit for Hydrocarbon Chain Distribution (HCD) for EBA-1.

   d. Laboratory report 1500744; 8015B modified - %R below ±40% project limit for Hydrocarbon Chain Distribution (HCD) for 1278-129-1.5, 1278-135-0, 1278-135-1.5 and EBB-2.

   e. Laboratory report 1500855; 8015B modified Hydrocarbon Chain Distribution - %Rs below ±40% project limit for 1278-127-0, 1278-127-1.5, 1278-128-0, 1278-131-0, 1278-132-0, 1278-132-1.5, 1278-133-0, 1278-133-1.5 and 1278-134-0.

   f. Laboratory report 1500894; 8015B modified Hydrocarbon Chain Distribution - %Rs below ±40% project limit for 1278-166-1.5, 1278-163-1.5, 1278-162-0, EB-1, 1278-168-0, 1278-168-1.5, 1278-169-0, 1278-169-0 and EB-2.

      Associated sample results flagged "J" if positive or "UJ" if non-detect.

6. Laboratory Duplicate Samples: Laboratory duplicate samples were reported within the relative percent difference (RPD) control limit of 20 percent except for the following:

   a. Laboratory report 1500725; 6010B batch B5C0013 – Laboratory duplicate RPD above limits (± 20%) for Barium (22%), Cadmium (30%), Molybdenum (39%) and Zinc (35%). Sample site specific. Associated result flagged "J" for 1278-118-0 only.

b. Batch B5C0082 - Laboratory duplicate RPD above limits (± 20%) for Antimony (48%) and Molybdenum (26%). Sample site specific. Associated result flagged "J" for 1278-117-0 only.

c. 8015B modified batch B5B0701 - Laboratory duplicate RPD above limits (± 20%) for Hydrocarbon Chain Distribution (20%). Sample site specific. Associated result flagged "J" for 1278-115-0 only.

d. Batch B5B0726 - Laboratory duplicate RPD above limits (± 20%) for Hydrocarbon Chain Distribution (42%). Sample site specific. Associated result flagged "J" for 1278-154-0 only.

e. Laboratory report 1500726; 6010B batch B5C0019 – Laboratory duplicate RPD above limits (± 20%) for Cadmium (35%), Lead (36%) and Selenium (22%). Sample site specific. Associated result flagged "J" for 1278-151-0 only.

f. 8015B modified batch B5B0739 - Laboratory duplicate RPD above limits (± 20%) for DRO (33%). Sample site specific. Associated result flagged "J" for 1278-110-0 only.

g. Laboratory report 1500744; 6010B batch B5C0020 – Laboratory duplicate RPD above limits (± 20%) for Molybdenum (38%). Sample site specific. Associated result flagged "J" for 1278-129-0 only.

h. Batch B5C0021 - Laboratory duplicate RPD above limits (± 20%) for Cobalt (32%), Lead (34%) and Molybdenum (74%). Sample site specific. Associated result flagged "J" for 1278-137-1.5 only.

i. Laboratory report 1500747; 6010B batch B5C0022 – Laboratory duplicate RPD above limits (± 20%) for Antimony at 164%, Arsenic at 48%, Cadmium at 22% and Molybdenum at 64%. Sample site specific. Associated result flagged "J" for 1278-121-1.5 only.

j. 6010B batch B5C0023 - Laboratory duplicate RPD above limits (± 20%) for Antimony at 22%. Sample site specific. Associated result flagged "J" for 1278-145-0 only.

k. 8015B modified batch B5C0081 – Laboratory duplicate RPD above ±20% limit for DRO at 69%. Associated result flagged "J" for 1278-145-0 only

l. Laboratory report 1500855; 6010B batch B5C0270 – Laboratory duplicate RPD above limits (± 20%) for Chromium at 24%. Sample site specific. Associated result flagged "J" for 1278-127-0 only.

m. 6010B batch B5C0271 - Laboratory duplicate RPD above limits (± 20%) for Cadmium at 39% and Zinc at 23%. Sample site specific. Associated result flagged "J" for 1278-134-1.5 only.

n. Laboratory report 1500894; 6010B batch B5C0406 – Laboratory duplicate RPD above limits (± 20%) for Barium at 20% and Zinc at 30%. Sample site specific. Associated result flagged "J" for 1278-167-0 only.

o. 6010B batch B5C0407 - Laboratory duplicate RPD above limits (± 20%) for Antimony at 70%, Cadmium at 27%, Lead at 50% and Zinc at 21%. Sample site specific. Associated result flagged "J" for 1278-168-0 only.

Reason Code – LDUP

The discrepancy appears to be related to natural sample heterogeneity and the data were qualified as indicated above.

7. Matrix Spike and Spike Duplicates: Matrix spike and duplicate samples were analyzed to assess accuracy and to evaluate matrix effects on data analysis. The percent recoveries and RPDs were found to within laboratory-determined control limits except: Reason Code - MS

a. Laboratory report 1500725; 6010B batch B5C0013 - %Rs below ±20% limit for Zinc. Associated result flagged "J" for 1278-118-0 only.

b. 8015B modified batch B5C0723 - %Rs below ±30% limit for GRO C4-C8. Associated result flagged "J" if positive or "UJ" if non-detect for 1278-118-0 only.

c. Laboratory report 1500726; 6010B batch B5C0019 - %Rs below ±20% limit for Zinc at 57%. Associated result flagged "J" for 1278-151-0 only.

d. 8015B modified batch B5B0739 - %Rs below ±40% limit for DRO at 51%. Associated result flagged "J" if positive or "UJ" if non-detect for 1278-110-1.5 only.

e. Laboratory report 1500744; 8015B modified batch B5B0751 - %Rs below ±40% limit for DRO at 46%. Associated result flagged "J" for 1278-135-1.5 only.

q. 7471A batches B5C0411 and B5C0412 – Post digestion spike %R above 115% limit at 117% and 128%. All associated positive sample results flagged "J". Reason Code – PDS

The RPD issues appear to the result of natural sample heterogeneity and matrix interferences. Out of control sample results are "J-flagged". No other corrective action was required.

8. No Field Duplicates were collected.

9. Data were considered "useable" and marked as such in the tables provided and that it was validated according to the EPA and scope of work. No data was qualified as "rejected". The Data Validation Reports/Checklists summarize compounds that were qualified and are attached to this summary. Additionally, data qualifiers and the reason codes associated with the qualifier are in the tables.

Stantec Analytical Validation Report/Checklist — Report No. 032315-EC-01

Project Name: Caltrans 07A TO-23	Project Number: 185832023
Stantec Validator: Elizabeth Crowley	Laboratory: ATL, Signal Hill, CA
Date Validated: 03/21/15	Laboratory Project Number: 1500725 and 1500725add
Sample Start-End Date: 02/24/15	Laboratory Report Date: 03/09/15 and 03/09/15

Parameters Validated: Total Metals by EPA SW-846 6010B, Mercury by 7471A/7470A, Hydrocarbon Chain Distribution by 8015B modified, Gasoline Range Organics by 8015B modified, Volatile Organic Compounds by 8260B, Semi-volatile Organic Compounds by 8270C, Chlorinated Herbicides by 8151A, PCBs by 8082 and Asbestos by Transmission Electron Microscopy.

