Appendix E2
Phase II Environmental Site Assessment

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Commercial Property
1515 West 178th Street
Gardena, California
Stantec Project No: 185803664

Prepared for:
The Olson Company
3010 Old ranch Parkway,
Suite 100
Seal Beach, CA 90740

Prepared by:
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July 18, 2016

Sign-off Sheet

This PHASE II ENVIRONMENTAL SITE ASSESSMENT was prepared by Stantec Consulting Services Inc. for The Olson Company. The material in it reflects Stantec's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Stantec Consulting Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Prepared by 

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Kristen Daly, Project Geologist

Reviewed by 

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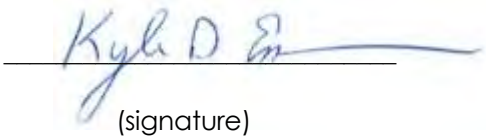
Jim DeWoody, Senior Scientist

Approved by 

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Kyle Emerson, Managing Principal Geologist, C.E.G. 1271

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Executive Summary

The subject property is addressed as 1515 West 178th Street, in the City of Gardena, County of Los Angeles, California (the "Site"). The Site consists of two contiguous parcels totaling approximately 5.63 acres of land developed as warehouse building with associated parking area. The surrounding area is a mixture of commercial and residential properties.

The Site and vicinity appear to have been used for agricultural purposes until the 1960's. SECOR (now Stantec) conducted a shallow soil assessment in 2004 to evaluate the potential presence of residual pesticides in shallow soils from historic agricultural use of the Site. The assessment detected no pesticides at levels above residential screening levels. A site-wide assessment of the Site regarding arsenic and lead (associated with potential herbicide application) was performed by Terracon in 2007. The results of shallow soil sampling by Terracon concluded that neither compound was present at levels above residential screening levels. Based on these assessments, Stantec concludes that the historical agricultural use of the Site represents neither a recognized environmental condition nor a human health risk in light of the contemplated residential use of the Site. Stantec recommends no further investigation regarding this issue.

A soil and soil gas survey was also completed by Terracon in 2007 under the direction of Los Angeles County Fire Department (LACFD). Terracon's assessment identified limited impacts to soil and soil gas on the Site at levels below commercial screening levels. Chlorinated compounds, namely tetrachloroethylene (PCE) and trichloroethylene (TCE), were reported at multiple locations at concentrations that slightly exceeded the residential use screening levels. Based on this information, LACFD issued written regulation closure for the Site in 2008 – but the closure was contingent upon the continued commercial use of the Site.

Since there have been continued automobile repair operations reported at the Site since 2007, and in light of the contemplated change in use from commercial purposes to residential purposes, Stantec recommended performing a new assessment to evaluate whether the detected soil vapor concentration reported in 2007 had changed. Accordingly, Stantec conducted additional soil, soil gas sampling at the Site to evaluate the existing impacts.

In April and May of 2016, Stantec personnel oversaw two rounds of assessment that included the installation of soil vapor probes and soil sampling at seventeen (17) locations at the Site. The assessments identified concentrations of contaminants in soil vapor at levels above current residential screening levels, primarily along the eastern portion of the Site. Soil samples were collected during the May 2016 investigation, but none of the results reported VOCs above laboratory reporting limits (i.e., the results were "non-detect"). The two (2) samples which were also analyzed for TPH similarly reported no concentrations at levels above laboratory reporting limits (i.e., "non-detect").

Seventeen (17) soil vapor samples were collected from a depth of five (5) feet below ground surface (bgs) at the Site. The samples reported the presence of PCE, TCE, benzene, 1,1-dichloroethene (1,1-DCE) and methylene chloride at concentrations above laboratory reporting limits. Of these VOCs, PCE was reported above its DTSC HERO Note 3 value of 0.48 microgram per liter (ug/L) for residential uses, with a maximum concentration of 68 ug/L reported in location SV-13 (northeast portion of the Site). Benzene was reported slightly above its DTSC HERO Note 3 value of 0.097 ug/L with a maximum concentration of 0.17 ug/L reported at SV-11. The detected soil vapor impacts appear to affect the eastern 1/3 of the Site above the DTSC HERO Note 3 value of 0.48 microgram per liter (ug/L) for residential uses.

To evaluate if the contaminants detected in soil vapor has affected groundwater, Stantec completed an additional assessment in June of 2016. The assessment included the drilling of three (3) borings into groundwater for the collection of hydropunch water samples. Soils encountered during the investigation consisted mainly of silty sand to the maximum depth of 40 feet bgs. Groundwater was encountered at a depth of between 30 and 40 feet bgs in the borings. Stantec identified no staining or hydrocarbon odors in any of the borings.

The groundwater samples reported TPH and VOCs at levels above the Site screening levels, with the highest PCE concentration reported in groundwater at the northeast corner of the Site – in the vicinity of the highest detected contaminant concentrations in soil vapor. Specifically, PCE was reported in HP-1 at 70 µg/L. PCE concentrations in groundwater decrease toward the south, but elevated concentrations of 1,1-DCE were reported at the southern property line of the Site. The detected concentrations of PCE exceed the maximum contaminant level (MCL) for groundwater, which is currently set at 5 µg/L.

The groundwater flow gradient at the Site is reported to be toward the northeast, based on a recent groundwater monitoring report from the off-site property located to the south. This property known as Bee Chemical and has a known groundwater contamination issue composed of the same VOCs that were detected at the Site. The VOC impacts in groundwater along the southern property line appear to be commingled with the plume from the former Bee Chemical Facility located to the south of the Site. The limits of this groundwater contamination both on-site and off-site have not been defined to date.

Based on the data collected to date, impact to soil vapor by VOCs - particularly PCE - is present in the northeastern portion of the Site. No source has been identified in soil on the Site. Groundwater has been impacted by VOCs, with the highest reported concentration in the northeastern portion of the Site in the vicinity of highest soil vapor impact. The highest soil vapor concentrations appear to be the source of the elevated groundwater impact in the northeast corner of the Site. The lower concentration groundwater impact in the southern portion of the Site is likely the result of an offsite source migrating onto the Site.

Stantec recommends submitting the data collected to date to LACFD with a request for regulatory oversight. Based on LACFD's review and discussions to be conducted with LACFD, Stantec will then be able to make a determination as to whether additional on-site and/or off-Site assessment is necessary in regard to both soil vapor and groundwater. Following completion of any LACFD-required assessment, Stantec could then – as necessary – be able to

prepare a remedial action plan (RAP) in order to complete any work required by LACFD for redevelopment of the Site for residential purposes.

Should there be any questions regarding the information provided within the accompanying report, please do not hesitate to contact the undersigned at (909) 335-6116.

Respectfully submitted,

STANTEC CONSULTING SERVICES INC.

Kristen Daly
Project Geologist

Kyle D. Emerson, CEG 1271
Managing Principal Geologist

1.0 INTRODUCTION

This report documents the methodology and results of a soil, groundwater and soil vapor assessment completed at the Site. This assessment was conducted in accordance with a *Proposal for Soil Vapor Sampling* dated March 23, 2016, a *Proposal for Additional Soil and Soil Vapor Sampling* dated April 21, 2016, and a *Proposal for Groundwater Sampling* dated June 2, 2016 by Stantec. The work completed and results of that sampling are described in the sections below.

1.1 SITE DESCRIPTION AND OPERATIONS

The Site is addressed as 1515 West 178th Street, in the City of Gardena, County of Los Angeles, California and consists of two contiguous parcels totaling approximately 5.63 acres of land developed as warehouse building with associated parking area. The surrounding area is a mixture of commercial and residential properties.

1.2 SITE GEOLOGY AND HYDROGEOLOGY

The Site is located in an area of recent alluvial fan deposits from the Quaternary age. These deposits typically consist of tideland and flood-plain deposits. Regionally, the Site is located within the southwestern block of the Los Angeles Basin, within the Peninsular Ranges Geomorphic Province of California. Shallow sediments in this area of the Los Angeles Basin consist of recent-age gravel, sand, silt, and clay deposits by the Los Angeles River and Dominguez Channel. In some areas, these sediments are expected to be approximately 50 to 90 feet thick. The near-surface sediments are underlain by sedimentary rocks of primarily recent to Miocene age. According to past assessments of the Site, the Site is underlain by silty sand (SECOR, 2004c).

The Site is at an average elevation of approximately 35 feet above mean sea levels (msl). The regional topographic is relatedly flat with a local gradient slightly to the northeast towards the Dominguez Channel (United States Geological Survey [USGS], 1964).

The closest mapped active fault is the Newport-Inglewood-Rose Canyon Fault Zone located approximately 2.8 miles northeast of the Property. According to official maps of California, the Site is not located within an Alquist-Priolo (AP) Earthquake Fault Zone boundary (California Geological Survey [CGS], 2010).

The Property lies within the Coastal Plain of Los Angeles groundwater basin, West Coast sub basin (4-11.03). The basin is bounded on the north by the Ballona Escarpment, an abandoned erosional channel from the Los Angeles River; on the east by the Newport-Inglewood fault zone; and on the south and west of the Pacific Ocean and consolidated rocks of the Palos Verdes Hills (Department of Water Resources [DWR], 1999). Water-bearing units include the unconsolidated and semi-consolidated marine and alluvial sediments of Holocene, Pleistocene, and Pliocene ages. Groundwater data attained from the Geotracker website for a facility located 0.35 miles of the north of the Property shows groundwater at elevation of 12-15 feet above msl (approximately 20 feet bgs) as of September 2015 (Geotracker, 2016). However, groundwater data from a facility located 200 feet to the south of the Property shows groundwater gradient to the northwest in 2014. Groundwater was encountered at the Site between 30 and 40 feet bgs during the Site assessment.

2.0 SITE BACKGROUND AND PREVIOUS SUBSURFACE INVESTIGATIONS

The Site and vicinity appear to have been used for agricultural purposes until the 1960's. SECOR (now Stantec) conducted a shallow soil assessment in 2004 to evaluate the potential presence of residual pesticides in shallow soils from historic agricultural use of the Site. That assessment did not detect pesticides above residential screening levels. A site-wide assessment of the Site regarding arsenic and lead (associated with potential herbicides) was performed by Terracon in 2007. The results of shallow soil sampling by Terracon concluded that neither compound exists at levels above residential screening levels. Based on these assessments the historical agricultural use of the Site represents neither a recognized environmental condition nor a human health risk in light of the contemplated residential use of the Site, and Stantec recommended no further investigation regarding this issue.

A soil and soil gas survey was also completed by Terracon in 2007 under the direction of Los Angeles County Fire Department (LACFD). Terracon's assessment identified limited impacts to soil and soil gas on the Site at levels below commercial screening levels. Chlorinated compounds, namely tetrachloroethylene (PCE) and trichloroethylene (TCE), were reported at concentrations that slightly exceed residential use screening levels in several locations. Based on this information the LACFD issued a Site closure in 2008. That closure was for continued commercial use of the Site.

Since there have been reported continued automobile repair operations at the Site since 2007, and the use was proposed to change from the commercial use to residential, Stantec recommended that a new assessment be conducted to evaluate if the detected soil vapor concentration reported in 2007 had changed. Stantec conducted additional soil, soil gas sampling at the Site to evaluate the existing impact.

3.0 FIELD INVESTIGATION PROGRAM

On April 8, 2016, Stantec provided oversight for the advancement and installation on ten (10) soil vapor probes across the Site. Based on the elevated soil vapor detection reported in April 2016, Stantec conducted an additional soil and soil vapor survey on May 19, 2016 in the northeast corner of the Site. This additional assessment focused on the evaluation of the lateral and vertical extent of soil vapor impact in this area. The findings of those assessments are discussed below.

In June 2016, Stantec advanced a total of three (3) borings at the Site into groundwater (one location in the northeast, one along the eastern property line, and one location in the southeast). This assessment was conducted to evaluate if groundwater had been affected by the detected elevated soil vapor at the Site. The scopes of work for these assessments consisted of the general elements discussed in the following sections.

3.1 SOIL SAMPLING

Soil Boring and Sampling Procedures
Soil was collected from the boring locations during the May 2016 investigation (not during the April 2016 assessment). Where applicable, paved surfaces were cored to expose underlying soils and hand clearing equipment (hand auger) was used to collect soil for samples at 5 feet or less in depth. Upon extracting the auger bucket at each depth interval, the soils contained therein were placed in a 4-ounce glass jar and labeled with the appropriate identification information (boring number, sample depth, sample collection date, and sample collection time).

Once the five foot depth had been reached, each of the boring locations was further advanced using a Geoprobe direct push rig. During advancement at each location, sampling of subsurface soils was performed at a depth of approximately 15 foot bgs using a 12-inch long by 1.25-inch inner diameter stainless steel sampler with acetate inserts. At each sampling interval, the sampler was driven into undisturbed soil using a hydraulic ram on the Geoprobe rig until 12 inches of penetration was achieved. Upon advancement of the sampler to the desired sampling depth interval, the steel rods were extracted from the boring and the sample sleeves were removed.

Upon extracting the sampler at each depth interval, the soil samples were collected from the bottom portion of the acetate liner. In selected borings, the soils were visually examined by Stantec field personnel and classified in accordance with the unified soil classification system (USCS). All soil samples were carefully packaged for chemical analysis by sealing the sleeve with Teflon sheets, plastic end-caps, and non-VOC tape. After the sleeve was sealed, it was labeled with the appropriate identification information (boring number, sample depth, sample collection date, and sample collection time). The samples were then logged on a chain-of-custody form and placed in an ice-filled cooler for transport to the laboratory. Copies of the chain-of-custody forms are included as Appendix A.

3.2 SOIL VAPOR SAMPLING

Stantec performed soil vapor sampling during the April 2016 and May 2016 investigations. Vapor probes were set at 5 feet bgs during the initial investigation in April 2016, and 5 and 15 feet bgs in each location in May 2016 with all samples analyzed for VOCs by EPA test method 8260b. The soil vapor sampling probe locations and results are shown on Figures 2 and 3.

Subsurface soil vapor sampling was performed in general accordance with the July 2015 Cal-EPA Advisory for active soil gas investigations. Each of the soil gas sample probes was installed using a Geoprobe drilling rig utilizing a hydraulically driven direct push system to advance the proposed boring to 6 or 16 feet bgs. Each sample boring was constructed with a 6-inch sampling screen set between 5 and 6 feet bgs in all borings and additionally between 15 and 16 feet bgs in the May 2016 investigation. The sampling screen was then connected to the ground surface via dedicated Nylaflow ® nylon tubing. The annulus around the exposed probe tip was backfilled with a silica sand filter pack to an elevation of about six inches above the sampling screen. Above the filter pack, a 6 to 12-inch transition zone was constructed using dry bentonite granules. From the top of the dry bentonite transition zone to the ground surface, hydrated bentonite granules were utilized to seal the annular space. At the surface the exposed nylon tubing was capped with tight fitting plastic end-caps, labeled to indicate sampling depth. After placement of the soil gas sampling points, subsurface conditions were allowed to equilibrate for at least 48 hours prior to leak testing and sample collection.

After at least 48 hours elapsed, a shut-in test was performed consisting of an above-ground apparatus of valves, line, and fitting located downstream from the top of the probe. The line was evacuated to a measured vacuum of approximately 100 inches of water column and the vacuum was shut in with closed valves on opposite ends of the sampling train. At this point, a vacuum gauge connected to the line was observed for at least one minute for any signs of a loss in vacuum.

One replicate sample per day was also collected and analyzed from a gas probe containing detectable concentrations of VOCs.

During soil gas sampling a leak check was performed using tracer gas of 1,1-difluoroethane. The tracer compound was applied to a clean rag and situated around the monitoring point to evaluate seal integrity. Seal integrity was confirmed by analyzing the collected soil gas samples for the tracer compound. No tracer gases were found in any of the samples.