Samples Validated: 16 solid field samples and 3 Equipment Blanks

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

- **U** The analyte was analyzed for, but not detected above the reported sample quantitation limit.
- **J** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- **UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- **N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- **NJ** The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- **R** The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- **B** The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments: Additional analyses are dependent on initial analyses results, all required analyses reported.		
2. Did the laboratory identify any non-conformances related to the analytical result?	X	
Comments: Refer to laboratory report for dilution and minor issues.		
3. Were sample Chain-of-Custody forms complete?	X	
Comments: All signatures and required items present.		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments: All holding times met for all analyses.		
6. Were correct concentration units reported?	X	
Comments: Results reported in both mg/Kg and mg/L depending on the analytical method and/or matrix.		
7. Were detections found in laboratory blank samples?	Yes	No

			X
Comments: 6010B batch B5C0013 – Chromium = 0.20 mg/Kg, Copper = 0.21 mg/Kg, Lead = 0.13 mg/Kg, Nickel = 0.17 mg/Kg and Zinc = 0.51 mg/Kg. Batch B5C0082 – Chromium = 0.19 mg/Kg, Copper = 0.13 mg/Kg and Zinc = 0.36 mg/Kg. Associated sample results greater than 10 times the blank concentration. No qualifying action required. 6010B batch B5C0012 – Chromium = 0.21 mg/Kg, Copper = 3.5 mg/Kg, Lead = 0.25 mg/Kg, Nickel = 0.16 mg/Kg and Zinc = 2.2 mg/Kg. Batch B5C0062 – Chromium = 0.0009 mg/L, Copper = 0.0018 mg/L, Nickel = 0.0021 mg/L and Zinc = 0.0043 mg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB			
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes X	No
Comments: EBB-1 – Barium = 0.0006 mg/L, Molybdenum = 0.0005 mg/L and Silver = 0.0007 mg/L. EBB-2 – Barium = 0.0005 mg/L, Chromium = 0.0011 mg/L, Copper = 0.0028 mg/L, Molybdenum = 0.0006 mg/L, Silver = 0.0015 mg/L, Zinc = 0.0056 mg/L and trans-1,3-Dichloropropane = 1.5 µg/L. EBB-3 – Silver = 0.0011 mg/L and Zinc = 0.0062 mg/L. Associated sample results greater than 10 times the blank concentration. No qualifying action required.			
9. Were instrument calibrations within method criteria?		Yes NA	No
Comments: Level II data package and validation, no data provided.			
10. Were surrogate recoveries within control limits?		Yes	No X
Comments: 8015B modified - %R below ±40% project limit for Hydrocarbon Chain Distribution for EBB-1, EBB-2, 1278-155-1.5 and EBB-3. 8270C - %Rs for 2 of 4 acid surrogates below ±40% project limits for EBB-1 and EBB-3. %Rs for 8 of 8 surrogates are below limits for 1278-117-0 and 1278-115-0. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – SUR			
11. Were laboratory control (LC/LD) sample recoveries within control limits?		Yes	No X
Comments: 8270C batch B5C0043 - %Rs below 60% limit for 4-Nitrophenol (54%) and Phenol (42%). 8015B modified batch B5C0704, B5C0723 and B5C0725 - %RS below ±30% project limit for GRO C4-C8 at 41%, 69% and 61%. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – LCS			

12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X
Comments: 6010B batch B5C0013 - %Rs below ±20% limit for Zinc. Associated result flagged "J" for 1278-118-0 only. 8015B modified batch B5C0723 - %Rs below ±30% limit for GRO C4-C8. Associated result flagged "J" if positive or "UJ" if non-detect for 1278-118-0 only. Reason Code – MS		
13. Were RPDs within control limits?	Yes	No X
Comments: 6010B batch B5C0013 – Laboratory duplicate RPD above limits (± 20%) for Barium (22%), Cadmium (30%), Molybdenum (39%) and Zinc (35%). Sample site specific. Associated result flagged "J" for 1278-118-0 only. Batch B5C0082 - Laboratory duplicate RPD above limits (± 20%) for Antimony (48%) and Molybdenum (26%). Sample site specific. Associated result flagged "J" for 1278-117-0 only. 8015B modified batch B5B0701 - Laboratory duplicate RPD above limits (± 20%) for Hydrocarbon Chain Distribution (20%). Sample site specific. Associated result flagged "J" for 1278-115-0 only. Batch B5B0726 - Laboratory duplicate RPD above limits (± 20%) for Hydrocarbon Chain Distribution (42%). Sample site specific. Associated result flagged "J" for 1278-154-0 only. Reason Code – LDUP		
14. Were dilutions required on any samples?	Yes X	No
Comments: No qualifying action required.		
15. Were Tentatively Identified Compounds (TIC) present?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL		
16. Were organic system performance criteria met? NA	Yes	No
Comments: Level II data package, no data provided.		
17. Were GC/MS internal standards within method criteria? NA	Yes	No
Comments: Level II data package, no data provided.		
18. Were inorganic system performance criteria met?	Yes X	No
Comments:		
19. Were blind field duplicates collected? If so, discuss the	Yes	No

precision (RPD) of the results.				X
Duplicate Sample Nos.				
Comments:				
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?			Yes X	No Initials EAC
Comments:				
21. Other:			Yes	No X
Comments:				
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT				
Precision:	Acceptable X	Unacceptable	Initials EAC	
Comments: Data usable as qualified.				
Sensitivity:	Acceptable X	Unacceptable	Initials EAC	
Comments: Samples analyzed at lowest levels possible to achieve required screening limits.				
Accuracy:	Acceptable X	Unacceptable	Initials EAC	
Comments: Data usable as qualified.				
Representativeness:	Acceptable X	Unacceptable	Initials EAC	
Comments:				
Method Compliance:	Acceptable X	Unacceptable	Initials EAC	
Comments:				
Completeness:	Acceptable X	Unacceptable	Initials EAC	
Comments: No data are rejected.				

Stantec Analytical Validation Report/Checklist **Report No. 032315-EC-02**

Project Name: Caltrans 07A TO-23	Project Number: 185832023
Stantec Validator: Elizabeth Crowley	Laboratory: ATL, Signal Hill, CA
Date Validated: 03/21/15	Laboratory Project Number: 1500726
Sample Start-End Date: 02/24/15	Laboratory Report Date: 03/06/15

Parameters Validated: Total Metals by EPA SW-846 6010B, Mercury by 7471A/7470A, Hydrocarbon Chain Distribution by 8015B modified, Gasoline Range Organics by 8015B modified, Volatile Organic Compounds by 8260B and Chlorinated Herbicides by 8151A

Samples Validated: 18 solid field samples and 3 Equipment Blanks

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

U The analyte was analyzed for, but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

B The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	

Comments: Additional analyses are dependent on initial analyses results, all required analyses reported.

	Yes	No
2. Did the laboratory identify any non-conformances related to the analytical result?	X	

Comments: Refer to laboratory report for dilution and minor issues.

	Yes	No
3. Were sample Chain-of-Custody forms complete?	X	

Comments: All signatures and required items present.

	Yes	No
4. Were samples received in good condition and at the appropriate temperature?	X	

Comments:

	Yes	No
5. Were sample holding times met?	X	

Comments: All holding times met for all analyses.

	Yes	No
6. Were correct concentration units reported?	X	

Comments: Results reported in both mg/Kg and mg/L depending on the analytical method and/or matrix.

	Yes	No
7. Were detections found in laboratory blank samples?	X	

Comments: 6010B batch B5C0017 – Chromium = 0.19 mg/Kg, Copper = 0.12 mg/Kg and Zinc = 0.19 mg/Kg. Batch B5C0019 – Chromium = 0.19 mg/Kg, Copper = 0.10 mg/Kg and Zinc = 0.33 mg/Kg. Associated sample results greater than 10 times the blank concentration. No qualifying action required. 6010B batch B5C0062 – Chromium = 0.0009 mg/L, Copper = 0.0018 mg/L, Nickel = 0.0021 mg/L and Zinc = 0.0043 mg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes X	No
Comments: EBA-3 – Barium = 0.0006 mg/L, Chromium = 0.0010 mg/L, Copper = 0.0027 mg/L and Molybdenum = 0.0006 mg/L. Associated sample results greater than 10 times the blank concentration. No qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes NA	No
Comments: Level II data package and validation, no data provided.		
10. Were surrogate recoveries within control limits?	Yes	No X
Comments: 8015B modified - %R below ±40% project limit for Hydrocarbon Chain Distribution (HCD) for EBA-1. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – SUR		
11. Were laboratory control (LC/LD) sample recoveries within control limits?	Yes	No X
Comments: 8016B modified batch B5B0751 - %R below ±40% project limit for DRO. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – LCS		
12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X
Comments: 6010B batch B5C0019 - %Rs below ±20% limit for Zinc at 57%. Associated result flagged "J" for 1278-151-0 only. 8015B modified batch B5B0739 - %Rs below ±40% limit for DRO at 51%. Associated result flagged "J" if positive or "UJ" if non-detect for 1278-110-1.5 only. Reason Code – MS		
13. Were RPDs within control limits?	Yes	No X

Comments: 6010B batch B5C0019 – Laboratory duplicate RPD above limits (± 20%) for Cadmium (35%), Lead (36%) and Selenium (22%). Sample site specific. Associated result flagged "J" for 1278-151-0 only. 8015B modified batch B5B0739 - Laboratory duplicate RPD above limits (± 20%) for DRO (33%). Sample site specific. Associated result flagged "J" for 1278-110-0 only. Reason Code - LDUP 8015B modified batch B5B0739 – Matrix Spike RPD above limits (± 20%) for DRO (26%). Sample site specific. All associated sample results flagged "J" if positive. Reason Code – RPD			
14. Were dilutions required on any samples?		Yes X	No
Comments: No qualifying action required.			
15. Were Tentatively Identified Compounds (TIC) present?		Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package, no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package, no data provided.			
18. Were inorganic system performance criteria met?		Yes X	No
Comments:			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos.		Yes	No X
Comments:			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments: Samples analyzed at lowest levels possible to achieve required screening limits.			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments: No data are rejected.			

Stantec Analytical Validation Report/Checklist — Report No. 032415-EC-01

Project Name: Caltrans 07A TO-23	Project Number: 185832023
Stantec Validator: Elizabeth Crowley	Laboratory: ATL, Signal Hill, CA
Date Validated: 03/21/15	Laboratory Project Number: 1500744
Sample Start-End Date: 02/25/15	Laboratory Report Date: 03/06/15

Parameters Validated: Total Metals by EPA SW-846 6010B, Mercury by 7471A/7470A, Hydrocarbon Chain Distribution by 8015B modified, Gasoline Range Organics by 8015B modified, Volatile Organic Compounds by 8260B and Chlorinated Herbicides by 8151A

Samples Validated: 18 solid field samples and 3 Equipment Blanks

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

- **U** The analyte was analyzed for, but not detected above the reported sample quantitation limit.
- **J** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- **UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- **N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- **NJ** The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- **R** The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- **B** The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments: Additional analyses are dependent on initial analyses results, all required analyses reported.		
2. Did the laboratory identify any non-conformances related to the analytical result?	X	
Comments: Refer to laboratory report for dilution and minor issues.		
3. Were sample Chain-of-Custody forms complete?	X	
Comments: All signatures and required items present.		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments: All holding times met for all analyses.		
6. Were correct concentration units reported?	X	
Comments: Results reported in both mg/Kg and mg/L depending on the analytical method and/or matrix.		
7. Were detections found in laboratory blank samples?	X	

Comments: 6010B batch B5C0020 – Chromium = 0.19 mg/Kg and Zinc = 0.12 mg/Kg. Batch B5C0021 – Chromium = 0.19 mg/Kg, Copper = 0.09 mg/Kg, Lead = 0.16 mg/Kg and Zinc = 0.73 mg/Kg. Associated sample results greater than 10 times the blank concentration. No qualifying action required. 6010B batch B5C0062 – Chromium = 0.0009 mg/L, Copper = 0.0018 mg/L, Nickel = 0.0021 mg/L and Zinc = 0.0043 mg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes X	No
Comments: EBB-1 – Barium = 0.0006 mg/L, Chromium = 0.0011 mg/L and Zinc = 0.0094 mg/L. EBB-2 – Barium = 0.0005 mg/L and Chromium = 0.0014 mg/L. EBB-3 – Barium = 0.0005 mg/L, Chromium = 0.0010 mg/L and Vanadium = 0.0014 mg/L. Associated sample results greater than 10 times the blank concentration. No qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes NA	No
Comments: Level II data package and validation, no data provided.		
10. Were surrogate recoveries within control limits?	Yes	No X
Comments: 8015B modified - %R below ±40% project limit for Hydrocarbon Chain Distribution (HCD) for 1278-129-1.5, 1278-135-0, 1278-135-1.5 and EBB-2. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – SUR		
11. Were laboratory control (LC/LD) sample recoveries within control limits?	Yes	No X
Comments: 8016B modified batch B5B0751 - %R below ±40% project limit for DRO. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – LCS		
12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X
Comments: 8015B modified batch B5B0751 - %Rs below ±40% limit for DRO at 46%. Associated result flagged "J" for 1278-135-1.5 only. 8015B modified batch B5C0069 - %Rs below ±40% limit for DRO at 48%. Associated result flagged "J" if positive or "UJ" if non-detect for 1278-136-3.5 only. Reason Code – MS		
13. Were RPDs within control limits?	Yes	No X

Comments: 6010B batch B5C0020 – Laboratory duplicate RPD above limits (± 20%) for Molybdenum (38%). Sample site specific. Associated result flagged "J" for 1278-129-0 only. Batch B5C0021 - Laboratory duplicate RPD above limits (± 20%) for Cobalt)32%), Lead (34%) and Molybdenum (74%). Sample site specific. Associated result flagged "J" for 1278-137-1.5 only. Reason Code – LDUP			
14. Were dilutions required on any samples?		Yes X	No
Comments: No qualifying action required.			
15. Were Tentatively Identified Compounds (TIC) present?		Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package, no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package, no data provided.			
18. Were inorganic system performance criteria met?		Yes	No X
Comments: 7471A batches B5C0026 and B5C0027 – Post digestion spike %R above 115% limit at 118% and 116%. All associated positive sample results flagged "J". Reason Code - PDS			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos.		Yes	No X
Comments:			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?		Yes X	No
Comments:			Initials EAC
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments: Samples analyzed at lowest levels possible to achieve required screening limits.			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments: No data are rejected.			

Stantec Analytical Validation Report/Checklist — Report No. 032415-EC-02

Project Name: Caltrans 07A TO-23	Project Number: 185832023
Stantec Validator: Elizabeth Crowley	Laboratory: ATL, Signal Hill, CA
Date Validated: 03/22/15	Laboratory Project Number: 1500747
Sample Start-End Date: 02/25/15	Laboratory Report Date: 03/06/15

Parameters Validated: Total Metals by EPA SW-846 6010B, Mercury by 7471A/7470A, Hydrocarbon Chain Distribution by 8015B modified, Gasoline Range Organics by 8015B modified, Volatile Organic Compounds by 8260B and Chlorinated Herbicides by 8151A

Samples Validated: 20 solid field samples and 3 Equipment Blanks

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B	The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	

Comments: Additional analyses are dependent on initial analyses results, all required analyses reported.

	Yes	No
2. Did the laboratory identify any non-conformances related to the analytical result?	X	

Comments: Refer to laboratory report for dilution and minor issues.

	Yes	No
3. Were sample Chain-of-Custody forms complete?	X	

Comments: All signatures and required items present.