3.3 GROUNDWATER SAMPLING

Stantec performed groundwater sampling at three (3) locations during the June 2016 investigation. Groundwater was encountered between 30 and 40 feet bgs with all samples analyzed for TPH and VOCs by EPA test methods 8015m and 8260b, respectively. The groundwater boring locations and results are shown on Figures 2 and 4.

Borings were advanced using a Geoprobe hydraulic ram with steel rods advanced in five-foot flights to the total depth of the boring. Upon verifying the presence of groundwater, a sampling screen was exposed at the bottom of the boring and groundwater was collected via a steel bailer or Teflon tubing lowered through the center of the rods. Groundwater was discharged from the bailer or tubing directly into 40 mL volatile organic analysis (VOA) vials and 1-L amber glass jars. The sample containers were labeled with appropriate identification information (boring number, sample collection date, sample collection time), recorded on a COC form and placed in an iced cooler for delivery to the off-site ELAP-certified laboratory. Copies of the COC forms are included in Appendix A.

3.4 DECONTAMINATION PROCEDURES

To maintain quality control during soil sampling, prior to each sampling interval, the sampling equipment was decontaminated in an Alconox scrub solution and double-rinsed, first with tap water followed by a final rinse using distilled water. Where single use disposable sampling equipment was used (i.e. disposable bailers, and Teflon tubing), the equipment was used once at the dedicated sampling interval and then discarded. In addition, prior to, and between each boring advanced, the hollow steel rods were cleaned following the same protocol.

3.5 WASTE DISPOSAL

All soil cuttings and purge/decon-water generated during the investigation were placed in DOT approved 16-gallon or 55-gallon drums and labeled with the appropriate identification. The drums are temporarily stored on-site pending removal and proper disposal.

4.0 LABORATORY TESTING PROGRAM

A total of fifteen (15) soil samples and three (3) groundwater samples collected during this investigation were delivered under chain-of-custody (Appendix A) to Eurofins Calscience Laboratories (Eurofins) based out of Garden Grove, California. Samples were analyzed for TPH and/or VOCs by EPA Test Methods 8015m and 8260b, respectively.

A total of twenty four (24) soil vapor samples plus two (2) replicates collected during this investigation were delivered under chain-of-custody (Appendix A) to H&P Mobile Geochemistry (H&P) based out of Carlsbad, California. All of the soil vapor samples were collected and analyzed for VOCs by EPA Test Method 8260b onsite by H&P in a mobile laboratory.

Eurofins and H&P are certified to perform hazardous waste testing by the State of California Department of Health Services, Environmental Laboratory Accreditation Program.

Analytical results are tabulated in Tables 1 through 3. Analytical laboratory test results are included in Appendix A and discussed in Section 5.2.

5.0 INVESTIGATION RESULTS

5.1 FIELD OBSERVATIONS

In April and May 2016, Stantec personnel oversaw the installation of soil vapor probes and soil sampling at seventeen (17) locations at the Site. In June 2016, three (3) groundwater borings were advanced. Soils encountered during the investigation consisted mainly of silty sand to the maximum explored depth of 40 feet bgs. Groundwater was encountered at a depth of between 30 and 40 feet bgs in the groundwater borings. No staining or hydrocarbon odors were identified in any of the borings.

5.2 ANALYTICAL RESULTS

The laboratory test results are discussed below. Laboratory test results are summarized in attached Tables 1 through 3. The complete laboratory analytical test results are presented on the laboratory data sheets attached as Appendix A.

5.2.1 Soil Samples

Soil samples were collected during the May 2016 investigation. None of the soil samples reported VOCs above laboratory reporting limits (i.e., the results were "non-detect"). The two (2) samples which were also analyzed for TPH reported none above laboratory reporting limits.

The results of soil sample analysis are summarized in Table 1 and the complete laboratory report is attached as Appendix A.

5.2.2 Soil Vapor Samples

Soil vapor samples were collected from ten (10) locations at a depth of 5 feet at the Site in April 2016. The samples reported PCE, TCE, benzene, 1,1-DCE and methylene chloride above laboratory reporting limits. Of these VOCs, PCE was reported above its DTSC HERO Note 3 value of 0.48 ug/L in four (4) samples with a maximum concentration of 46 ug/L reported in location SV-7 (northeast portion of the Site). Benzene was reported above its DTSC HERO Note 3 value of 0.097 ug/L in three (3) samples with a maximum concentration of 0.10 ug/L reported in locations SV-6, SV-7 and SV-9.

Based on those results, seven (7) additional soil vapor borings were completed within the northeast portion of the Site in May 2016 where high PCE was reported (SV-7) to assess if remedial excavation and/or vapor barriers are required for this area of the Site. Soil vapor samples were collected from 5 and 15 feet bgs from these locations (SV-11 through SV-17) with the exception of SV-13 and SV-14 where the 15 foot probes could not be sampled due to high vacuum in the soil vapor probe. PCE, TCE, benzene, 1,1-DCE, methylene chloride and xylenes were reported above laboratory reporting limits. All samples reported PCE above the DTSC HERO Note 3 residential soil screening level, up to a maximum concentration of 68 ug/L in sample SV-

13-5. Concentrations decreased with depth in several locations. TCE was reported above its U.S. EPA RSL value of 0.48 ug/L in four (4) locations with a maximum concentration of 3.1 ug/L reported in sample SV-15-15. Benzene was reported above its DTSC HERO Note 3 value of 0.097 ug/L in four (4) locations with a maximum concentration of 0.17 ug/L reported in sample SV-11-5.

The results of soil vapor sample analysis are summarized in Table 2 and the complete laboratory report is attached as Appendix A.

5.2.3 Groundwater Samples

The collected groundwater samples reported TPH and VOCs above the Site screening levels with the highest PCE concentration reported in groundwater the northeast corner of the Site in the vicinity of the highest soil vapor concentrations. PCE was reported in HP-1 at 70 µg/L. PCE concentrations decrease toward the south, but elevated concentrations of 1,1-DCE were reported at the southern property line of the Site. The detected concentrations of PCE are above the maximum contaminant level (MCL) for groundwater currently set at 5 µg/L.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The subject property is addressed as 1515 West 178th Street, in the City of Gardena, County of Los Angeles, California (the "Site"). The Site consists of two contiguous parcels totaling approximately 5.63 acres of land developed as warehouse building with associated parking area. The surrounding area is a mixture of commercial and residential properties.

The Site and vicinity appear to have been used for agricultural purposes until the 1960's. SECOR (now Stantec) conducted a shallow soil assessment in 2004 to evaluate the potential presence of residual pesticides in shallow soils from historic agricultural use of the Site.
The assessment detected no pesticides at levels above residential screening levels. A site-wide assessment of the Site regarding arsenic and lead (associated with potential herbicide application) was performed by Terracon in 2007. The results of shallow soil sampling by Terracon concluded that neither compound was present at levels above residential screening levels. Based on these assessments, Stantec concludes that the historical agricultural use of the Site represents neither a recognized environmental condition nor a human health risk in light of the contemplated residential use of the Site. Stantec recommends no further investigation regarding this issue.

A soil and soil gas survey was also completed by Terracon in 2007 under the direction of Los Angeles County Fire Department (LACFD). Terracon's assessment identified limited impacts to soil and soil gas on the Site at levels below commercial screening levels. Chlorinated compounds, namely tetrachloroethylene (PCE) and trichloroethylene (TCE), were reported at multiple locations at concentrations that slightly exceeded the residential use screening levels. Based on this information, LACFD issued written regulation closure for the Site in 2008 – but the closure was contingent upon the continued commercial use of the Site.

Since there have been continued automobile repair operations reported at the Site since 2007, and in light of the contemplated change in use from commercial purposes to residential purposes, Stantec recommended performing a new assessment to evaluate whether the detected soil vapor concentration reported in 2007 had changed. Accordingly, Stantec conducted additional soil, soil gas sampling at the Site to evaluate the existing impacts.

In April and May of 2016, Stantec personnel oversaw two rounds of assessment that included the installation of soil vapor probes and soil sampling at seventeen (17) locations at the Site. The assessments identified concentrations of contaminants in soil vapor at levels above current residential screening levels, primarily along the eastern portion of the Site. Soil samples were collected during the May 2016 investigation, but none of the results reported VOCs above laboratory reporting limits (i.e., the results were "non-detect"). The two (2) samples which were also analyzed for TPH similarly reported no concentrations at levels above laboratory reporting limits (i.e., "non-detect").

Seventeen (17) soil vapor samples were collected from a depth of five (5) feet below ground surface (bgs) at the Site. The samples reported the presence of PCE, TCE, benzene, 1,1-

dichloroethene (1,1-DCE) and methylene chloride at concentrations above laboratory reporting limits. Of these VOCs, PCE was reported above its DTSC HERO Note 3 value of 0.48 microgram per liter (ug/L) for residential uses, with a maximum concentration of 68 ug/L reported in location SV-13 (northeast portion of the Site). Benzene was reported slightly above its DTSC HERO Note 3 value of 0.097 ug/L with a maximum concentration of 0.17 ug/L reported at SV-11. The detected soil vapor impacts appear to affect the eastern 1/3 of the Site above the DTSC HERO Note 3 value of 0.48 microgram per liter (ug/L) for residential uses.

To evaluate if the contaminants detected in soil vapor has affected groundwater, Stantec completed an additional assessment in June of 2016. The assessment included the drilling of three (3) borings into groundwater for the collection of hydropunch water samples. Soils encountered during the investigation consisted mainly of silty sand to the maximum depth of 40 feet bgs. Groundwater was encountered at a depth of between 30 and 40 feet bgs in the borings. Stantec identified no staining or hydrocarbon odors in any of the borings.

The groundwater samples reported TPH and VOCs at levels above the Site screening levels, with the highest PCE concentration reported in groundwater at the northeast corner of the Site – in the vicinity of the highest detected contaminant concentrations in soil vapor. Specifically, PCE was reported in HP-1 at 70 µg/L. PCE concentrations in groundwater decrease toward the south, but elevated concentrations of 1,1-DCE were reported at the southern property line of the Site. The detected concentrations of PCE exceed the maximum contaminant level (MCL) for groundwater, which is currently set at 5 µg/L.

The groundwater flow gradient at the Site is reported to be toward the northeast, based on a recent groundwater monitoring report from the off-site property located to the south. This property known as Bee Chemical and has a known groundwater contamination issue composed of the same VOCs that were detected at the Site. The VOC impacts in groundwater along the southern property line appear to be commingled with the plume from the former Bee Chemical Facility located to the south of the Site. The limits of this groundwater contamination both on-site and off-site have not been defined to date.

Based on the data collected to date, impact to soil vapor by VOCs - particularly PCE - is present in the northeastern portion of the Site. No source has been identified in soil on the Site. Groundwater has been impacted by VOCs, with the highest reported concentration in the northeastern portion of the Site in the vicinity of highest soil vapor impact. The highest soil vapor concentrations appear to be the source of the elevated groundwater impact in the northeast corner of the Site. The lower concentration groundwater impact in the southern portion of the Site is likely the result of an offsite source migrating onto the Site.

Stantec recommends submitting the data collected to date to LACFD with a request for regulatory oversight. Based on LACFD's review and discussions to be conducted with LACFD, Stantec will then be able to make a determination as to whether additional on-site and/or off-Site assessment is necessary in regard to both soil vapor and groundwater. Following completion of any LACFD-required assessment, Stantec could then – as necessary – be able to prepare a remedial action plan (RAP) in order to complete any work required by LACFD for redevelopment of the Site for residential purposes.

7.0 LIMITATIONS

The conclusions presented in this report are professional opinions based on data described in this report. The opinions of this report have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location, and are subject to the following inherent limitations. Stantec makes no other warranty, either expressed or implied, concerning the conclusions and professional advice that is contained within the body of this report.

Inherent in most projects performed in a heterogeneous subsurface environment, continuing excavation and assessments may reveal findings that are different than those presented herein. This facet of the environmental profession should be considered when formulating professional opinions on the limited data collected on these projects.

This report has been issued with the clear understanding that it is the responsibility of the owner, or their representative, to make appropriate notifications to regulatory agencies. It is specifically not the responsibility of Stantec to conduct appropriate notifications as specified by current County and State regulations.

The information presented in this report is valid as of the date our exploration was performed. Site conditions may degrade with time; consequently, the findings presented herein are subject to change.

8.0 REFERENCES

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Department of Toxic Substances and Control, 2005, *Fact Sheet #2: Gardena Sumps Site, Environmental Investigation Resumes*, October.

_____, 2016, website http://www.envirostor.dtsc.ca.gov/public/

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Odic Environmental, 2013, Update of Phase I Environmental Site Assessment, February 2.

SECOR, 2004, Phase I Environmental Site Assessment – Power Trans Freight Systems, May 12.

SECOR, 2004, Phase II Environmental Site Assessment – Power Trans Freight Systems, December 2.

Stantec, 2016, Phase I Environmental Site Assessment, April 27.

State Water Resource Control Board's Geotracker, 2016, website https://geotracker.waterboards.ca.gov/

United States Geological Survey (USGS), 1981, Torrance, 7.5 Minute Topographic Map, Scale 1 inch = 2,400 feet.

TABLES

Table 1
Summary of Soil Analytical Results
1515 West 178th Street, Gardena, CA

Stantec Project No.: 185803664

Sample ID [1]	Sampling Date	Sampling Depth [2]			VOCs [3]					
					EPA Test Method 8260B					
			TPHd	TPHo	Benzene	PCE	TCE	1,1-DCE	Methylene Choride	All Other VOCs
USEPA RSLs (mg/kg) [3]			***96***	***2,500***	***1.2***	***24***	***0.94***	***780***	***580***	*varies*
CA - DTSC HERO Note 3 - Soil (mg/kg) [4]			*NE*	*NE*	***0.33***	***0.60***	*NE*	***210***	*NE*	*varies*
SV-11-5	5/19/2016	5	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-11-15	5/19/2016	15	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-12-5	5/19/2016	5	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-12-15	5/19/2016	5	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-12-15 REP	5/19/2016	15	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-13-5	5/19/2016	5	*<4.9*	*<25*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-13-15	5/19/2016	15	*<4.9*	*<25*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-14-5	5/19/2016	5	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-14-15	5/19/2016	15	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-15-5	5/19/2016	5	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-15-15	5/19/2016	15	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-16-5	5/19/2016	5	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-16-15	5/19/2016	15	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-17-5	5/19/2016	5	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*
SV-17-15	5/19/2016	15	*NA*	*NA*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.0051*	*<0.051*	*ND*

NOTES:
(1) Refer to Figure 2 for sampling locations
(2) sampling depth is reported as feet below ground surface
(3) Concentrations reported in milligrams per kilogram (mg/kg)
(4) California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note No.3 - Soil Values in mg/kg - January 2016
< - Indicates the concentration was not detected above the laboratory reporting limit.