	Yes	No
4. Were samples received in good condition and at the appropriate temperature?	X	

Comments:

	Yes	No
5. Were sample holding times met?	X	

Comments: All holding times met for all analyses.

	Yes	No
6. Were correct concentration units reported?	X	

Comments: Results reported in both mg/Kg and mg/L depending on the analytical method and/or matrix.

	Yes	No
7. Were detections found in laboratory blank samples?	X	

Comments: 6010B batch B5C0021 – Chromium = 0.19 mg/Kg, Copper = 0.09 mg/Kg, Lead = 0.16 mg/Kg and Zinc = 0.73 mg/Kg. Batch B5C0022 – Chromium = 0.19 mg/Kg, Copper = 0.11 mg/Kg and Zinc = 0.26 mg/Kg. Batch B5C0023 – Chromium = 0.18 mg/Kg, Copper = 0.07 mg/Kg, Lead = 0.08 mg/Kg and Zinc = 0.43 mg/Kg. Associated sample results greater than 10 times the blank concentration. No qualifying action required. 6010B batch B5C0062 – Chromium = 0.0009 mg/L, Copper = 0.0018 mg/L, Nickel = 0.0021 mg/L and Zinc = 0.0043 mg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes X	No
Comments: EBA-1 – Arsenic = 0.0026 mg/L, Barium = 0.0045 mg/L, Chromium = 0.0010 mg/L, Molybdenum = 0.0005 mg/L and Zinc = 0.0078 mg/L. EBB-2 – Barium = 0.0005 mg/L. EBB-3 – Barium = 0.0005 mg/L, Chromium = 0.0010 mg/L, Copper = 0.0050 mg/L and Zinc = 0.0048 mg/L. Associated sample results greater than 10 times the blank concentration. No qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes NA	No
Comments: Level II data package and validation, no data provided.		
10. Were surrogate recoveries within control limits?	Yes X	No
Comments:		
11. Were laboratory control (LC/LD) sample recoveries within control limits?	Yes	No X
Comments: 8016B modified batch B5C0081 - %R below ±40% project limit for DRO. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – LCS		
12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X

Comments: 6010B batch B5C0023 - %R above ±20% limit for Lead at 143%. Associated result flagged "J" for 1278-145-0 only. 8015B modified batch B5C0070 - %Rs below ±40% limit for DRO at 53%. Associated result flagged "J" for 1278-140-1.5 only. 8015B modified batch B5C0081 - %Rs below ±40% limit for DRO at 54%. Associated result flagged "J" if positive or "UJ" if non-detect for 1278-145-0 only. Reason Code – MS		
13. Were RPDs within control limits?	Yes	No X
Comments: 6010B batch B5C0022 – Laboratory duplicate RPD above limits (± 20%) for Antimony at 164%, Arsenic at 48%, Cadmium at 22% and Molybdenum at 64%. Sample site specific. Associated result flagged "J" for 1278-121-1.5 only. 6010B batch B5C0023 - Laboratory duplicate RPD above limits (± 20%) for Antimony at 22%. Sample site specific. Associated result flagged "J" for 1278-145-0 only. 8015B modified batch B5C0081 – Laboratory duplicate RPD above ±20% limit for DRO at 69%. Associated result flagged "J" for 1278-145-0 only Reason Code – LDUP		
14. Were dilutions required on any samples?	Yes X	No
Comments: No qualifying action required.		
15. Were Tentatively Identified Compounds (TIC) present?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL		
16. Were organic system performance criteria met? NA	Yes	No
Comments: Level II data package, no data provided.		
17. Were GC/MS internal standards within method criteria? NA	Yes	No
Comments: Level II data package, no data provided.		
18. Were inorganic system performance criteria met?	Yes	No X
Comments: 7471A batches B5C0027 and B5C0029 – Post digestion spike %R above 115% limit at 116% and 116%. All associated positive sample results flagged "J". Reason Code - PDS		

19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.	Yes	No
		X
Duplicate Sample Nos.		
Comments:		

20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes	No	Initials
	X		EAC
Comments:			

21. Other:	Yes	No
		X
Comments:		

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments: Samples analyzed at lowest levels possible to achieve required screening limits.			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments: No data are rejected.			

Stantec Analytical Validation Report/Checklist — Report No. 032415-EC-03

Project Name: Caltrans 07A TO-23	Project Number: 185832023
Stantec Validator: Elizabeth Crowley	Laboratory: ATL, Signal Hill, CA
Date Validated: 03/22/15	Laboratory Project Number: 1500855
Sample Start-End Date: 03/06/15	Laboratory Report Date: 03/20/15

Parameters Validated: Total Metals by EPA SW-846 6010B, Mercury by 7471A/7470A, Hydrocarbon Chain Distribution by 8015B modified, Gasoline Range Organics by 8015B modified, Volatile Organic Compounds by 8260B and Chlorinated Herbicides by 8151A

Samples Validated: 11 solid field samples and 2 Equipment Blanks

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

- **U** The analyte was analyzed for, but not detected above the reported sample quantitation limit.
- **J** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- **UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- **N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- **NJ** The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- **R** The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- **B** The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	

Comments: Additional analyses are dependent on initial analyses results, all required analyses reported.

	Yes	No
2. Did the laboratory identify any non-conformances related to the analytical result?	X	

Comments: Refer to laboratory report for dilution and minor issues.

	Yes	No
3. Were sample Chain-of-Custody forms complete?	X	

Comments: All signatures and required items present.

	Yes	No
4. Were samples received in good condition and at the appropriate temperature?	X	

Comments:

	Yes	No
5. Were sample holding times met?	X	

Comments: All holding times met for all analyses.

	Yes	No
6. Were correct concentration units reported?	X	

Comments: Results reported in both mg/Kg and mg/L depending on the analytical method and/or matrix.

	Yes	No
7. Were detections found in laboratory blank samples?	X	

Comments: 6010B batch B5C0270 – Chromium = 0.19 mg/Kg, Copper = 0.06 mg/Kg and Zinc = 0.16 mg/Kg. Batch B5C0271 – Chromium = 0.19 mg/Kg. Associated sample results greater than 10 times the blank concentration. No qualifying action required. 6010B batch B5C0278 – Chromium = 0.0009 mg/L and Zinc = 0.0039 mg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes X	No
Comments: EB-1 – Barium = 0.0004 mg/L and Zinc = 0.0041 mg/L. EB-2 – Beryllium = 0.0002 mg/Kg, Cadmium = 0.0001 mg/Kg, Chromium = 0.0010 mg/L, Copper = 0.0011 mg/L and Zinc = 0.0047 mg/L. Associated sample results greater than 10 times the blank concentration. No qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes NA	No
Comments: Level II data package and validation, no data provided.		
10. Were surrogate recoveries within control limits?	Yes	No X
Comments: 8015B modified Hydrocarbon Chain Distribution - %Rs below ±40% project limit for 1278-127-0, 1278-127-1.5, 1278-128-0, 1278-131-0, 1278-132-0, 1278-132-1.5, 1278-133-0, 1278-133-1.5 and 1278-134-0. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – SUR		
11. Were laboratory control (LC/LD) sample recoveries within control limits?	Yes X	No
Comments:		
12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X
Comments: 6010B batch B5C0270 - %R below ±20% limit for Antimony at 58%. Associated result flagged "J" for 1278-127-0 only. 8015B modified batch B5C0247 - %Rs below ±40% limit for DRO at 23%. Associated result flagged "J" for 1278-134-1.5 only. Reason Code – MS		
13. Were RPDs within control limits?	Yes	No X

Comments: 6010B batch B5C0270 – Laboratory duplicate RPD above limits (± 20%) for Chromium at 24%. Sample site specific. Associated result flagged "J" for 1278-127-0 only. 6010B batch B5C0271 - Laboratory duplicate RPD above limits (± 20%) for Cadmium at 39% and Zinc at 23%. Sample site specific. Associated result flagged "J" for 1278-134-1.5 only. Reason Code – LDUP			
14. Were dilutions required on any samples?		Yes X	No
Comments: No qualifying action required.			
15. Were Tentatively Identified Compounds (TIC) present?		Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package, no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package, no data provided.			
18. Were inorganic system performance criteria met?		Yes	No X
Comments: 7471A batch B5C0272 – Post digestion spike %R above 115% limit at 116%. All associated positive sample results flagged "J". Reason Code - PDS			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos.		Yes	No X
Comments:			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT			
Precision:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments: Samples analyzed at lowest levels possible to achieve required screening limits.			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments: No data are rejected.			