ABBREVIATIONS:

bgs - below ground surface
NA - Not Analyzed
ND - Non Detect
NE - Not Established
PCE - Tetrachloroethene
TCE - Trichloroethene
USEPA RSLs - United States Environmental Protection Agency Regional Screening Levels for Residential Soils - November 2015
1,1-DCE - 1,1-Dichloroethene
TPHg - Total Petroleum Hydrocarbons as gasoline
TPHd - Total Petroleum Hydrocarbons as diesel
TPHo -Total Petroleum Hydrocarbons as oil
VOCs - Volatile Organic Compounds

Table 2
Summary of Soil Vapor Analytical Results
1515 West 178th Street, Gardena, CA

Stantec Project No.: 185803664

Sample ID	Purge Volume	Sampling Date	Sampling Depth [1]	VOCs (µg/L) [2]					
				PCE	TCE	Benzene	1,1-DCE	Methylene Chloride	Other VOCs
EPA RSLs for Residential Land Use - Soil Vapor ***(µg/L)*** [3]				11	0.48	0.36	210	100	varies
CA - DTSC HERO Note 3 - Soil Vapor ***(µg/L)*** [4]				0.48	NE	0.097	73	1.0	varies
Samples									
SV-1	3	4/8/2016	5	**0.41**	<0.08	<0.08	<0.40	<0.40	ND
SV-2	3	4/8/2016	5	**0.51**	<0.08	<0.08	**0.62**	**0.45**	ND
SV-3	3	4/8/2016	5	**0.31**	<0.08	<0.08	<0.40	<0.40	ND
SV-3 REP	3	4/8/2016	5	**0.26**	<0.08	<0.08	<0.40	<0.40	ND
SV-4	3	4/8/2016	5	**0.24**	<0.08	<0.08	<0.40	**1.0**	ND
SV-5	3	4/8/2016	5	**1.0**	<0.08	**0.09**	<0.40	<0.40	ND
SV-6	3	4/8/2016	5	**0.99**	**0.11**	**0.10**	<0.40	<0.40	ND
SV-7	3	4/8/2016	5	**46**	**0.10**	**0.10**	<0.40	<0.40	ND
SV-8	3	4/8/2016	5	<0.08	<0.08	**0.09**	<0.40	<0.40	ND
SV-9	3	4/8/2016	5	<0.08	<0.08	**0.10**	<0.40	<0.40	ND
SV-10	3	4/8/2016	5	**0.11**	<0.08	**0.09**	<0.40	<0.40	ND
SV-11-5	3	5/19/2016	5	**6.1**	**2.1**	**0.17**	<0.40	<0.40	**m,p-Xylene - 0.51**
SV-11-15	3	5/19/2016	15	**7.4**	**2.8**	<0.08	<0.40	<0.40	ND
SV-12-5	3	5/19/2016	5	**15**	**1.3**	<0.08	<0.40	<0.40	ND
SV-12-15	3	5/19/2016	5	**31**	**2.4**	<0.08	<0.40	<0.40	ND
SV-12-15 REP	3	5/19/2016	15	**23**	**2.0**	<0.08	<0.40	<0.40	ND
SV-13-5	3	5/19/2016	5	**68**	**0.13**	**0.10**	<0.40	<0.40	ND
SV-13-15	3	5/19/2016	15	**NS - > 100" H2O**					
SV-14-5	3	5/19/2016	5	**21**	**0.28**	**0.14**	<0.40	<0.40	ND
SV-14-15	3	5/19/2016	15	**NS - > 100" H2O**					
SV-15-5	3	5/19/2016	5	**4.6**	**1.7**	<0.08	<0.40	<0.40	ND
SV-15-15	3	5/19/2016	15	**7.1**	**3.1**	**0.09**	<0.40	<0.40	ND
SV-16-5	3	5/19/2016	5	**14**	**0.64**	<0.08	<0.40	<0.40	ND
SV-16-15	3	5/19/2016	15	**3.5**	**0.30**	**0.09**	<0.40	<0.40	ND
SV-17-5	3	5/19/2016	5	**27**	**0.42**	**0.15**	<0.40	<0.40	ND
SV-17-15	3	5/19/2016	15	**24**	**0.40**	<0.08	<0.40	<0.40	ND

NOTES:
(1) Sample depth is reported as feet below ground surface
(2) Concentrations reported in µg/L and analyzed by GC/MS, EPA Method 8260B or TO-15
(3) Environmental Protection Agency (EPA) Regional Screening Levels (RSL) for Reseidential Soil Vapor updated November 2015 (with an attenuation factor of 0.001)
(4) California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note No.3 - Residential Air Cancer Endpoint Values in µg/L - January
ND< - Indicates the concentration was not detected above the listed laboratory method reporting limit.
The analyte was reported above its RSL or HERO HHRA No. 3

ABBREVIATIONS:
NA - Not Analzyed
NE - Not Established
VOCs - Volatile Organic Compounds

TABLE 3
Summary of Groundwater Results
1515 West 178th Street, Gardena, CA

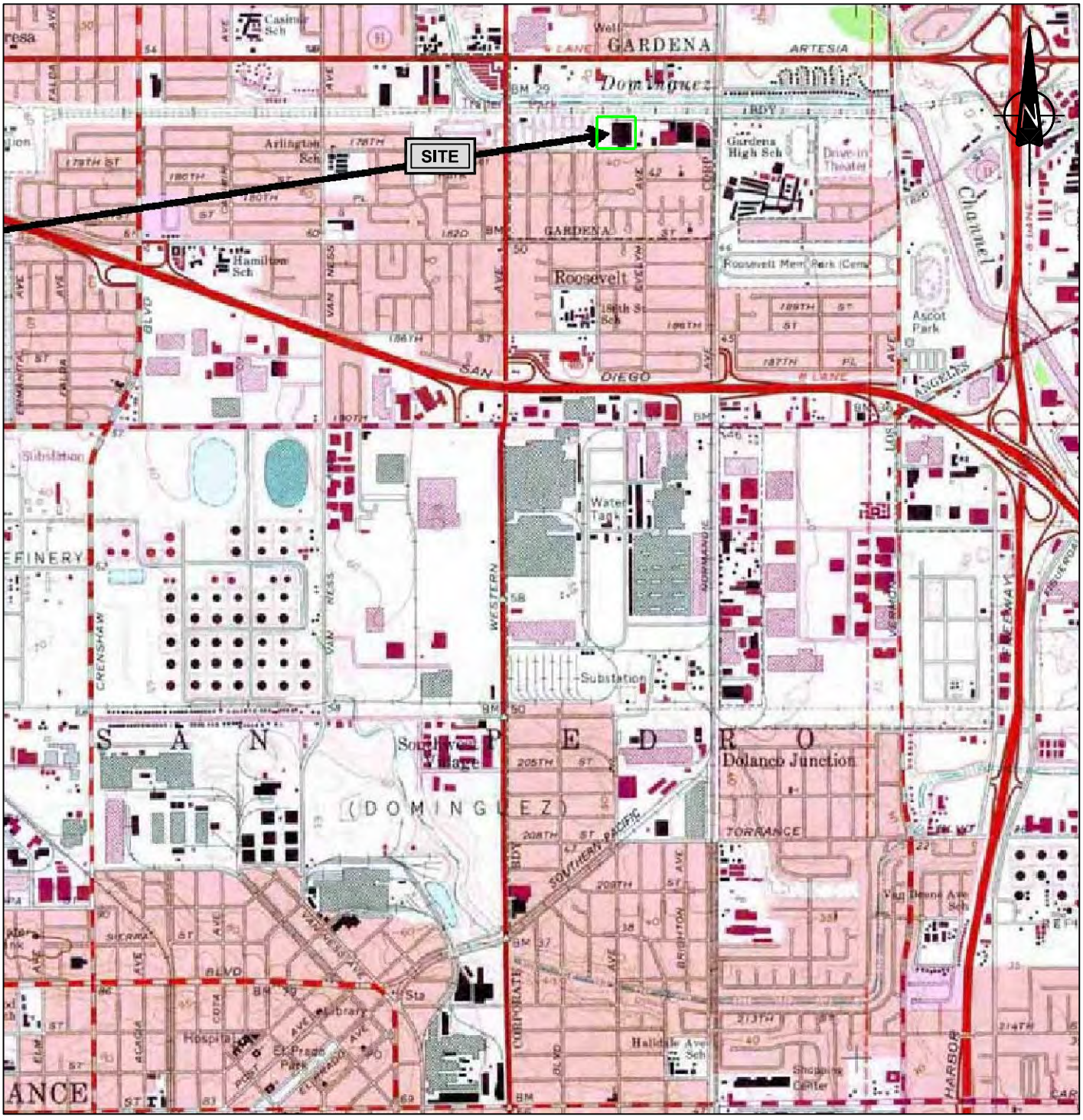
Stantec Project No.: 185803664

Well ID	Date	TPHg	TPHd	TPHo	PCE	TCE	1,1-DCA	1,1-DCE	1,2-DCA	1,1,2-TCA	Chloroform	All Other VOCs
US EPA MCL		**--**	**--**	**--**	**5.0**	**5.0**	**--**	**7.0**	**5.0**	**5.0**	**--**	various
CALIFORNIA MCL/NL		**--**	**--**	**--**	**5.0**	**5.0**	**5.0**	**6.0**	**0.5**	**5.0**	**1.0**	various
HP-1	06/27/16	<100	**53**	<250	**70**	**16**	<1.0	<1.0	<0.50	<1.0	<1.0	ND
HP-2	06/27/16	<100	**65**	<250	**3.7**	**1.5**	<1.0	<1.0	<0.50	<1.0	<1.0	ND
HP-3	06/27/16	<100	**310**	**1,100**	**5.8**	**12**	**16**	**100**	**1.7**	**1.7**	**1.8**	ND

Notes:
All results reported in micrograms per liter (ug/L)
USEPA = United States Environmental Protection Agency
MCL = Maximum Contaminant Levels updated January 2015.
< = Concentration less than the indicated laboratory reporting limit.
The analyte was reported above its MCL
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHo =Total Petroleum Hydrocarbons as oil

PCE = Tetrachloroethene
TCE = Trichloroethene
1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCE = 1,1-Dichloroethane
1,1,2-TCA = 1,1,-Trichloroethane
TPH = Total petroleum hydrocarbons
VOCs = Volatile organic compounds

FIGURES



0 2500 5000 7500 ft

SCALE : AS SHOWN

NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC SERVICES INC. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

PROPERTY LOCATION MAP

PHASE I ESA

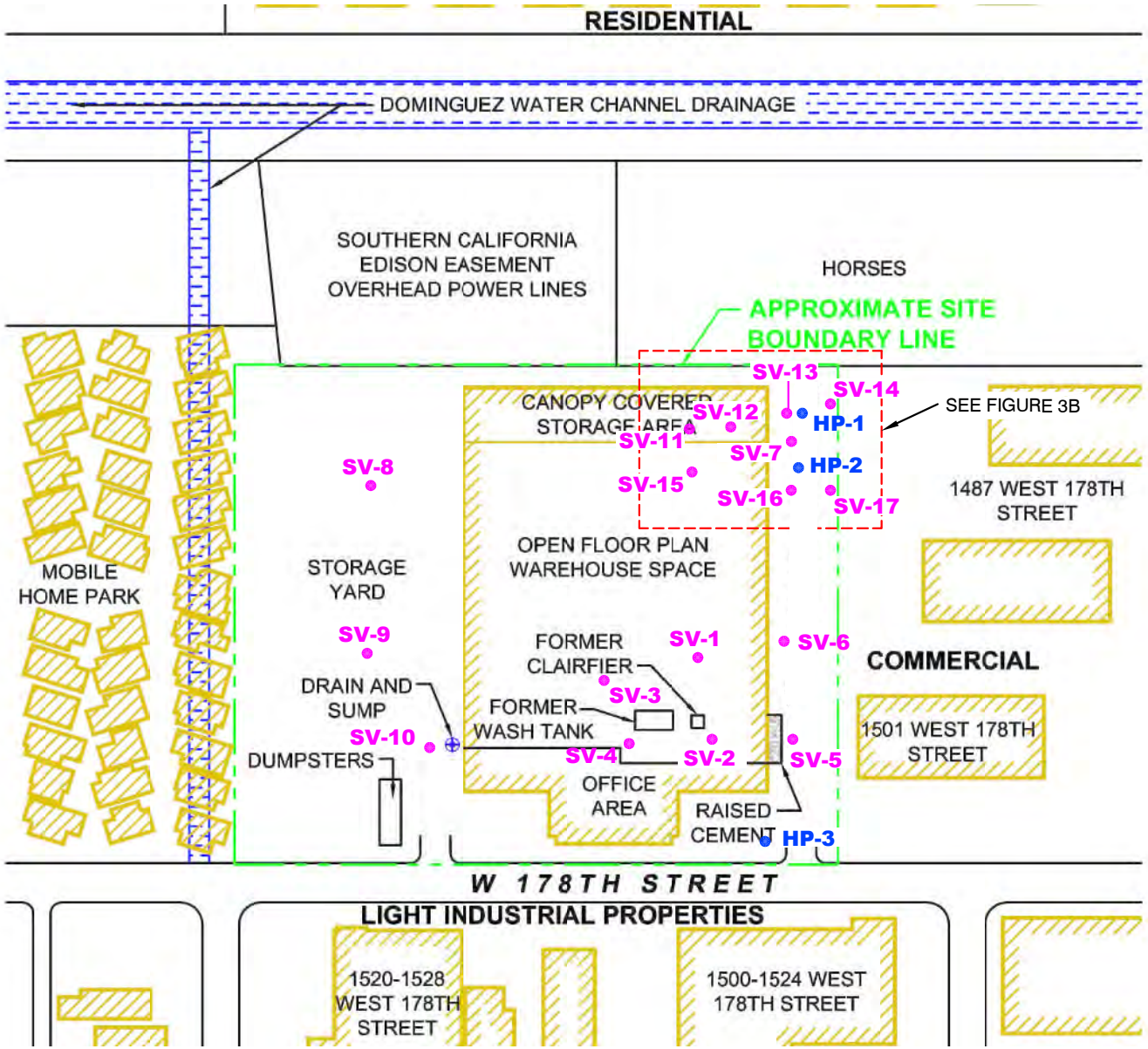
1515 W. 178TH STREET, GARDENA, CA

Client:	THE OLSON COMPANY

Project No.:	185803664
Scale:	AS SHOWN
Date:	16/03/24
Dwn. By:	CD VM SC2016030068
App'd By:	KE

Fig. No.: 1

Stantec



LEGEND:

PROPERTY BOUNDARY

SOIL/SOIL VAPOR BORING LOCATION

GROUNDWATER BORING LOCATION

0 150 300

APPROXIMATE SCALE (FEET)

Stantec

2310 PARKDALE DRIVE NE, SUITE 400
ATLANTA, GEORGIA 30345
PH (909) 283-5523 FAX (909) 335-6120

FOR:
THE OLSON COMPANY
COMMERCIAL PROPERTY
1515 W. 178TH STREET
GARDENA, CALIFORNIA

SITE MAP

FIGURE:
2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185803664	KD	KD	KE	07/14/201(