Stantec Analytical Validation Report/Checklist — Report No. 032415-EC-04

Project Name: Caltrans 07A TO-23	Project Number: 185832023
Stantec Validator: Elizabeth Crowley	Laboratory: ATL, Signal Hill, CA
Date Validated: 03/22/15	Laboratory Project Number: 1500894
Sample Start-End Date: 03/10/15	Laboratory Report Date: 03/20/15

Parameters Validated: Total Metals by EPA SW-846 6010B, Mercury by 7471A/7470A, Hydrocarbon Chain Distribution by 8015B modified, Gasoline Range Organics by 8015B modified, Volatile Organic Compounds by 8260B and Chlorinated Herbicides by 8151A

Samples Validated: 15 solid field samples and 2 Equipment Blanks

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

- **U** The analyte was analyzed for, but not detected above the reported sample quantitation limit.
- **J** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- **UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- **N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- **NJ** The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- **R** The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- **B** The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments: Additional analyses are dependent on initial analyses results, all required analyses reported.		
2. Did the laboratory identify any non-conformances related to the analytical result?	X	
Comments: Refer to laboratory report for dilution and minor issues.		
3. Were sample Chain-of-Custody forms complete?	X	
Comments: All signatures and required items present.		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments: All holding times met for all analyses.		
6. Were correct concentration units reported?	X	
Comments: Results reported in both mg/Kg and mg/L depending on the analytical method and/or matrix.		
7. Were detections found in laboratory blank samples?	X	

Comments: 6010B batch B5C0406 – Chromium = 0.22 mg/Kg, Copper = 0.31 mg/Kg, Nickel = 0.11 mg/Kg and Zinc = 0.33 mg/Kg. Batch B5C0407 – Chromium = 0.17 mg/Kg, Copper = 0.06 mg/Kg, Nickel = 0.09 mg/Kg and Zinc = 0.76 mg/Kg. Associated sample results greater than 10 times the blank concentration. No qualifying action required. 6010B batch B5C0368 – Chromium = 0.0009 mg/L, Copper = 0.0029 mg/L and Zinc = 0.0088 mg/L. Sample results below the blank concentration are validated to non-detect and flagged "UJB". Sample results greater than the blank concentration are flagged "JB". The detection limit changed to the blank concentration. Sample results greater than 10 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes X	No
Comments: EB-1 – Barium = 0.0004 mg/L, Cadmium = 0.0003 mg/L, Chromium = 0.0015 mg/L, Copper = 0.0030 mg/L, Nickel = 0.0005 mg/L, Zinc = 0.032 mg/L and C23-C32 = 0.05 mg/L. EB-2 – Beryllium = 0.0002 mg/Kg, Chromium = 0.0012 mg/L, Copper = 0.0031 mg/L, Silver = 0.0008 mg/L and Zinc = 0.0093 mg/L. Associated sample results greater than 10 times the blank concentration. No qualifying action required.		
9. Were instrument calibrations within method criteria?	Yes NA	No
Comments: Level II data package and validation, no data provided.		
10. Were surrogate recoveries within control limits?	Yes	No X
Comments: 8015B modified Hydrocarbon Chain Distribution - %Rs below ±40% project limit for 1278-166-1.5, 1278-163-1.5, 1278-162-0, EB-1, 1278-168-0, 1278-168-1.5, 1278-169-0, 1278-169-0 and EB-2. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code – SUR		
11. Were laboratory control (LC/LD) sample recoveries within control limits?	Yes	No X
Comments: 8015B modified batches B5C0340, B5C0390 and B5C0391 - %Rs below ±40% limit for DRO at 55%, 57% and 56%. Associated sample results flagged "J" if positive or "UJ" if non-detect. 8260B batch B5C0297 - %Rs below ±30% limit for 2-CVE at 62%, Bromomethane at 56% and Chloromethane at 68%. Associated sample results flagged "J" if positive or "UJ" if non-detect. Reason Code - LCS		
12. Were site specific matrix spike (MS/MD) recoveries within control limits?	Yes	No X

Comments: 8015B modified batch B5C0390 - %Rs below ±40% limit for DRO at 20%. Associated sample result flagged "J" if positive or "UJ" if non-detect for 1278-166-0 only. 8015B modified batch B5C0391 - %Rs below ±40% limit for DRO at 39%. Associated result flagged "J" for 1278-169-1.5 only. Reason Code – MS		
13. Were RPDs within control limits?	Yes	No X
Comments: 6010B batch B5C0406 – Laboratory duplicate RPD above limits (± 20%) for Barium at 20% and Zinc at 30%. Sample site specific. Associated result flagged "J" for 1278-167-0 only. 6010B batch B5C0407 - Laboratory duplicate RPD above limits (± 20%) for Antimony at 70%, Cadmium at 27%, Lead at 50% and Zinc at 21%. Sample site specific. Associated result flagged "J" for 1278-168-0 only. Reason Code – LDUP		
14. Were dilutions required on any samples?	Yes X	No
Comments: No qualifying action required.		
15. Were Tentatively Identified Compounds (TIC) present?	Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code – SQL		
16. Were organic system performance criteria met? NA	Yes	No
Comments: Level II data package, no data provided.		
17. Were GC/MS internal standards within method criteria? NA	Yes	No
Comments: Level II data package, no data provided.		
18. Were inorganic system performance criteria met?	Yes	No X
Comments: 7471A batches B5C0411 and B5C0412 – Post digestion spike %R above 115% limit at 117% and 128%. All associated positive sample results flagged "J". Reason Code - PDS		
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample Nos.	Yes	No X
Comments:		

20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Sensitivity:	Acceptable X	Unacceptable	Initials EAC
Comments: Samples analyzed at lowest levels possible to achieve required screening limits.			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments: Data usable as qualified.			
Representativeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments: No data are rejected.			

APPENDIX F
PHOTOGRAPHIC LOG

STANTEC CONSULTING SERVICES
PHOTOGRAPHIC RECORD

Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 1 & 2

Borings 1278-101 and 1278-102 located on the North Canyon Staging Area, west of I-405 southbound.