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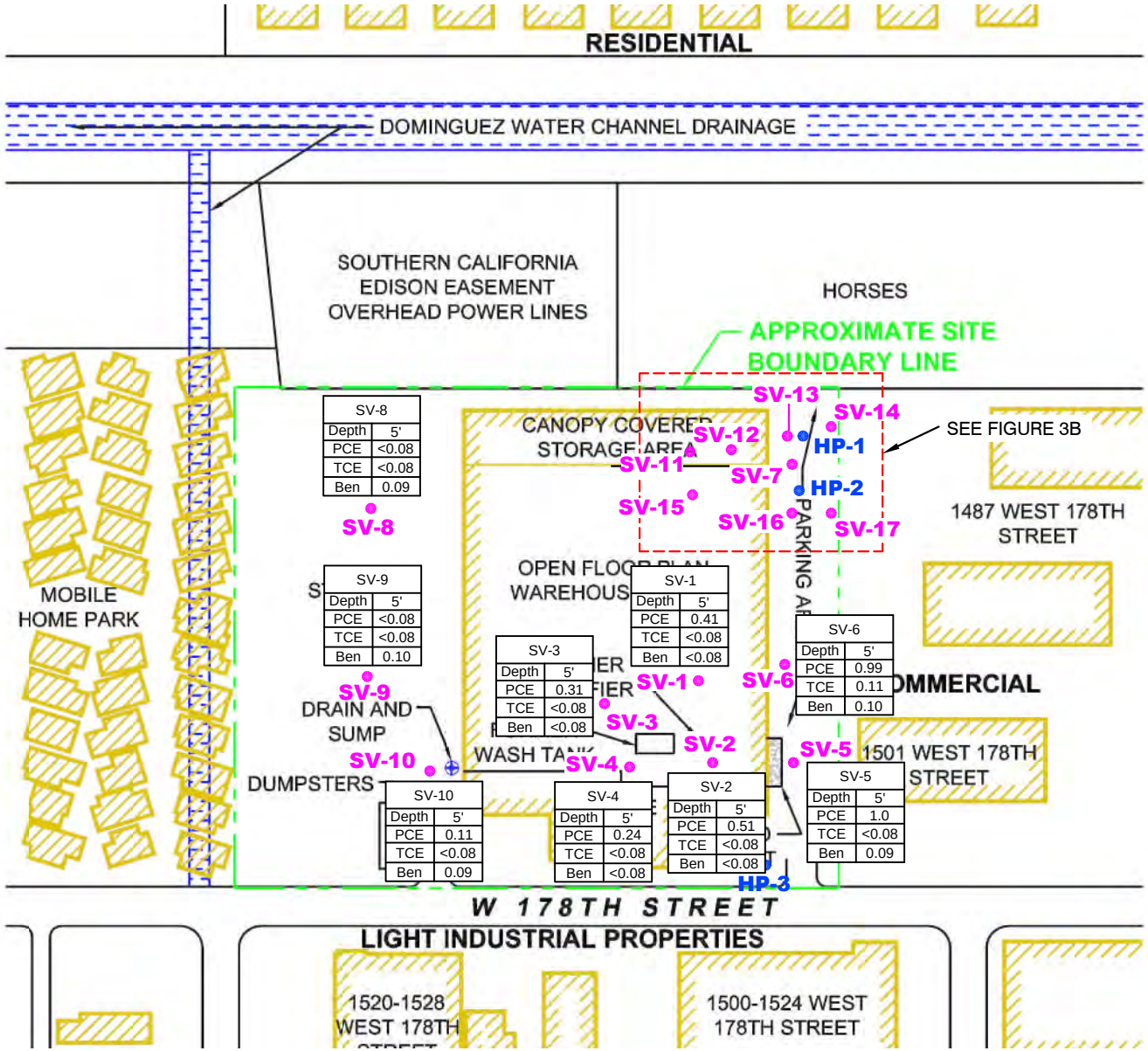

SV-8	
Depth	5'
PCE	<0.08
TCE	<0.08
Ben	0.09

SV-9	
Depth	5'
PCE	<0.08
TCE	<0.08
Ben	0.10

SV-1	
Depth	5'
PCE	0.41
TCE	<0.08
Ben	<0.08

SV-3	
Depth	5'
PCE	0.31
TCE	<0.08
Ben	<0.08

SV-6	
Depth	5'
PCE	0.99
TCE	0.11
Ben	0.10

SV-10	
Depth	5'
PCE	0.11
TCE	<0.08
Ben	0.09

SV-4	
Depth	5'
PCE	0.24
TCE	<0.08
Ben	<0.08

SV-2	
Depth	5'
PCE	0.51
TCE	<0.08
Ben	<0.08

SV-5	
Depth	5'
PCE	1.0
TCE	<0.08
Ben	0.09

LEGEND:

- PROPERTY BOUNDARY
- SOIL/SOIL VAPOR BORING LOCATION
- GROUNDWATER BORING LOCATION
- Ben — BENZENE
- PCE — TETRACHLOROETHENE
- TCE — TRICHLOROETHENE
- 4.6 — CONCENTRATION IN MICROGRAMS PER LITER

0 150 300

APPROXIMATE SCALE (FEET)

Stantec
2310 PARKDALE DRIVE NE, SUITE 400
ATLANTA, GEORGIA 30345
PH (909) 283-5523 FAX (909) 335-6120

FOR:
THE OLSON COMPANY
COMMERCIAL PROPERTY
1515 W. 178TH STREET
GARDENA, CALIFORNIA

SITE MAP WITH SOIL VAPOR CONCENTRATIONS

FIGURE: **3A**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185803664	KD	KD	KE	07/14/2016

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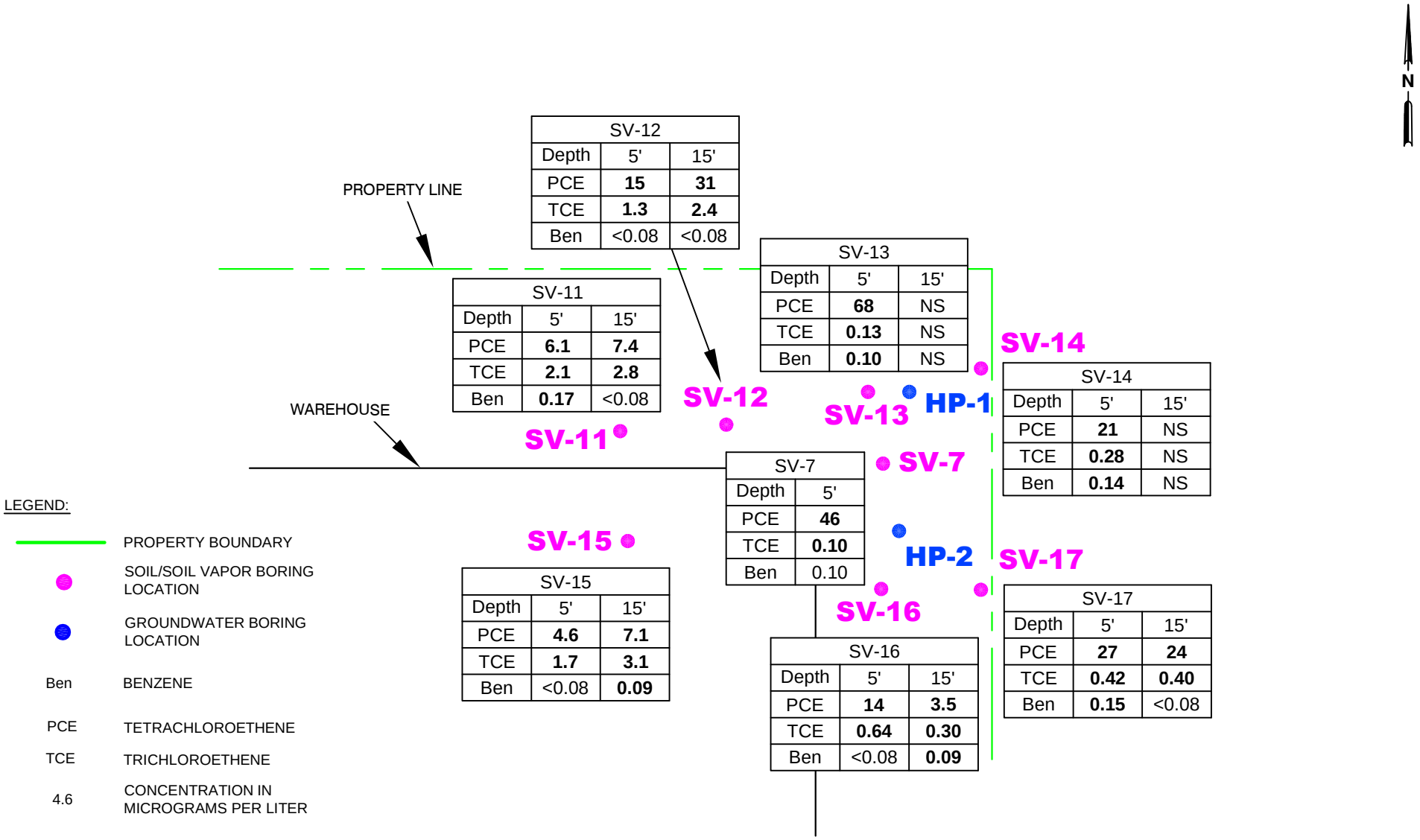

Stantec

2310 PARKDALE DRIVE NE, SUITE 400
ATLANTA, GEORGIA 30345
PH (909) 283-5523 FAX (909) 335-6120

FOR:
THE OLSON COMPANY
COMMERCIAL PROPERTY
1515 W. 178TH STREET
GARDENA, CALIFORNIA

SITE MAP WITH SOIL VAPOR CONCENTRATIONS - NE QUADRANT

FIGURE: **3B**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185803664	KD	KD	KE	07/14/2016

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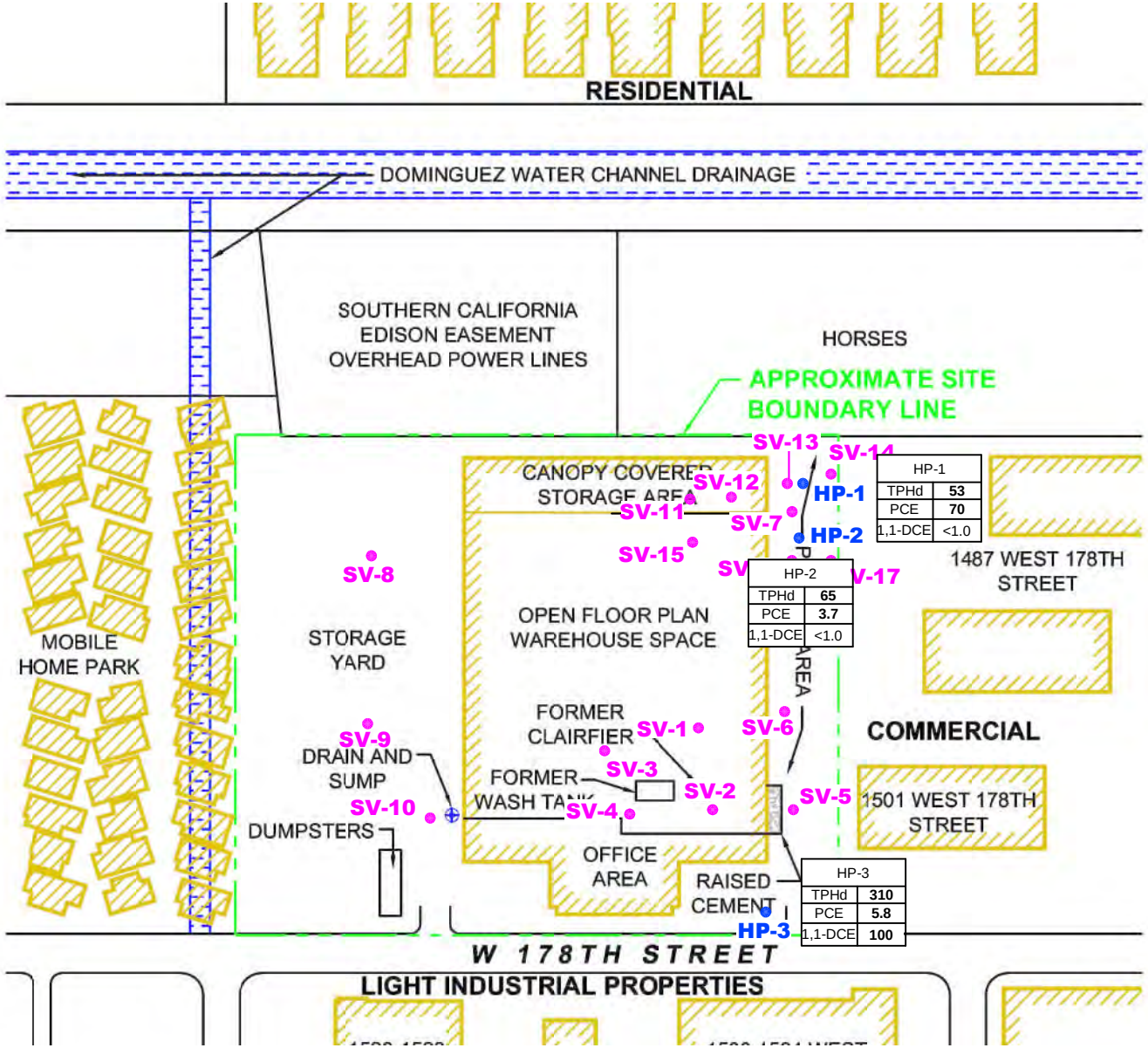

LEGEND:

- PROPERTY BOUNDARY
- SOIL/SOIL VAPOR BORING LOCATION
- GROUNDWATER BORING LOCATION
- TPHd — TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- PCE — TETRACHLOROETHENE
- 1,1-DCE — 1,1-DICHLOROETHENE
- 5.8 — CONCENTRATION IN MICROGRAMS PER LITER

0 150 300

APPROXIMATE SCALE (FEET)

Stantec
2310 PARKDALE DRIVE NE, SUITE 400
ATLANTA, GEORGIA 30345
PH (909) 283-5523 FAX (909) 335-6120

FOR:
THE OLSON COMPANY
COMMERCIAL PROPERTY
1515 W. 178TH STREET
GARDENA, CALIFORNIA

SITE MAP WITH GROUNDWATER CONCENTRATIONS

FIGURE: **4**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185803664	KD	KD	KE	07/14/2016

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APPENDIX A
LABORATORY DATA SHEETS AND QA/QC RESULTS

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WORK ORDER NUMBER: 16-05-1326

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Stantec

Client Project Name: 185803664

Attention: Jim DeWoody
25864-F Business Center Drive
Redlands, CA 92374-4515

Approved for release on 05/25/2016 by:
Carla Hollowell
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: 185803664
Work Order Number: 16-05-1326

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Work Order Narrative

Work Order: 16-05-1326 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/18/16. They were assigned to Work Order 16-05-1326.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Stantec	Work Order:	16-05-1326
	25864-F Business Center Drive	Project Name:	185803664
	Redlands, CA 92374-4515	PO Number:	
		Date/Time Received:	05/18/16 15:40
		Number of Containers:	14
Attn:	Jim DeWoody		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SV-11-5	16-05-1326-1	05/17/16 09:13	1	Solid
SV-11-15	16-05-1326-2	05/17/16 09:27	1	Solid
SV-12-5	16-05-1326-3	05/17/16 09:55	1	Solid
SV-12-15	16-05-1326-4	05/17/16 10:09	1	Solid
SV-13-5	16-05-1326-5	05/17/16 10:33	1	Solid
SV-13-15	16-05-1326-6	05/17/16 10:47	1	Solid
SV-17-5	16-05-1326-7	05/17/16 12:00	1	Solid
SV-17-15	16-05-1326-8	05/17/16 12:10	1	Solid
SV-14-5	16-05-1326-9	05/17/16 12:38	1	Solid
SV-14-15	16-05-1326-10	05/17/16 12:50	1	Solid
SV-16-5	16-05-1326-11	05/17/16 13:07	1	Solid
SV-16-15	16-05-1326-12	05/17/16 13:20	1	Solid
SV-15-5	16-05-1326-13	05/17/16 13:55	1	Solid
SV-15-15	16-05-1326-14	05/17/16 14:25	1	Solid