Photograph No. 3 & 4

Borings 1278-103 and 1278-104 located on the North Canyon Staging Area, west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 5 & 6

Borings 1278-105 and 1278-106 located on the North Canyon Staging Area, west of I-405 southbound

Photograph No. 7 & 8

Borings 1278-107 and 1278-108 located on the North Canyon Staging Area, west of I-405 southbound

Photograph No. 9 & 10

STANTEC CONSULTING SERVICES
PHOTOGRAPHIC RECORD

Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Borings 1278-109 and 1278-110 located on the North Canyon Staging Area, west of I-405 southbound

Photograph No. 11 & 12

Borings 1278-111 and 1278-112 located on the North-North Canyon Staging Area, west of I-405 southbound

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 13 & 14

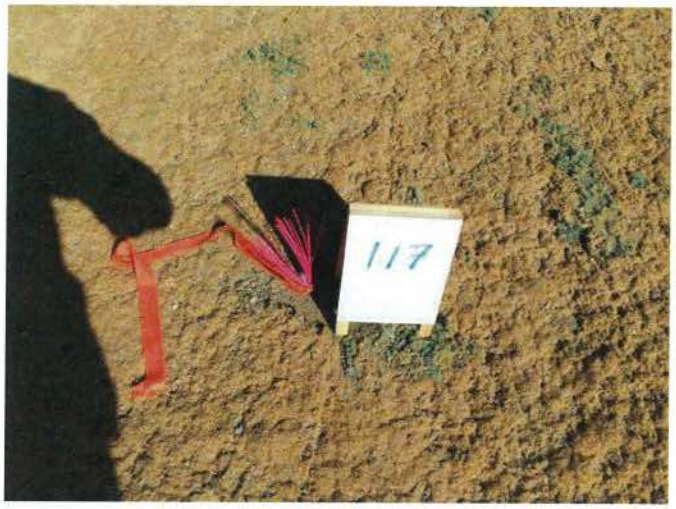
Borings 1278-113 and 1278-114 located on the North-North Canyon Staging Area, west of I-405 southbound

Photograph No. 15 & 16

Borings 1278-115 and 1278-116 located on the North-North Canyon Staging Area, west of I-405 southbound

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 17 & 18



Boring 1278-117 and 1278-118 located on the North-North Canyon Staging Area, west of I-405 southbound

Photograph No. 19 & 20

Boring 1278-119 located on the North-North Canyon Staging Area, west of I-405 southbound (not located on Getty Center Property and not sampled). Boring 1278-120 located on I-405 Right of Way between Stations 1752+00 to 1766+50 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 21 & 22

Boring 1278-121 and 1278-122 located on I-405 Right of Way between Stations 1752+00 to 1766+50 west of I-405 southbound.

Photograph No. 23 & 24

Boring 1278-123 and 1278-127 located on I-405 Right of Way between Stations 1752+00 to 1766+50 west of I-405 southbound. Borings 1278-124 through 1278-126 located on SR-405 Right of Way Stations 1752+00 to 1766+50 west of I-405 southbound were inaccessible by foot (no photographs and not sampled).

STANTEC CONSULTING SERVICES
PHOTOGRAPHIC RECORD

Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 25 and 26

Borings 1278-128 and 1278-129 located on SR-405 Right of Way Stations 1766+50 to 1781+00 west of I-405 southbound.

Photograph No. 27 & 28

Borings 1278-130 and 1278-131 located on SR-405 Right of Way Stations 1766+50 to 1781+00 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 29 & 30

Borings 1278-132 and 1278-133 located on SR-405 Right of Way Stations 1766+50 to 1781+00 west of I-405 southbound.

Photograph No. 31 & 32

Borings 1278-134 and 1278-135 located on SR-405 Right of Way Stations 1766+50 to 1781+00 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 33 & 34

Borings 1278-136 and 1278-137 located on SR-405 Right of Way Stations 1766+50 to 1781+00 west of I-405 southbound.

Photograph No. 35 & 36

Boring 1278-138 and 1278-139 located on SR-405 Right of Way Stations 1781+00 to 1795+00 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 37 & 38

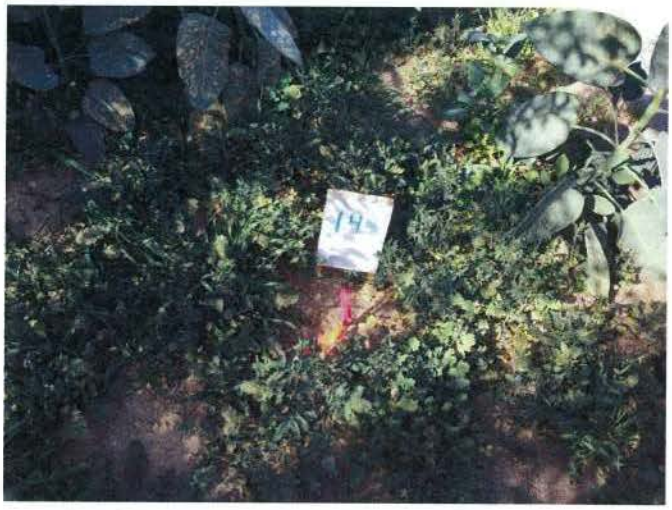
Borings 1278-140 and 1278-141 located on SR-405 Right of Way Stations 1781+00 to 1795+00 west of I-405 southbound.

Photograph No. 39 & 40

Boring 1278-142 and 1278-143 located on SR-405 Right of Way Stations 1781+00 to 1795+00 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 41 & 42



Boring 1278-144 and 1278-145 located on SR-405 Right of Way Stations 1781+00 to 1795+00 west of I-405 southbound.

Photograph No. 43 & 44

Boring 1278-146 and 1278-147 located on SR-405 Right of Way Stations 1781+00 to 1795+00 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 45 & 46

Borings 1278-148 and 1278-149 located on I-405 Right of Way Stations 1795+00 to 1807+00 west of I-405 southbound.

Photograph No. 47 & 48

Borings 1278-150 and 1278-151 located on I-405 Right of Way Stations 1795+00 to 1807+00 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 49 & 50

Borings 1278-152 and 1278-153 located on I-405 Right of Way Stations 1795+00 to 1807+00 west of I-405 southbound.

Photograph No. 51 & 52

Borings 1278-154 and 1278-155 located on I-405 Right of Way Stations 1795+00 to 1807+00 west of I-405 southbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 53 & 54

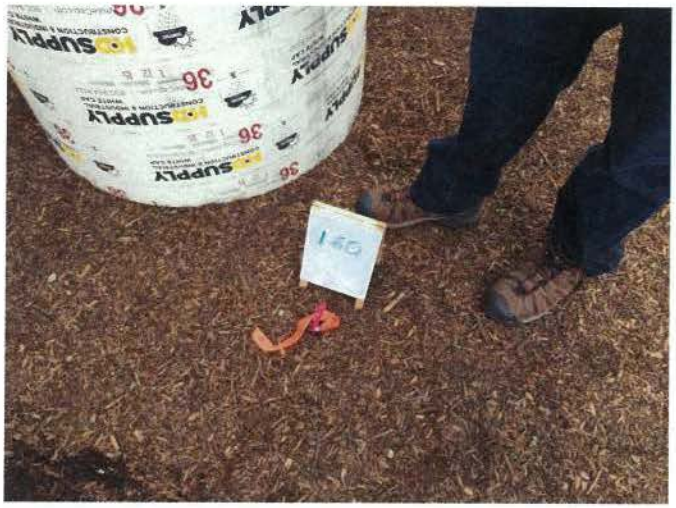
Borings 1278-156 and 1278-157 located on I-405 Right of Way Stations 1802+00 to 1809+50, east of I-405 northbound (not sampled).

Photograph No. 55 & 56

Borings 1278-158 and 1278-159 located on I-405 Right of Way Stations 1802+00 to 1809+50, east of I-405 northbound (not sampled).

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 57 & 58



Boring 1278-160 located on I-405 Right of Way Stations 1802+00 to 1809+50, east of I-405 northbound (not sampled). Boring 1278-161 located on I-405 Right of Way Stations 1809+50 to 1821+00, east of I-405 northbound (not sampled).

Photograph No. 59 & 60

Borings 1278-162 and 1278-163 located on I-405 Right of Way Stations 1809+50 to 1821+00, east of I-405 northbound.

STANTEC CONSULTING SERVICES PHOTOGRAPHIC RECORD	
Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 61 & 62

Borings 1278-164 and 1278-165 located on I-405 Right of Way Stations 1809+50 to 1821+00, east of I-405 northbound.

Photograph No. 63 & 64

Borings 1278-166 and 1278-167 located on I-405 Right of Way Stations 1809+50 to 1821+00, east of I-405 northbound.

STANTEC CONSULTING SERVICES
PHOTOGRAPHIC RECORD

Client: CalTrans District 7 – 07A3322	**Job Number:** 185832023
Site Name: Task Order 23	**Location:** I-405 Freeway - Getty Center – Los Angeles County
Photographer: JS/SE	**Project Dates:** February 18, 25, 24, and March 5 and 15, 2015

Photograph No. 65 & 66

Borings 1278-168 and 1278-169 located on I-405 Right of Way Stations 1809+50 to 1821+00, east of I-405 northbound.

APPENDIX G
UPPER CONFIDENCE LEVEL CALCULATIONS

Outlier Tests for Selected Uncensored Variables

User Selected Options		
Date/Time of Computation	4/18/2015 14:40	
From File		WorkSheet.xls
Full Precision		OFF

Dixon's Outlier Test for North-North Canyon (Debris) Parcel -- Arsenic

Number of Observations = 8
10% critical value: 0.479
5% critical value: 0.554
1% critical value: 0.683

1. Observation Value 40 is a Potential Outlier (Upper Tail)?

Test Statistic: 0.938

For 10% significance level, 40 is an outlier.
For 5% significance level, 40 is an outlier.
For 1% significance level, 40 is an outlier.

2. Observation Value 7.9 is a Potential Outlier (Lower Tail)?

Test Statistic: 0.048

For 10% significance level, 7.9 is not an outlier.
For 5% significance level, 7.9 is not an outlier.
For 1% significance level, 7.9 is not an outlier.

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	4/18/2015 14:54
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Southbound Strip Parcel -- Arsenic

General Statistics					
Total Number of Observations		64	Number of Distinct Observations		44
			Number of Missing Observations		0
Minimum		0.65	Mean		5.671
Maximum		19	Median		5.4
SD		3.408	Std. Error of Mean		0.426
Coefficient of Variation		0.601	Skewness		1.762
Normal GOF Test					
Shapiro Wilk Test Statistic		0.846	Shapiro Wilk GOF Test		
5% Shapiro Wilk P Value		7.85E-09	Data Not Normal at 5% Significance Level		
Lilliefors Test Statistic		0.166	Lilliefors GOF Test		
5% Lilliefors Critical Value		0.111	Data Not Normal at 5% Significance Level		
Data Not Normal at 5% Significance Level					
Assuming Normal Distribution					
95% Normal UCL			95% UCLs (Adjusted for Skewness)		
95% Student's-t UCL		6.383	95% Adjusted-CLT UCL (Chen-1995)		6.472
			95% Modified-t UCL (Johnson-1978)		6.398
Gamma GOF Test					
A-D Test Statistic		1.932	Anderson-Darling Gamma GOF Test		
5% A-D Critical Value		0.759	Data Not Gamma Distributed at 5% Significance Level		
K-S Test Statistic		0.184	Kolmogrov-Smirnoff Gamma GOF Test		
5% K-S Critical Value		0.112	Data Not Gamma Distributed at 5% Significance Level		
Data Not Gamma Distributed at 5% Significance Level					
Gamma Statistics					
k hat (MLE)		2.777	k star (bias corrected MLE)		2.657
Theta hat (MLE)		2.042	Theta star (bias corrected MLE)		2.134
nu hat (MLE)		355.5	nu star (bias corrected)		340.2
MLE Mean (bias corrected)		5.671	MLE Sd (bias corrected)		3.479
			Approximate Chi Square Value (0.05)		298.4
Adjusted Level of Significance		0.0463	Adjusted Chi Square Value		297.5
Assuming Gamma Distribution					
95% Approximate Gamma UCL (use when n>=50))		6.465	95% Adjusted Gamma UCL (use when n<50)		6.484
Lognormal GOF Test					
Shapiro Wilk Test Statistic		0.89	Shapiro Wilk Lognormal GOF Test		
5% Shapiro Wilk P Value		4.18E-06	Data Not Lognormal at 5% Significance Level		
Lilliefors Test Statistic		0.226	Lilliefors Lognormal GOF Test		
5% Lilliefors Critical Value		0.111	Data Not Lognormal at 5% Significance Level		
Data Not Lognormal at 5% Significance Level					
Lognormal Statistics					
Minimum of Logged Data		-0.431	Mean of logged Data		1.545
Maximum of Logged Data		2.944	SD of logged Data		0.685

Assuming Lognormal Distribution

95% H-UCL	7.041	90% Chebyshev (MVUE) UCL	7.559
95% Chebyshev (MVUE) UCL	8.311	97.5% Chebyshev (MVUE) UCL	9.354
99% Chebyshev (MVUE) UCL	11.4		

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	6.372	95% Jackknife UCL	6.383
95% Standard Bootstrap UCL	6.384	95% Bootstrap-t UCL	6.544
95% Hall's Bootstrap UCL	6.549	95% Percentile Bootstrap UCL	6.39
95% BCA Bootstrap UCL	6.454		
90% Chebyshev(Mean, Sd) UCL	6.949	95% Chebyshev(Mean, Sd) UCL	7.528
97.5% Chebyshev(Mean, Sd) UCL	8.332	99% Chebyshev(Mean, Sd) UCL	9.91

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	7.528

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Outlier Tests for Selected Uncensored Variables

User Selected Options
Date/Time of Computation 4/18/2015 15:16
From File WorkSheet.xls
Full Precision OFF

Dixon's Outlier Test for Northbound Strip Parcel -- Lead

Number of Observations = 14
10% critical value: 0.492
5% critical value: 0.546
1% critical value: 0.641

1. Observation Value 2500 is a Potential Outlier (Upper Tail)?

Test Statistic: 0.917

For 10% significance level, 2500 is an outlier.
For 5% significance level, 2500 is an outlier.
For 1% significance level, 2500 is an outlier.

2. Observation Value 9 is a Potential Outlier (Lower Tail)?

Test Statistic: 0.226

For 10% significance level, 9 is not an outlier.
For 5% significance level, 9 is not an outlier.
For 1% significance level, 9 is not an outlier.

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	4/18/2015 15:23
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Northbound Strip Parcel -- Lead

General Statistics

Total Number of Observations	14	Number of Distinct Observations	12
		Number of Missing Observations	0
Minimum	9	Mean	333.4
Maximum	2500	Median	200
SD	630.3	Std. Error of Mean	168.5
Coefficient of Variation	1.891	Skewness	3.603

Normal GOF Test

Shapiro Wilk Test Statistic	0.432	Shapiro Wilk GOF Test
5% Shapiro Wilk Critical Value	0.874	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.469	Lilliefors GOF Test
5% Lilliefors Critical Value	0.237	Data Not Normal at 5% Significance Level
Data Not Normal at 5% Significance Level		

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	631.7	95% Adjusted-CLT UCL (Chen-1995)	783.8
		95% Modified-t UCL (Johnson-1978)	658.7

Gamma GOF Test

A-D Test Statistic	1.198	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.77	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.344	Kolmogrov-Smirnoff Gamma GOF Test
5% K-S Critical Value	0.237	Data Not Gamma Distributed at 5% Significance Level
Data Not Gamma Distributed at 5% Significance Level		

Gamma Statistics

k hat (MLE)	0.763	k star (bias corrected MLE)	0.647
Theta hat (MLE)	436.7	Theta star (bias corrected MLE)	514.9
nu hat (MLE)	21.37	nu star (bias corrected)	18.13
MLE Mean (bias corrected)	333.4	MLE Sd (bias corrected)	414.3
		Approximate Chi Square Value (0.05)	9.483
Adjusted Level of Significance	0.0312	Adjusted Chi Square Value	8.664