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-11-5	**16-05-1326-1-A**	**05/17/16 09:13**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 06:10**	**160518L054**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 2 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	
Tert-Butyl Alcohol (TBA)	ND	51	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 3 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-11-15	**16-05-1326-2-A**	**05/17/16 09:27**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/18/16 23:32**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.9	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 5 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	9.9	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	9.9	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.9	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.9	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 6 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	102	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-12-5	**16-05-1326-3-A**	**05/17/16 09:55**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/18/16 23:58**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 8 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	
Tert-Butyl Alcohol (TBA)	ND	51	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 9 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	102	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-12-15	**16-05-1326-4-A**	**05/17/16 10:09**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 00:24**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.8	1.00	
Bromobenzene	ND	4.8	1.00	
Bromochloromethane	ND	4.8	1.00	
Bromodichloromethane	ND	4.8	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	48	1.00	
n-Butylbenzene	ND	4.8	1.00	
sec-Butylbenzene	ND	4.8	1.00	
tert-Butylbenzene	ND	4.8	1.00	
Carbon Disulfide	ND	48	1.00	
Carbon Tetrachloride	ND	4.8	1.00	
Chlorobenzene	ND	4.8	1.00	
Chloroethane	ND	4.8	1.00	
Chloroform	ND	4.8	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.8	1.00	
4-Chlorotoluene	ND	4.8	1.00	
Dibromochloromethane	ND	4.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.6	1.00	
1,2-Dibromoethane	ND	4.8	1.00	
Dibromomethane	ND	4.8	1.00	
1,2-Dichlorobenzene	ND	4.8	1.00	
1,3-Dichlorobenzene	ND	4.8	1.00	
1,4-Dichlorobenzene	ND	4.8	1.00	
Dichlorodifluoromethane	ND	4.8	1.00	
1,1-Dichloroethane	ND	4.8	1.00	
1,2-Dichloroethane	ND	4.8	1.00	
1,1-Dichloroethene	ND	4.8	1.00	
c-1,2-Dichloroethene	ND	4.8	1.00	
t-1,2-Dichloroethene	ND	4.8	1.00	
1,2-Dichloropropane	ND	4.8	1.00	
1,3-Dichloropropane	ND	4.8	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.8	1.00	
c-1,3-Dichloropropene	ND	4.8	1.00	
t-1,3-Dichloropropene	ND	4.8	1.00	
Ethylbenzene	ND	4.8	1.00	
2-Hexanone	ND	48	1.00	
Isopropylbenzene	ND	4.8	1.00	
p-Isopropyltoluene	ND	4.8	1.00	
Methylene Chloride	ND	48	1.00	
4-Methyl-2-Pentanone	ND	48	1.00	
Naphthalene	ND	48	1.00	
n-Propylbenzene	ND	4.8	1.00	
Styrene	ND	4.8	1.00	
1,1,1,2-Tetrachloroethane	ND	4.8	1.00	
1,1,2,2-Tetrachloroethane	ND	4.8	1.00	
Tetrachloroethene	ND	4.8	1.00	
Toluene	ND	4.8	1.00	
1,2,3-Trichlorobenzene	ND	9.6	1.00	
1,2,4-Trichlorobenzene	ND	4.8	1.00	
1,1,1-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	48	1.00	
Trichloroethene	ND	4.8	1.00	
1,2,3-Trichloropropane	ND	4.8	1.00	
1,2,4-Trimethylbenzene	ND	4.8	1.00	
Trichlorofluoromethane	ND	48	1.00	
1,3,5-Trimethylbenzene	ND	4.8	1.00	
Vinyl Acetate	ND	48	1.00	
Vinyl Chloride	ND	4.8	1.00	
p/m-Xylene	ND	4.8	1.00	
o-Xylene	ND	4.8	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.8	1.00	
Tert-Butyl Alcohol (TBA)	ND	48	1.00	
Diisopropyl Ether (DIPE)	ND	9.6	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.6	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.6	1.00	
Ethanol	ND	240	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 12 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-13-5	**16-05-1326-5-A**	**05/17/16 10:33**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 00:51**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 14 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	
Tert-Butyl Alcohol (TBA)	ND	51	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 15 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-13-15	**16-05-1326-6-A**	**05/17/16 10:47**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 01:18**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 17 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	
Tert-Butyl Alcohol (TBA)	ND	51	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 18 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-17-5	**16-05-1326-7-A**	**05/17/16 12:00**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 01:44**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.8	1.00	
Bromobenzene	ND	4.8	1.00	
Bromochloromethane	ND	4.8	1.00	
Bromodichloromethane	ND	4.8	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	48	1.00	
n-Butylbenzene	ND	4.8	1.00	
sec-Butylbenzene	ND	4.8	1.00	
tert-Butylbenzene	ND	4.8	1.00	
Carbon Disulfide	ND	48	1.00	
Carbon Tetrachloride	ND	4.8	1.00	
Chlorobenzene	ND	4.8	1.00	
Chloroethane	ND	4.8	1.00	
Chloroform	ND	4.8	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.8	1.00	
4-Chlorotoluene	ND	4.8	1.00	
Dibromochloromethane	ND	4.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.6	1.00	
1,2-Dibromoethane	ND	4.8	1.00	
Dibromomethane	ND	4.8	1.00	
1,2-Dichlorobenzene	ND	4.8	1.00	
1,3-Dichlorobenzene	ND	4.8	1.00	
1,4-Dichlorobenzene	ND	4.8	1.00	
Dichlorodifluoromethane	ND	4.8	1.00	
1,1-Dichloroethane	ND	4.8	1.00	
1,2-Dichloroethane	ND	4.8	1.00	
1,1-Dichloroethene	ND	4.8	1.00	
c-1,2-Dichloroethene	ND	4.8	1.00	
t-1,2-Dichloroethene	ND	4.8	1.00	
1,2-Dichloropropane	ND	4.8	1.00	
1,3-Dichloropropane	ND	4.8	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 20 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.8	1.00	
c-1,3-Dichloropropene	ND	4.8	1.00	
t-1,3-Dichloropropene	ND	4.8	1.00	
Ethylbenzene	ND	4.8	1.00	
2-Hexanone	ND	48	1.00	
Isopropylbenzene	ND	4.8	1.00	
p-Isopropyltoluene	ND	4.8	1.00	
Methylene Chloride	ND	48	1.00	
4-Methyl-2-Pentanone	ND	48	1.00	
Naphthalene	ND	48	1.00	
n-Propylbenzene	ND	4.8	1.00	
Styrene	ND	4.8	1.00	
1,1,1,2-Tetrachloroethane	ND	4.8	1.00	
1,1,2,2-Tetrachloroethane	ND	4.8	1.00	
Tetrachloroethene	ND	4.8	1.00	
Toluene	ND	4.8	1.00	
1,2,3-Trichlorobenzene	ND	9.6	1.00	
1,2,4-Trichlorobenzene	ND	4.8	1.00	
1,1,1-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	48	1.00	
Trichloroethene	ND	4.8	1.00	
1,2,3-Trichloropropane	ND	4.8	1.00	
1,2,4-Trimethylbenzene	ND	4.8	1.00	
Trichlorofluoromethane	ND	48	1.00	
1,3,5-Trimethylbenzene	ND	4.8	1.00	
Vinyl Acetate	ND	48	1.00	
Vinyl Chloride	ND	4.8	1.00	
p/m-Xylene	ND	4.8	1.00	
o-Xylene	ND	4.8	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.8	1.00	
Tert-Butyl Alcohol (TBA)	ND	48	1.00	
Diisopropyl Ether (DIPE)	ND	9.6	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.6	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.6	1.00	
Ethanol	ND	240	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 21 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-17-15	**16-05-1326-8-A**	**05/17/16 12:10**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 02:11**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.7	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec		Date Received:	05/18/16
25864-F Business Center Drive		Work Order:	16-05-1326
Redlands, CA 92374-4515		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/kg
Project: 185803664			Page 23 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.7	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	49	1.00	
Diisopropyl Ether (DIPE)	ND	9.7	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.7	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.7	1.00	
Ethanol	ND	240	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 24 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-14-5	**16-05-1326-9-A**	**05/17/16 12:38**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 02:37**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.7	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 26 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.7	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	49	1.00	
Diisopropyl Ether (DIPE)	ND	9.7	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.7	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.7	1.00	
Ethanol	ND	240	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 27 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-14-15	**16-05-1326-10-A**	**05/17/16 12:50**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 03:04**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.8	1.00	
Bromobenzene	ND	4.8	1.00	
Bromochloromethane	ND	4.8	1.00	
Bromodichloromethane	ND	4.8	1.00	
Bromoform	ND	4.8	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	48	1.00	
n-Butylbenzene	ND	4.8	1.00	
sec-Butylbenzene	ND	4.8	1.00	
tert-Butylbenzene	ND	4.8	1.00	
Carbon Disulfide	ND	48	1.00	
Carbon Tetrachloride	ND	4.8	1.00	
Chlorobenzene	ND	4.8	1.00	
Chloroethane	ND	4.8	1.00	
Chloroform	ND	4.8	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	4.8	1.00	
4-Chlorotoluene	ND	4.8	1.00	
Dibromochloromethane	ND	4.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.5	1.00	
1,2-Dibromoethane	ND	4.8	1.00	
Dibromomethane	ND	4.8	1.00	
1,2-Dichlorobenzene	ND	4.8	1.00	
1,3-Dichlorobenzene	ND	4.8	1.00	
1,4-Dichlorobenzene	ND	4.8	1.00	
Dichlorodifluoromethane	ND	4.8	1.00	
1,1-Dichloroethane	ND	4.8	1.00	
1,2-Dichloroethane	ND	4.8	1.00	
1,1-Dichloroethene	ND	4.8	1.00	
c-1,2-Dichloroethene	ND	4.8	1.00	
t-1,2-Dichloroethene	ND	4.8	1.00	
1,2-Dichloropropane	ND	4.8	1.00	
1,3-Dichloropropane	ND	4.8	1.00	
2,2-Dichloropropane	ND	4.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.8	1.00	
c-1,3-Dichloropropene	ND	4.8	1.00	
t-1,3-Dichloropropene	ND	4.8	1.00	
Ethylbenzene	ND	4.8	1.00	
2-Hexanone	ND	48	1.00	
Isopropylbenzene	ND	4.8	1.00	
p-Isopropyltoluene	ND	4.8	1.00	
Methylene Chloride	ND	48	1.00	
4-Methyl-2-Pentanone	ND	48	1.00	
Naphthalene	ND	48	1.00	
n-Propylbenzene	ND	4.8	1.00	
Styrene	ND	4.8	1.00	
1,1,1,2-Tetrachloroethane	ND	4.8	1.00	
1,1,2,2-Tetrachloroethane	ND	4.8	1.00	
Tetrachloroethene	ND	4.8	1.00	
Toluene	ND	4.8	1.00	
1,2,3-Trichlorobenzene	ND	9.5	1.00	
1,2,4-Trichlorobenzene	ND	4.8	1.00	
1,1,1-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloroethane	ND	4.8	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	48	1.00	
Trichloroethene	ND	4.8	1.00	
1,2,3-Trichloropropane	ND	4.8	1.00	
1,2,4-Trimethylbenzene	ND	4.8	1.00	
Trichlorofluoromethane	ND	48	1.00	
1,3,5-Trimethylbenzene	ND	4.8	1.00	
Vinyl Acetate	ND	48	1.00	
Vinyl Chloride	ND	4.8	1.00	
p/m-Xylene	ND	4.8	1.00	
o-Xylene	ND	4.8	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.8	1.00	
Tert-Butyl Alcohol (TBA)	ND	48	1.00	
Diisopropyl Ether (DIPE)	ND	9.5	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.5	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.5	1.00	
Ethanol	ND	240	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 30 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	105	62-146	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16-5	**16-05-1326-11-A**	**05/17/16 13:07**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 03:30**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 32 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	
Tert-Butyl Alcohol (TBA)	ND	52	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 33 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-16-15	**16-05-1326-12-A**	**05/17/16 13:20**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 07:56**	**160518L054**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	4.9	1.00	
Bromobenzene	ND	4.9	1.00	
Bromochloromethane	ND	4.9	1.00	
Bromodichloromethane	ND	4.9	1.00	
Bromoform	ND	4.9	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	49	1.00	
n-Butylbenzene	ND	4.9	1.00	
sec-Butylbenzene	ND	4.9	1.00	
tert-Butylbenzene	ND	4.9	1.00	
Carbon Disulfide	ND	49	1.00	
Carbon Tetrachloride	ND	4.9	1.00	
Chlorobenzene	ND	4.9	1.00	
Chloroethane	ND	4.9	1.00	
Chloroform	ND	4.9	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	4.9	1.00	
4-Chlorotoluene	ND	4.9	1.00	
Dibromochloromethane	ND	4.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	9.8	1.00	
1,2-Dibromoethane	ND	4.9	1.00	
Dibromomethane	ND	4.9	1.00	
1,2-Dichlorobenzene	ND	4.9	1.00	
1,3-Dichlorobenzene	ND	4.9	1.00	
1,4-Dichlorobenzene	ND	4.9	1.00	
Dichlorodifluoromethane	ND	4.9	1.00	
1,1-Dichloroethane	ND	4.9	1.00	
1,2-Dichloroethane	ND	4.9	1.00	
1,1-Dichloroethene	ND	4.9	1.00	
c-1,2-Dichloroethene	ND	4.9	1.00	
t-1,2-Dichloroethene	ND	4.9	1.00	
1,2-Dichloropropane	ND	4.9	1.00	
1,3-Dichloropropane	ND	4.9	1.00	
2,2-Dichloropropane	ND	4.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 35 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	4.9	1.00	
c-1,3-Dichloropropene	ND	4.9	1.00	
t-1,3-Dichloropropene	ND	4.9	1.00	
Ethylbenzene	ND	4.9	1.00	
2-Hexanone	ND	49	1.00	
Isopropylbenzene	ND	4.9	1.00	
p-Isopropyltoluene	ND	4.9	1.00	
Methylene Chloride	ND	49	1.00	
4-Methyl-2-Pentanone	ND	49	1.00	
Naphthalene	ND	49	1.00	
n-Propylbenzene	ND	4.9	1.00	
Styrene	ND	4.9	1.00	
1,1,1,2-Tetrachloroethane	ND	4.9	1.00	
1,1,2,2-Tetrachloroethane	ND	4.9	1.00	
Tetrachloroethene	ND	4.9	1.00	
Toluene	ND	4.9	1.00	
1,2,3-Trichlorobenzene	ND	9.8	1.00	
1,2,4-Trichlorobenzene	ND	4.9	1.00	
1,1,1-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloroethane	ND	4.9	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	49	1.00	
Trichloroethene	ND	4.9	1.00	
1,2,3-Trichloropropane	ND	4.9	1.00	
1,2,4-Trimethylbenzene	ND	4.9	1.00	
Trichlorofluoromethane	ND	49	1.00	
1,3,5-Trimethylbenzene	ND	4.9	1.00	
Vinyl Acetate	ND	49	1.00	
Vinyl Chloride	ND	4.9	1.00	
p/m-Xylene	ND	4.9	1.00	
o-Xylene	ND	4.9	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	49	1.00	
Diisopropyl Ether (DIPE)	ND	9.8	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	9.8	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	9.8	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 36 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-15-5	**16-05-1326-13-A**	**05/17/16 13:55**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 08:23**	**160518L054**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.2	1.00	
Bromobenzene	ND	5.2	1.00	
Bromochloromethane	ND	5.2	1.00	
Bromodichloromethane	ND	5.2	1.00	
Bromoform	ND	5.2	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	52	1.00	
n-Butylbenzene	ND	5.2	1.00	
sec-Butylbenzene	ND	5.2	1.00	
tert-Butylbenzene	ND	5.2	1.00	
Carbon Disulfide	ND	52	1.00	
Carbon Tetrachloride	ND	5.2	1.00	
Chlorobenzene	ND	5.2	1.00	
Chloroethane	ND	5.2	1.00	
Chloroform	ND	5.2	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.2	1.00	
4-Chlorotoluene	ND	5.2	1.00	
Dibromochloromethane	ND	5.2	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.2	1.00	
Dibromomethane	ND	5.2	1.00	
1,2-Dichlorobenzene	ND	5.2	1.00	
1,3-Dichlorobenzene	ND	5.2	1.00	
1,4-Dichlorobenzene	ND	5.2	1.00	
Dichlorodifluoromethane	ND	5.2	1.00	
1,1-Dichloroethane	ND	5.2	1.00	
1,2-Dichloroethane	ND	5.2	1.00	
1,1-Dichloroethene	ND	5.2	1.00	
c-1,2-Dichloroethene	ND	5.2	1.00	
t-1,2-Dichloroethene	ND	5.2	1.00	
1,2-Dichloropropane	ND	5.2	1.00	
1,3-Dichloropropane	ND	5.2	1.00	
2,2-Dichloropropane	ND	5.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.2	1.00	
c-1,3-Dichloropropene	ND	5.2	1.00	
t-1,3-Dichloropropene	ND	5.2	1.00	
Ethylbenzene	ND	5.2	1.00	
2-Hexanone	ND	52	1.00	
Isopropylbenzene	ND	5.2	1.00	
p-Isopropyltoluene	ND	5.2	1.00	
Methylene Chloride	ND	52	1.00	
4-Methyl-2-Pentanone	ND	52	1.00	
Naphthalene	ND	52	1.00	
n-Propylbenzene	ND	5.2	1.00	
Styrene	ND	5.2	1.00	
1,1,1,2-Tetrachloroethane	ND	5.2	1.00	
1,1,2,2-Tetrachloroethane	ND	5.2	1.00	
Tetrachloroethene	ND	5.2	1.00	
Toluene	ND	5.2	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.2	1.00	
1,1,1-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloroethane	ND	5.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	52	1.00	
Trichloroethene	ND	5.2	1.00	
1,2,3-Trichloropropane	ND	5.2	1.00	
1,2,4-Trimethylbenzene	ND	5.2	1.00	
Trichlorofluoromethane	ND	52	1.00	
1,3,5-Trimethylbenzene	ND	5.2	1.00	
Vinyl Acetate	ND	52	1.00	
Vinyl Chloride	ND	5.2	1.00	
p/m-Xylene	ND	5.2	1.00	
o-Xylene	ND	5.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.2	1.00	
Tert-Butyl Alcohol (TBA)	ND	52	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 39 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-15-15	**16-05-1326-14-A**	**05/17/16 14:25**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 08:49**	**160518L054**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	130	1.00	
Benzene	ND	5.1	1.00	
Bromobenzene	ND	5.1	1.00	
Bromochloromethane	ND	5.1	1.00	
Bromodichloromethane	ND	5.1	1.00	
Bromoform	ND	5.1	1.00	
Bromomethane	ND	26	1.00	
2-Butanone	ND	51	1.00	
n-Butylbenzene	ND	5.1	1.00	
sec-Butylbenzene	ND	5.1	1.00	
tert-Butylbenzene	ND	5.1	1.00	
Carbon Disulfide	ND	51	1.00	
Carbon Tetrachloride	ND	5.1	1.00	
Chlorobenzene	ND	5.1	1.00	
Chloroethane	ND	5.1	1.00	
Chloroform	ND	5.1	1.00	
Chloromethane	ND	26	1.00	
2-Chlorotoluene	ND	5.1	1.00	
4-Chlorotoluene	ND	5.1	1.00	
Dibromochloromethane	ND	5.1	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.1	1.00	
Dibromomethane	ND	5.1	1.00	
1,2-Dichlorobenzene	ND	5.1	1.00	
1,3-Dichlorobenzene	ND	5.1	1.00	
1,4-Dichlorobenzene	ND	5.1	1.00	
Dichlorodifluoromethane	ND	5.1	1.00	
1,1-Dichloroethane	ND	5.1	1.00	
1,2-Dichloroethane	ND	5.1	1.00	
1,1-Dichloroethene	ND	5.1	1.00	
c-1,2-Dichloroethene	ND	5.1	1.00	
t-1,2-Dichloroethene	ND	5.1	1.00	
1,2-Dichloropropane	ND	5.1	1.00	
1,3-Dichloropropane	ND	5.1	1.00	
2,2-Dichloropropane	ND	5.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 41 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.1	1.00	
c-1,3-Dichloropropene	ND	5.1	1.00	
t-1,3-Dichloropropene	ND	5.1	1.00	
Ethylbenzene	ND	5.1	1.00	
2-Hexanone	ND	51	1.00	
Isopropylbenzene	ND	5.1	1.00	
p-Isopropyltoluene	ND	5.1	1.00	
Methylene Chloride	ND	51	1.00	
4-Methyl-2-Pentanone	ND	51	1.00	
Naphthalene	ND	51	1.00	
n-Propylbenzene	ND	5.1	1.00	
Styrene	ND	5.1	1.00	
1,1,1,2-Tetrachloroethane	ND	5.1	1.00	
1,1,2,2-Tetrachloroethane	ND	5.1	1.00	
Tetrachloroethene	ND	5.1	1.00	
Toluene	ND	5.1	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.1	1.00	
1,1,1-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloroethane	ND	5.1	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	1.00	
Trichloroethene	ND	5.1	1.00	
1,2,3-Trichloropropane	ND	5.1	1.00	
1,2,4-Trimethylbenzene	ND	5.1	1.00	
Trichlorofluoromethane	ND	51	1.00	
1,3,5-Trimethylbenzene	ND	5.1	1.00	
Vinyl Acetate	ND	51	1.00	
Vinyl Chloride	ND	5.1	1.00	
p/m-Xylene	ND	5.1	1.00	
o-Xylene	ND	5.1	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.1	1.00	
Tert-Butyl Alcohol (TBA)	ND	51	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	260	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 42 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	63-141	
1,2-Dichloroethane-d4	103	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-11159**	**N/A**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/18/16 17:56**	**160518L025**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 44 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 45 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	102	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-796-11164**	**N/A**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 05:43**	**160518L054**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	120	1.00	
Benzene	ND	5.0	1.00	
Bromobenzene	ND	5.0	1.00	
Bromochloromethane	ND	5.0	1.00	
Bromodichloromethane	ND	5.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	25	1.00	
2-Butanone	ND	50	1.00	
n-Butylbenzene	ND	5.0	1.00	
sec-Butylbenzene	ND	5.0	1.00	
tert-Butylbenzene	ND	5.0	1.00	
Carbon Disulfide	ND	50	1.00	
Carbon Tetrachloride	ND	5.0	1.00	
Chlorobenzene	ND	5.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	5.0	1.00	
Chloromethane	ND	25	1.00	
2-Chlorotoluene	ND	5.0	1.00	
4-Chlorotoluene	ND	5.0	1.00	
Dibromochloromethane	ND	5.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	10	1.00	
1,2-Dibromoethane	ND	5.0	1.00	
Dibromomethane	ND	5.0	1.00	
1,2-Dichlorobenzene	ND	5.0	1.00	
1,3-Dichlorobenzene	ND	5.0	1.00	
1,4-Dichlorobenzene	ND	5.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	5.0	1.00	
1,2-Dichloroethane	ND	5.0	1.00	
1,1-Dichloroethene	ND	5.0	1.00	
c-1,2-Dichloroethene	ND	5.0	1.00	
t-1,2-Dichloroethene	ND	5.0	1.00	
1,2-Dichloropropane	ND	5.0	1.00	
1,3-Dichloropropane	ND	5.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 47 of 48

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	5.0	1.00	
c-1,3-Dichloropropene	ND	5.0	1.00	
t-1,3-Dichloropropene	ND	5.0	1.00	
Ethylbenzene	ND	5.0	1.00	
2-Hexanone	ND	50	1.00	
Isopropylbenzene	ND	5.0	1.00	
p-Isopropyltoluene	ND	5.0	1.00	
Methylene Chloride	ND	50	1.00	
4-Methyl-2-Pentanone	ND	50	1.00	
Naphthalene	ND	50	1.00	
n-Propylbenzene	ND	5.0	1.00	
Styrene	ND	5.0	1.00	
1,1,1,2-Tetrachloroethane	ND	5.0	1.00	
1,1,2,2-Tetrachloroethane	ND	5.0	1.00	
Tetrachloroethene	ND	5.0	1.00	
Toluene	ND	5.0	1.00	
1,2,3-Trichlorobenzene	ND	10	1.00	
1,2,4-Trichlorobenzene	ND	5.0	1.00	
1,1,1-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloroethane	ND	5.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	1.00	
Trichloroethene	ND	5.0	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	5.0	1.00	
Trichlorofluoromethane	ND	50	1.00	
1,3,5-Trimethylbenzene	ND	5.0	1.00	
Vinyl Acetate	ND	50	1.00	
Vinyl Chloride	ND	5.0	1.00	
p/m-Xylene	ND	5.0	1.00	
o-Xylene	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	50	1.00	
Diisopropyl Ether (DIPE)	ND	10	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	10	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	10	1.00	
Ethanol	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	60-132	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	05/18/16
25864-F Business Center Drive	Work Order:	16-05-1326
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/kg
Project: 185803664		Page 48 of 48

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	100	63-141	
1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	101	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-05-1330-1	**Sample**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/18/16 18:39**	**160518S011**
16-05-1330-1	**Matrix Spike**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/18/16 19:06**	**160518S011**
16-05-1330-1	**Matrix Spike Duplicate**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/18/16 19:33**	**160518S011**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	37.09	74	35.87	72	61-127	3	0-20	
Carbon Tetrachloride	ND	50.00	37.26	75	35.74	71	51-135	4	0-29	
Chlorobenzene	ND	50.00	37.52	75	36.53	73	57-123	3	0-20	
1,2-Dibromoethane	ND	50.00	41.41	83	41.07	82	64-124	1	0-20	
1,2-Dichlorobenzene	ND	50.00	38.62	77	36.93	74	35-131	4	0-25	
1,2-Dichloroethane	ND	50.00	39.68	79	39.56	79	80-120	0	0-20	3
1,1-Dichloroethene	ND	50.00	37.84	76	35.72	71	47-143	6	0-25	
Ethylbenzene	ND	50.00	37.12	74	35.85	72	57-129	3	0-22	
Toluene	ND	50.00	37.85	76	36.74	73	63-123	3	0-20	
Trichloroethene	ND	50.00	38.64	77	37.25	75	44-158	4	0-20	
Vinyl Chloride	ND	50.00	45.85	92	39.83	80	49-139	14	0-47	
p/m-Xylene	ND	100.0	74.61	75	72.29	72	70-130	3	0-30	
o-Xylene	ND	50.00	38.00	76	37.17	74	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	43.53	87	43.21	86	57-123	1	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	212.0	85	222.1	89	30-168	5	0-34	
Diisopropyl Ether (DIPE)	ND	50.00	39.91	80	38.90	78	57-129	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	41.04	82	40.90	82	55-127	0	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	40.90	82	40.99	82	58-124	0	0-20	
Ethanol	ND	500.0	392.8	79	395.5	79	17-167	1	0-47	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 5030C
Method: EPA 8260B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SV-11-5	**Sample**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 06:10**	**160518S031**
SV-11-5	**Matrix Spike**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 06:36**	**160518S031**
SV-11-5	**Matrix Spike Duplicate**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 07:03**	**160518S031**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	41.32	83	44.04	88	61-127	6	0-20	
Carbon Tetrachloride	ND	50.00	43.80	88	45.50	91	51-135	4	0-29	
Chlorobenzene	ND	50.00	41.22	82	44.17	88	57-123	7	0-20	
1,2-Dibromoethane	ND	50.00	41.43	83	45.45	91	64-124	9	0-20	
1,2-Dichlorobenzene	ND	50.00	40.14	80	45.19	90	35-131	12	0-25	
1,2-Dichloroethane	ND	50.00	41.44	83	44.58	89	80-120	7	0-20	
1,1-Dichloroethene	ND	50.00	43.42	87	45.52	91	47-143	5	0-25	
Ethylbenzene	ND	50.00	42.71	85	45.28	91	57-129	6	0-22	
Toluene	ND	50.00	43.13	86	45.33	91	63-123	5	0-20	
Trichloroethene	ND	50.00	45.66	91	48.73	97	44-158	6	0-20	
Vinyl Chloride	ND	50.00	45.54	91	47.27	95	49-139	4	0-47	
p/m-Xylene	ND	100.0	84.88	85	90.11	90	70-130	6	0-30	
o-Xylene	ND	50.00	43.01	86	46.09	92	70-130	7	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	42.83	86	47.04	94	57-123	9	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	271.0	108	289.5	116	30-168	7	0-34	
Diisopropyl Ether (DIPE)	ND	50.00	42.30	85	45.80	92	57-129	8	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	42.73	85	46.63	93	55-127	9	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	42.29	85	46.06	92	58-124	9	0-20	
Ethanol	ND	500.0	610.7	122	666.1	133	17-167	9	0-47	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Stantec		Date Received:	05/18/16
25864-F Business Center Drive		Work Order:	16-05-1326
Redlands, CA 92374-4515		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: 185803664			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-11159	**LCS**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/18/16 16:10**	**160518L025**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	49.09	98	78-120	71-127	
Carbon Tetrachloride	50.00	51.47	103	49-139	34-154	
Chlorobenzene	50.00	50.02	100	79-120	72-127	
1,2-Dibromoethane	50.00	50.82	102	80-120	73-127	
1,2-Dichlorobenzene	50.00	51.61	103	75-120	68-128	
1,2-Dichloroethane	50.00	49.52	99	80-120	73-127	
1,1-Dichloroethene	50.00	51.26	103	74-122	66-130	
Ethylbenzene	50.00	51.01	102	76-120	69-127	
Toluene	50.00	51.13	102	77-120	70-127	
Trichloroethene	50.00	53.08	106	80-120	73-127	
Vinyl Chloride	50.00	49.71	99	68-122	59-131	
p/m-Xylene	100.0	102.7	103	75-125	67-133	
o-Xylene	50.00	52.33	105	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	52.86	106	77-120	70-127	
Tert-Butyl Alcohol (TBA)	250.0	234.1	94	68-122	59-131	
Diisopropyl Ether (DIPE)	50.00	50.68	101	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	50.00	52.25	105	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	50.00	51.33	103	75-120	68-128	
Ethanol	500.0	432.7	87	56-140	42-154	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Stantec		Date Received:	05/18/16
25864-F Business Center Drive		Work Order:	16-05-1326
Redlands, CA 92374-4515		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: 185803664			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-796-11164	**LCS**	**Solid**	**GC/MS GGG**	**05/18/16**	**05/19/16 04:50**	**160518L054**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	48.40	97	78-120	71-127	
Carbon Tetrachloride	50.00	49.74	99	49-139	34-154	
Chlorobenzene	50.00	49.34	99	79-120	72-127	
1,2-Dibromoethane	50.00	50.56	101	80-120	73-127	
1,2-Dichlorobenzene	50.00	50.39	101	75-120	68-128	
1,2-Dichloroethane	50.00	50.17	100	80-120	73-127	
1,1-Dichloroethene	50.00	49.37	99	74-122	66-130	
Ethylbenzene	50.00	49.64	99	76-120	69-127	
Toluene	50.00	50.11	100	77-120	70-127	
Trichloroethene	50.00	50.90	102	80-120	73-127	
Vinyl Chloride	50.00	47.90	96	68-122	59-131	
p/m-Xylene	100.0	99.20	99	75-125	67-133	
o-Xylene	50.00	50.86	102	75-125	67-133	
Methyl-t-Butyl Ether (MTBE)	50.00	52.29	105	77-120	70-127	
Tert-Butyl Alcohol (TBA)	250.0	250.2	100	68-122	59-131	
Diisopropyl Ether (DIPE)	50.00	50.99	102	78-120	71-127	
Ethyl-t-Butyl Ether (ETBE)	50.00	51.73	103	78-120	71-127	
Tert-Amyl-Methyl Ether (TAME)	50.00	51.38	103	75-120	68-128	
Ethanol	500.0	490.8	98	56-140	42-154	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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Glossary of Terms and Qualifiers