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	637.2	95% Adjusted Gamma UCL (use when n<50)	697.5

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.899	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk Critical Value	0.874	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.254	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.237	Data Not Lognormal at 5% Significance Level
Data appear Approximate Lognormal at 5% Significance Level		

Lognormal Statistics

Minimum of Logged Data	2.197	Mean of logged Data	5.027
Maximum of Logged Data	7.824	SD of logged Data	1.265

Assuming Lognormal Distribution

95% H-UCL	1062	90% Chebyshev (MVUE) UCL	659.7
95% Chebyshev (MVUE) UCL	818.1	97.5% Chebyshev (MVUE) UCL	1038
99% Chebyshev (MVUE) UCL	1470		

Nonparametric Distribution Free UCL Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	610.4	95% Jackknife UCL	631.7
95% Standard Bootstrap UCL	605.2	95% Bootstrap-t UCL	1710
95% Hall's Bootstrap UCL	1957	95% Percentile Bootstrap UCL	655.2
95% BCA Bootstrap UCL	817.6		
90% Chebyshev(Mean, Sd) UCL	838.7	95% Chebyshev(Mean, Sd) UCL	1068
97.5% Chebyshev(Mean, Sd) UCL	1385	99% Chebyshev(Mean, Sd) UCL	2009

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	1068

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	4/18/2015 15:26
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Northbound Strip Parcel -- UCL95 lead without 2,500 mg/kg outlier

General Statistics			
Total Number of Observations	13	Number of Distinct Observations	11
		Number of Missing Observations	0
Minimum	9	Mean	166.7
Maximum	270	Median	180
SD	95.39	Std. Error of Mean	26.46
Coefficient of Variation	0.572	Skewness	-0.394

Normal GOF Test		
Shapiro Wilk Test Statistic	0.892	Shapiro Wilk GOF Test
5% Shapiro Wilk Critical Value	0.866	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.173	Lilliefors GOF Test
5% Lilliefors Critical Value	0.246	Data appear Normal at 5% Significance Level
Data appear Normal at 5% Significance Level		

Assuming Normal Distribution			
95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	213.8	95% Adjusted-CLT UCL (Chen-1995)	207.1
		95% Modified-t UCL (Johnson-1978)	213.4

Gamma GOF Test		
A-D Test Statistic	0.771	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.746	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.199	Kolmogrov-Smirnoff Gamma GOF Test
5% K-S Critical Value	0.24	Detected data appear Gamma Distributed at 5% Significance Level
Detected data follow Appr. Gamma Distribution at 5% Significance Level		

Gamma Statistics			
k hat (MLE)	1.791	k star (bias corrected MLE)	1.429
Theta hat (MLE)	93.07	Theta star (bias corrected MLE)	116.7
nu hat (MLE)	46.57	nu star (bias corrected)	37.15
MLE Mean (bias corrected)	166.7	MLE Sd (bias corrected)	139.4
		Approximate Chi Square Value (0.05)	24.2
Adjusted Level of Significance	0.0301	Adjusted Chi Square Value	22.72

Assuming Gamma Distribution			
95% Approximate Gamma UCL (use when n>=50))	255.9	95% Adjusted Gamma UCL (use when n<50)	272.6

Lognormal GOF Test		
Shapiro Wilk Test Statistic	0.791	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk Critical Value	0.866	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.219	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.246	Data appear Lognormal at 5% Significance Level
Data appear Approximate Lognormal at 5% Significance Level		

Lognormal Statistics			
Minimum of Logged Data	2.197	Mean of logged Data	4.812
Maximum of Logged Data	5.598	SD of logged Data	1.016

Assuming Lognormal Distribution

95% H-UCL	478.3	90% Chebyshev (MVUE) UCL	372.8
95% Chebyshev (MVUE) UCL	453.3	97.5% Chebyshev (MVUE) UCL	565.1
99% Chebyshev (MVUE) UCL	784.7		

Nonparametric Distribution Free UCL Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	210.2	95% Jackknife UCL	213.8
95% Standard Bootstrap UCL	208	95% Bootstrap-t UCL	210.2
95% Hall's Bootstrap UCL	206	95% Percentile Bootstrap UCL	208
95% BCA Bootstrap UCL	207.4		
90% Chebyshev(Mean, Sd) UCL	246.1	95% Chebyshev(Mean, Sd) UCL	282
97.5% Chebyshev(Mean, Sd) UCL	331.9	99% Chebyshev(Mean, Sd) UCL	429.9

Suggested UCL to Use

95% Student's-t UCL	213.8

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	4/18/2015 15:42
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

North-North Canyon (Debris) Parcel -- Arsenic excluding outlier 40 mg/kg outlier

General Statistics

Total Number of Observations	7	Number of Distinct Observations	5
		Number of Missing Observations	0
Minimum	7.9	Mean	9.143
Maximum	10	Median	9.3
SD	0.931	Std. Error of Mean	0.352
Coefficient of Variation	0.102	Skewness	-0.451

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest. For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012). Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.0

Normal GOF Test

Shapiro Wilk Test Statistic	0.835	Shapiro Wilk GOF Test	
5% Shapiro Wilk Critical Value	0.803	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.25	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.335	Data appear Normal at 5% Significance Level	
Data appear Normal at 5% Significance Level			

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	9.826	95% Adjusted-CLT UCL (Chen-1995)	9.657
		95% Modified-t UCL (Johnson-1978)	9.816

Gamma GOF Test

A-D Test Statistic	0.582	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.708	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.266	Kolmogrov-Smirnoff Gamma GOF Test
5% K-S Critical Value	0.311	Detected data appear Gamma Distributed at 5% Significance Level
Detected data appear Gamma Distributed at 5% Significance Level		

Gamma Statistics

k hat (MLE)	109.6	k star (bias corrected MLE)	62.72
Theta hat (MLE)	0.0834	Theta star (bias corrected MLE)	0.146
nu hat (MLE)	1534	nu star (bias corrected)	878.1
MLE Mean (bias corrected)	9.143	MLE Sd (bias corrected)	1.154
		Approximate Chi Square Value (0.05)	810.3
Adjusted Level of Significance	0.0158	Adjusted Chi Square Value	790.5

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	9.908	95% Adjusted Gamma UCL (use when n<50)	10.16

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.833	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk Critical Value	0.803	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.246	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.335	Data appear Lognormal at 5% Significance Level
Data appear Lognormal at 5% Significance Level		

Lognormal Statistics

Minimum of Logged Data	2.067	Mean of logged Data	2.208
Maximum of Logged Data	2.303	SD of logged Data	0.104

Assuming Lognormal Distribution

95% H-UCL	9.914	90% Chebyshev (MVUE) UCL	10.22
95% Chebyshev (MVUE) UCL	10.71	97.5% Chebyshev (MVUE) UCL	11.39
99% Chebyshev (MVUE) UCL	12.72		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	9.721	95% Jackknife UCL	9.826
95% Standard Bootstrap UCL	9.652	95% Bootstrap-t UCL	9.79
95% Hall's Bootstrap UCL	9.572	95% Percentile Bootstrap UCL	9.629
95% BCA Bootstrap UCL	9.629		
90% Chebyshev(Mean, Sd) UCL	10.2	95% Chebyshev(Mean, Sd) UCL	10.68
97.5% Chebyshev(Mean, Sd) UCL	11.34	99% Chebyshev(Mean, Sd) UCL	12.64

Suggested UCL to Use

95% Student's-t UCL	9.826

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. For additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.