Work Order: 16-05-1326 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stantec

CHAIN OF CUSTODY FORM

25864-F-Business Center Dr., Redlands, CA 92374 (909)335-6116, Fax (909) 335-6120

16-05-1326

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Client Name/Address:
Stantec
25864-F Business Center Drive
Redlands, CA 92374

Project/PO Number: 185803bdd

Project Manager: Jim DeWoody

Email Address: James.DeWoody@stantec.com

Phone Number: 909-335-6116

Sampler: Ryan McDaniel

Fax Number: 909-335-6120

	Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Analysis Required: VOCs 8260	Special Instructions
1	SV-11-5	S	Glass Jar	1	5-17-16	0913	Ice	X	
2	SV-11-15		Sleeve			0927		X	
3	SV-12-5		Glass Jar			0955		X	
4	SV-12-15		Acetate sleeve			1009		X	
5	SV-13-5		Glass Jar			1033		X	
6	SV-13-15		Liner			1047		X	
7	SV-17-5		Jar			1200		X	
8	SV-17-15		Liner			1210		X	
9	SV-14-5		Jar			1238		X	
10	SV-14-15		Liner			1250		X	
11	SV-16-5		Jar			~~1300~~ 1307		X	
12	SV-16-15		Liner			1320		X	
13	SV-15-5		Jar			1355		X	
14	SV-15-15		Liner	1	5-17-16	1425		X	

Relinquished By: | Date/Time: | Received By: | Date/Time:

Relinquished By: R McDaniel | Date/Time: 5/18/16 1540 | Received By: Dannyle EEZ | Date/Tim: 5/18/16 15:40

Relinquished By: | Date/Time | Received in Lab By: | Date/Time;

Turn Around Time:
RUSH
Sameday
24 hours
48 hours
72 hours
5 days
(normal)

Sample Integrity: (Check)
intact _____ on ice ____

Note: By relinquishing samples, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

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WORK ORDER NUMBER: 16-05-1526

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Stantec

DATE: 05 / 18 / 2016

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC2A (CF: 0.0°C); Temperature (w/o CF): 3.9 °C (w/ CF): 3.9 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 659

CUSTODY SEAL:

Cooler	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 659
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 659

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☑ Sleeve (P) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 659

Reviewed by: 856

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Supplemental Report 1

Additional requested analyses are reported as a stand-alone report.

WORK ORDER NUMBER: 16-05-1326

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Stantec

Client Project Name: 185803664

Attention: Jim DeWoody
25864-F Business Center Drive
Redlands, CA 92374-4515

Approved for release on 06/07/2016 by:
Carla Hollowell
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: 185803664
Work Order Number: 16-05-1326

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Work Order Narrative

Work Order: 16-05-1326 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/18/16. They were assigned to Work Order 16-05-1326.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Stantec	Work Order:	16-05-1326
	25864-F Business Center Drive	Project Name:	185803664
	Redlands, CA 92374-4515	PO Number:	
		Date/Time Received:	05/18/16 15:40
		Number of Containers:	14
Attn:	Jim DeWoody		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SV-13-5	16-05-1326-5	05/17/16 10:33	1	Solid
SV-13-15	16-05-1326-6	05/17/16 10:47	1	Solid

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-13-5	**16-05-1326-5-A**	**05/17/16 10:33**	**Solid**	**GC 45**	**05/31/16**	**06/01/16 01:34**	**160531B09**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	25	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	120	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-13-15	**16-05-1326-6-A**	**05/17/16 10:47**	**Solid**	**GC 45**	**05/31/16**	**06/01/16 01:51**	**160531B09**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	25	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-420-1819**	**N/A**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 19:33**	**160531B09**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	25	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	97	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 3550B
Method: EPA 8015B (M)
Units: mg/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-13-5	**16-05-1326-5-A**	**05/17/16 10:33**	**Solid**	**GC 45**	**05/31/16**	**06/01/16 01:34**	**160531B08**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	4.9	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	120	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SV-13-15	**16-05-1326-6-A**	**05/17/16 10:47**	**Solid**	**GC 45**	**05/31/16**	**06/01/16 01:51**	**160531B08**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-422-2461**	**N/A**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 19:33**	**160531B08**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	5.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	97	61-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Stantec		Date Received:	05/18/16
25864-F Business Center Drive		Work Order:	16-05-1326
Redlands, CA 92374-4515		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: 185803664			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-05-1623-12	**Sample**	**Solid**	**GC 45**	**05/31/16**	**06/01/16 09:44**	**160531S09**
16-05-1623-12	**Matrix Spike**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 20:56**	**160531S09**
16-05-1623-12	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 21:12**	**160531S09**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	3690	400.0	1231	0	1320	0	64-130	7	0-15	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 05/18/16
Work Order: 16-05-1326
Preparation: EPA 3550B
Method: EPA 8015B (M)
Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-05-1623-12	**Sample**	**Solid**	**GC 45**	**05/31/16**	**06/01/16 09:44**	**160531S08**
16-05-1623-12	**Matrix Spike**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 20:22**	**160531S08**
16-05-1623-12	**Matrix Spike Duplicate**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 20:39**	**160531S08**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	1273	400.0	1172	0	1030	0	64-130	13	0-15	3

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Stantec		Date Received:	05/18/16
25864-F Business Center Drive		Work Order:	16-05-1326
Redlands, CA 92374-4515		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: 185803664			Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-420-1819	**LCS**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 20:05**	**160531B09**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Motor Oil	400.0	395.8	99	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Stantec		Date Received:	05/18/16
25864-F Business Center Drive		Work Order:	16-05-1326
Redlands, CA 92374-4515		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)
Project: 185803664			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-422-2461	**LCS**	**Solid**	**GC 45**	**05/31/16**	**05/31/16 19:49**	**160531B08**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Diesel	400.0	418.9	105	75-123	

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RPD: Relative Percent Difference. CL: Control Limits

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Glossary of Terms and Qualifiers

Work Order: 16-05-1326 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN OF CUSTODY FORM

25864-F-Business Center Dr., Redlands, CA 92374 (909)335-6116, Fax (909) 335-6120

16-05-1326

Page 1 of 1

Client Name/Address: Stantec, 25864-F Business Center Drive, Redlands, CA 92374	Project/PO Number: 185803b[illegible]4
Project Manager: Jim DeWoody	Phone Number:909-335-6116
Email Address: James.DeWoody@stantec.com	Fax Number:909-335-6120
Sampler: Ryan McDaniel	

	Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Analysis Required: VOCs 8260	Special Instructions
1	SV-11-5	S	Glass Jar	1	5-17-16	0913	Ice	X	
2	SV-11-15		Sleeve			0927		X	
3	SV-12-5		Glass Jar			0955		X	
4	SV-12-15		Acetate sleeve			1009		X	
5	SV-13-5		Glass Jar			1033		X	
6	SV-13-15		Liner			1047		X	
7	SV-17-5		Jar			1200		X	
8	SV-17-15		Liner			1210		X	
9	SV-14-5		Jar			1238		X	
10	SV-14-15		Liner			1250		X	
11	SV-16-5		Jar			~~1300~~ 1307		X	
12	SV-16-15		Liner			1320		X	
13	SV-15-5		Jar			1355		X	
14	SV-15-15		Liner	1	5-17-16	1425		X	

Relinquished By:	Date/Time	Received By:	Date/Time:
Relinquished By: R McDaniel	Date/Time 5/18/16 1540	Received By: Dannyle ECT	Date/Tim: 5/18/16 15:40
Relinquished By:	Date/Time	Received in Lab By:	Date/ Time;

Turn Around Time:

RUSH
Sameday
24 hours
48 hours
72 hours
5 days
(normal)

Sample Integrity: (Check)

intact _____ on ice ____

Note: By relinquishing samples, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

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WORK ORDER NUMBER: 16-05-1526

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Stantec

DATE: 05 / 18 / 2016

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC2A (CF: 0.0°C); Temperature (w/o CF): 3.9 °C (w/ CF): 3.9 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 659

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 659

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 659

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☑	☐	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☐	☐	☑
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☐	☑
☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☑ 8ozCGJ ☐ 16ozCGJ ☑ Sleeve (P) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 659

Reviewed by: SMG

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From: Dewoody, James [mailto:James.Dewoody@stantec.com]
Sent: Tuesday, May 31, 2016 12:28 PM
To: Kathleen Burney
Cc: McDaniel, Ryan; Carla Hollowell
Subject: RE: 185803664 / ECI 16-05-1326

Hey Kathleen or Carla,

Could you run samples 16-05-1326-5 and 16-05-1326-6 for TPHd and TPHo by 8015B on a normal turn-around time?

Thanks,

Jim Dewoody
Senior Scientist
Stantec
25864-F Business Center Drive Redlands CA 92374-4515
Phone: (909) 255-8212
Cell: (951) 403-4623
James.Dewoody@stantec.com

From: Kathleen Burney [mailto:KathleenBurney@eurofinsUS.com]
Sent: Wednesday, May 25, 2016 3:34 PM
To: Dewoody, James
Cc: McDaniel, Ryan; Carla Hollowell
Subject: 185803664 / ECI 16-05-1326

Analytical report attached.

Please let me know if you need anything else. Thank you!

Kathy Burney
Project Manager Assistant
on behalf of

Carla Lee Hollowell
Environmental Project Manager

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7440 Lincoln Way
GARDEN GROVE, CA 92841
USA
Phone: +1 714 895 5494
Mobile: +1 714 904 1892

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WORK ORDER NUMBER: 16-06-1879

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For
Client: Stantec
Client Project Name: 185803664
Attention: Jim DeWoody
25864-F Business Center Drive
Redlands, CA 92374-4515

Approved for release on 07/06/2016 by:
Carla Hollowell
Project Manager

ResultLink ▸

Email your PM ▸

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Client Project Name: 185803664
Work Order Number: 16-06-1879

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Work Order Narrative

Work Order: 16-06-1879 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 06/27/16. They were assigned to Work Order 16-06-1879.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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Sample Summary

Client:	Stantec	Work Order:	16-06-1879
	25864-F Business Center Drive	Project Name:	185803664
	Redlands, CA 92374-4515	PO Number:	
		Date/Time Received:	06/27/16 12:25
		Number of Containers:	18
Attn:	Jim DeWoody		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
HP-1	16-06-1879-1	06/27/16 10:20	6	Aqueous
HP-2	16-06-1879-2	06/27/16 09:10	6	Aqueous
HP-3	16-06-1879-3	06/27/16 11:37	6	Aqueous

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Detections Summary

Client:	Stantec	Work Order:	16-06-1879
	25864-F Business Center Drive	Project Name:	185803664
	Redlands, CA 92374-4515	Received:	06/27/16
Attn:	Jim DeWoody		Page 1 of 1

Client SampleID

Analyte	Result	Qualifiers	RL	Units	Method	Extraction
HP-1 (16-06-1879-1)						
TPH as Diesel	53	HD	50	ug/L	EPA 8015B (M)	EPA 3510C
Tetrachloroethene	70		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	16		1.0	ug/L	EPA 8260B	EPA 5030C
HP-2 (16-06-1879-2)						
TPH as Diesel	65	HD	50	ug/L	EPA 8015B (M)	EPA 3510C
Tetrachloroethene	3.7		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	1.5		1.0	ug/L	EPA 8260B	EPA 5030C
HP-3 (16-06-1879-3)						
TPH as Motor Oil	1100	HD	250	ug/L	EPA 8015B (M)	EPA 3510C
TPH as Diesel	310	HD	50	ug/L	EPA 8015B (M)	EPA 3510C
Chloroform	1.8		1.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethane	16		1.0	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	1.7		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	100		1.0	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	5.8		1.0	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloroethane	1.7		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	12		1.0	ug/L	EPA 8260B	EPA 5030C

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 3510C
Method: EPA 8015B (M)
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-1	**16-06-1879-1-F**	**06/27/16 10:20**	**Aqueous**	**GC 48**	**06/29/16**	**06/30/16 00:58**	**160629B14**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	68-140	

HP-2	16-06-1879-2-F	06/27/16 09:10	Aqueous	GC 48	06/29/16	06/30/16 01:13	160629B14

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	68-140	

HP-3	16-06-1879-3-F	06/27/16 11:37	Aqueous	GC 48	06/29/16	06/30/16 01:29	160629B14

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	1100	250	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	68-140	

Method Blank	099-15-278-1230	N/A	Aqueous	GC 48	06/29/16	06/29/16 21:53	160629B14

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 3510C
Method: EPA 8015B (M)
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-1	**16-06-1879-1-F**	**06/27/16 10:20**	**Aqueous**	**GC 48**	**06/29/16**	**06/30/16 00:58**	**160629B13**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	53	50	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	76	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-2	**16-06-1879-2-F**	**06/27/16 09:10**	**Aqueous**	**GC 48**	**06/29/16**	**06/30/16 01:13**	**160629B13**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	65	50	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	79	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-3	**16-06-1879-3-F**	**06/27/16 11:37**	**Aqueous**	**GC 48**	**06/29/16**	**06/30/16 01:29**	**160629B13**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	310	50	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	83	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-304-1449**	**N/A**	**Aqueous**	**GC 48**	**06/29/16**	**06/29/16 21:53**	**160629B13**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	95	68-140	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-1	**16-06-1879-1-E**	**06/27/16 10:20**	**Aqueous**	**GC 1**	**06/28/16**	**06/29/16 09:58**	**160628L050**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	61	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-2	**16-06-1879-2-E**	**06/27/16 09:10**	**Aqueous**	**GC 1**	**06/28/16**	**06/29/16 10:34**	**160628L050**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	57	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-3	**16-06-1879-3-E**	**06/27/16 11:37**	**Aqueous**	**GC 1**	**06/28/16**	**06/29/16 11:10**	**160628L050**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	60	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-704-1466**	**N/A**	**Aqueous**	**GC 1**	**06/28/16**	**06/29/16 00:28**	**160628L050**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	59	38-134	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-1	**16-06-1879-1-A**	**06/27/16 10:20**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 13:15**	**160629L009**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: 185803664

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	70	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	16	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	06/27/16
25864-F Business Center Drive	Work Order:	16-06-1879
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: 185803664		Page 3 of 12

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	103	78-126	
1,2-Dichloroethane-d4	113	75-135	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-2	**16-06-1879-2-A**	**06/27/16 09:10**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 13:43**	**160629L009**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: 185803664

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	3.7	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	1.5	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	06/27/16
25864-F Business Center Drive	Work Order:	16-06-1879
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: 185803664		Page 6 of 12

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	101	78-126	
1,2-Dichloroethane-d4	111	75-135	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
HP-3	**16-06-1879-3-A**	**06/27/16 11:37**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 14:11**	**160629L009**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	1.8	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	16	1.0	1.00	
1,2-Dichloroethane	1.7	0.50	1.00	
1,1-Dichloroethene	100	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: 185803664

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	5.8	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	1.7	1.0	1.00	
Trichloroethene	12	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	06/27/16
25864-F Business Center Drive	Work Order:	16-06-1879
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: 185803664		Page 9 of 12

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	105	78-126	
1,2-Dichloroethane-d4	115	75-135	
Toluene-d8	100	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: 185803664

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-20742**	**N/A**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 12:19**	**160629L009**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: 185803664

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Analytical Report

Stantec	Date Received:	06/27/16
25864-F Business Center Drive	Work Order:	16-06-1879
Redlands, CA 92374-4515	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: 185803664		Page 12 of 12

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	104	78-126	
1,2-Dichloroethane-d4	112	75-135	
Toluene-d8	98	80-120	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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Quality Control - Spike/Spike Duplicate

Stantec		Date Received:	06/27/16
25864-F Business Center Drive		Work Order:	16-06-1879
Redlands, CA 92374-4515		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: 185803664			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-06-2044-2	**Sample**	**Aqueous**	**GC 48**	**06/29/16**	**06/29/16 23:56**	**160629S13**
16-06-2044-2	**Matrix Spike**	**Aqueous**	**GC 48**	**06/29/16**	**06/29/16 23:10**	**160629S13**
16-06-2044-2	**Matrix Spike Duplicate**	**Aqueous**	**GC 48**	**06/29/16**	**06/29/16 23:26**	**160629S13**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	2000	1498	75	1712	86	55-133	13	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Stantec		Date Received:	06/27/16
25864-F Business Center Drive		Work Order:	16-06-1879
Redlands, CA 92374-4515		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: 185803664			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-06-1825-1	**Sample**	**Aqueous**	**GC 1**	**06/28/16**	**06/29/16 01:04**	**160628S027**
16-06-1825-1	**Matrix Spike**	**Aqueous**	**GC 1**	**06/28/16**	**06/29/16 01:40**	**160628S027**
16-06-1825-1	**Matrix Spike Duplicate**	**Aqueous**	**GC 1**	**06/28/16**	**06/29/16 02:15**	**160628S027**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	2115	106	2033	102	68-122	4	0-18	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
16-06-2008-1	**Sample**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 16:03**	**160629S012**
16-06-2008-1	**Matrix Spike**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 16:31**	**160629S012**
16-06-2008-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 16:58**	**160629S012**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	47.34	95	45.35	91	74-122	4	0-21	
Carbon Tetrachloride	ND	50.00	53.97	108	52.72	105	60-144	2	0-21	
Chlorobenzene	ND	50.00	48.20	96	46.56	93	73-120	3	0-22	
1,2-Dibromoethane	ND	50.00	51.46	103	49.96	100	80-122	3	0-20	
1,2-Dichlorobenzene	ND	50.00	48.35	97	46.66	93	70-120	4	0-26	
1,2-Dichloroethane	ND	50.00	52.57	105	49.15	98	64-142	7	0-20	
1,1-Dichloroethene	ND	50.00	50.44	101	49.16	98	52-136	3	0-21	
Ethylbenzene	ND	50.00	49.51	99	48.86	98	77-125	1	0-24	
Toluene	ND	50.00	48.72	97	46.79	94	72-126	4	0-23	
Trichloroethene	2.574	50.00	53.34	102	48.45	92	74-128	10	0-22	
Vinyl Chloride	ND	50.00	47.64	95	48.88	98	67-133	3	0-20	
p/m-Xylene	ND	100.0	103.4	103	100.6	101	63-129	3	0-25	
o-Xylene	ND	50.00	52.65	105	51.21	102	62-128	3	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	47.30	95	48.41	97	68-134	2	0-21	
Tert-Butyl Alcohol (TBA)	ND	250.0	240.7	96	236.8	95	65-143	2	0-30	
Diisopropyl Ether (DIPE)	ND	50.00	50.01	100	48.35	97	61-139	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	50.00	47.93	96	47.05	94	64-136	2	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	50.00	46.52	93	45.44	91	67-133	2	0-20	
Ethanol	ND	500.0	487.3	97	430.0	86	34-178	12	0-58	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Stantec	Date Received: 06/27/16
25864-F Business Center Drive	Work Order: 16-06-1879
Redlands, CA 92374-4515	Preparation: EPA 3510C
	Method: EPA 8015B (M)
Project: 185803664	Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-278-1230	**LCS**	**Aqueous**	**GC 48**	**06/29/16**	**06/30/16 23:55**	**160629B14**
099-15-278-1230	**LCSD**	**Aqueous**	**GC 48**	**06/29/16**	**07/01/16 00:11**	**160629B14**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	2000	1806	90	1701	85	75-117	6	0-13	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Stantec	Date Received: 06/27/16
25864-F Business Center Drive	Work Order: 16-06-1879
Redlands, CA 92374-4515	Preparation: EPA 3510C
	Method: EPA 8015B (M)
Project: 185803664	Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-304-1449	**LCS**	**Aqueous**	**GC 48**	**06/29/16**	**06/29/16 22:08**	**160629B13**
099-15-304-1449	**LCSD**	**Aqueous**	**GC 48**	**06/29/16**	**06/29/16 22:23**	**160629B13**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	2275	114	2216	111	75-117	3	0-13	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Stantec		Date Received:	06/27/16
25864-F Business Center Drive		Work Order:	16-06-1879
Redlands, CA 92374-4515		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: 185803664			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-704-1466	**LCS**	**Aqueous**	**GC 1**	**06/28/16**	**06/28/16 23:53**	**160628L050**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	2000	2057	103	78-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Stantec
25864-F Business Center Drive
Redlands, CA 92374-4515

Project: 185803664

Date Received: 06/27/16
Work Order: 16-06-1879
Preparation: EPA 5030C
Method: EPA 8260B

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-20742	**LCS**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 10:47**	**160629L009**
099-14-001-20742	**LCSD**	**Aqueous**	**GC/MS V V**	**06/29/16**	**06/29/16 11:24**	**160629L009**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	48.98	98	48.11	96	80-120	73-127	2	0-20	
Carbon Tetrachloride	50.00	59.99	120	60.98	122	67-139	55-151	2	0-20	
Chlorobenzene	50.00	49.99	100	50.58	101	78-120	71-127	1	0-20	
1,2-Dibromoethane	50.00	52.21	104	53.46	107	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	50.00	51.41	103	51.55	103	63-129	52-140	0	0-20	
1,2-Dichloroethane	50.00	53.47	107	52.29	105	70-130	60-140	2	0-20	
1,1-Dichloroethene	50.00	40.57	81	41.33	83	66-126	56-136	2	0-20	
Ethylbenzene	50.00	52.67	105	53.29	107	80-123	73-130	1	0-20	
Toluene	50.00	51.47	103	51.04	102	80-120	73-127	1	0-20	
Trichloroethene	50.00	49.75	99	48.42	97	80-122	73-129	3	0-20	
Vinyl Chloride	50.00	48.82	98	48.27	97	70-130	60-140	1	0-20	
p/m-Xylene	100.0	109.0	109	110.5	111	75-123	67-131	1	0-20	
o-Xylene	50.00	55.53	111	56.27	113	74-122	66-130	1	0-20	
Methyl-t-Butyl Ether (MTBE)	50.00	51.90	104	53.57	107	69-129	59-139	3	0-20	
Tert-Butyl Alcohol (TBA)	250.0	258.4	103	256.8	103	69-129	59-139	1	0-20	
Diisopropyl Ether (DIPE)	50.00	52.65	105	52.82	106	68-128	58-138	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	51.11	102	52.72	105	63-135	51-147	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	51.47	103	51.26	103	67-133	56-144	0	0-20	
Ethanol	500.0	288.4	58	290.0	58	42-168	21-189	1	0-20	

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

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Glossary of Terms and Qualifiers

Work Order: 16-06-1879 Page 1 of 1

Qualifiers	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Stantec

CHAIN OF CUSTODY FORM

25864-F-Business Center Dr., Redlands, CA 92374 (909)335-6116, Fax (909) 335-6120

16-06-1879

Page 1 of 1

Client Name/Address:
Stantec
25864-F Business Center Drive
Redlands, CA 92374

Project/PO Number: 185803664

Project Manager: Jim DeWoody
Email Address: James.DeWoody@Stantec.com
Sampler: Ryan McDaniel

Phone Number: 909-335-6116
Fax Number: 909-335-6120

Analysis Required

	Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	TPH 8015 G/D/Mo	8260 VOCs	Special Instructions
1	HP-1	GW	5 VOAs 1 Amber	6	6-27-16	1020	HCl/Ice	X	X	
2	HP-2	GW	↓	↓	↓	0910	↓	X	X	
3	HP-3	GW	↓	↓	↓	1137	↓	X	X	

Relinquished By: [signature] Date/Time 6-27-16 1225
Received By: [signature] Date/Time: 6/27/16 1225

Relinquished By: Date/Time
Received By: Date/Tim:

Relinquished By: Date/Time
Received in Lab By: Date/Time;

Turn Around Time:
RUSH
Sameday
24 hours
48 hours
72 hours
5 days
normal

Sample Integrity: (Check)
intact _____ on ice ____

Note: By relinquishing samples, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

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WORK ORDER NUMBER: 16-06- 1879

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Stantec

DATE: 06 / 27 / 2016

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC2A (CF: 0.0°C); Temperature (w/o CF): 4.2 °C (w/ CF): 4.2 °C; ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 836

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 836

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 836

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers			
☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and in good condition	☑	☐	☐
Proper containers for analyses requested	☑	☐	☐
Sufficient volume/mass for analyses requested	☐	☑	☐
Samples received within holding time	☑	☐	☐
Aqueous samples for certain analyses received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation chemical(s) noted on COC and/or sample container	☑	☐	☐
Unpreserved aqueous sample(s) received for certain analyses			
☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals			
Container(s) for certain analysis free of headspace	☐	☑	☐
☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)			
☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE: 5 (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☑ VOAh ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: 836

s = H_2SO_4, **u** = ultra-pure, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: MO7

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WORK ORDER NUMBER: 16-06- 1879

SAMPLE ANOMALY REPORT

DATE: 06 / 27 / 2016

SAMPLES, CONTAINERS, AND LABELS:

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☑ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☐ Client sample label(s) do not match COC (comment)
  - ☐ Project information
  - ☐ Client sample ID
  - ☐ Sampling date and/or time
  - ☐ Number of container(s)
  - ☐ Requested analysis
- ☐ Sample container(s) compromised (comment)
  - ☐ Broken
  - ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
  - ☐ Flat
  - ☐ Very low in volume
  - ☐ Leaking (not transferred; duplicate bag submitted)
  - ☐ Leaking (transferred into ECI Tedlar™ bags*)
  - ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

Comments

E3) Received approx. 400 ml in 1 liter amber glass container for TPH-D and MO.

MISCELLANEOUS: (Describe)

Comments

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**
1, 2	A + E	5			
3	C, E	5			

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: _____

Reported by: SJG

Reviewed by: MOZ

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

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Mobile Geochemistry Inc.

15 April 2016

Mr. Jim Dewoody
Stantec - Redlands
25864-F Business Center Dr.
Redlands, CA 92374

H&P Project: ST040816-SB2
Client Project: 185803664 / 1515 W. 178th

Dear Mr. Jim Dewoody:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 08-Apr-16 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis Villarreal

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP, the National Environmental Laboratory Accreditation Conference (NELAC) and the Department of Defense Accreditation Programs.

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-2	E604033-01	Vapor	08-Apr-16	08-Apr-16
SV-1	E604033-02	Vapor	08-Apr-16	08-Apr-16
SV-4	E604033-03	Vapor	08-Apr-16	08-Apr-16
SV-3	E604033-04	Vapor	08-Apr-16	08-Apr-16
SV-3 REP	E604033-05	Vapor	08-Apr-16	08-Apr-16
SV-5	E604033-06	Vapor	08-Apr-16	08-Apr-16
SV-6	E604033-07	Vapor	08-Apr-16	08-Apr-16
SV-7	E604033-08	Vapor	08-Apr-16	08-Apr-16
SV-8	E604033-09	Vapor	08-Apr-16	08-Apr-16
SV-9	E604033-10	Vapor	08-Apr-16	08-Apr-16
SV-10	E604033-11	Vapor	08-Apr-16	08-Apr-16

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
Carlsbad, CA 92010
760-804-9678 Phone
760-804-9159 Fax

Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

DETECTIONS SUMMARY

Sample ID: **SV-2** Laboratory ID: **E604033-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Dichloroethene	**0.62**	0.40	ug/l	H&P 8260SV	
Methylene chloride (Dichloromethane)	**0.45**	0.40	ug/l	H&P 8260SV	
Tetrachloroethene	**0.51**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-1** Laboratory ID: **E604033-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	**0.41**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-4** Laboratory ID: **E604033-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Methylene chloride (Dichloromethane)	**1.0**	0.40	ug/l	H&P 8260SV	
Tetrachloroethene	**0.24**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-3** Laboratory ID: **E604033-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	**0.31**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-3 REP** Laboratory ID: **E604033-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Tetrachloroethene	**0.26**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-5** Laboratory ID: **E604033-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.09**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**1.0**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-6** Laboratory ID: **E604033-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.10**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**0.11**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**0.99**	0.08	ug/l	H&P 8260SV	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Sample ID: **SV-7** Laboratory ID: **E604033-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.10**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**0.10**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**46**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-8** Laboratory ID: **E604033-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.09**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-9** Laboratory ID: **E604033-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.10**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-10** Laboratory ID: **E604033-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.09**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**0.11**	0.08	ug/l	H&P 8260SV	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-2 (E604033-01) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	**0.62**	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**0.45**	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.51**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-2 (E604033-01) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.0 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*		*75-125*	"	"	"	"	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-1 (E604033-02) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.41**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-1 (E604033-02) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*109 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-4 (E604033-03) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	**1.0**	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.24**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

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Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-4 (E604033-03) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-3 (E604033-04) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.31**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-3 (E604033-04) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*111 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*110 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-3 REP (E604033-05) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.26**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-3 REP (E604033-05) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-5 (E604033-06) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.09**	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**1.0**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-5 (E604033-06) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-6 (E604033-07) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.10**	0.08	"	"	"	"	"	"	
Trichloroethene	**0.11**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.99**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Geochemistry Inc.

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Carlsbad, CA 92010
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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-6 (E604033-07) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*107 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-7 (E604033-08) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.10**	0.08	"	"	"	"	"	"	
Trichloroethene	**0.10**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**46**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-7 (E604033-08) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*106 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*75-125*	"	"	"	"	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-8 (E604033-09) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.09**	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-8 (E604033-09) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*111 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*107 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*75-125*	"	"	"	"	

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Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-9 (E604033-10) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.10**	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	ND	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-9 (E604033-10) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*105 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*107 %*		*75-125*	"	"	"	"	

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Geochemistry Inc.

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760-804-9678 Phone
760-804-9159 Fax

Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-10 (E604033-11) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.09**	0.08	"	"	"	"	"	"	
Trichloroethene	ND	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**0.11**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-10 (E604033-11) Vapor Sampled: 08-Apr-16 Received: 08-Apr-16									
o-Xylene	ND	0.40	ug/l	0.04	ED60801	08-Apr-16	08-Apr-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED60801 - EPA 5030										
Blank (ED60801-BLK1)				Prepared & Analyzed: 08-Apr-16						
1,1-Difluoroethane (LCC)	ND	0.40	ug/l							
Dichlorodifluoromethane (F12)	ND	0.40	"							
Chloromethane	ND	0.40	"							
Vinyl chloride	ND	0.04	"							
Bromomethane	ND	0.40	"							
Chloroethane	ND	0.40	"							
Trichlorofluoromethane (F11)	ND	0.40	"							
1,1-Dichloroethene	ND	0.40	"							
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"							
Methylene chloride (Dichloromethane)	ND	0.40	"							
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"							
trans-1,2-Dichloroethene	ND	0.40	"							
1,1-Dichloroethane	ND	0.40	"							
2,2-Dichloropropane	ND	0.40	"							
cis-1,2-Dichloroethene	ND	0.40	"							
Chloroform	ND	0.08	"							
Bromochloromethane	ND	0.40	"							
1,1,1-Trichloroethane	ND	0.40	"							
1,1-Dichloropropene	ND	0.40	"							
Carbon tetrachloride	ND	0.08	"							
1,2-Dichloroethane (EDC)	ND	0.08	"							
Benzene	ND	0.08	"							
Trichloroethene	ND	0.08	"							
1,2-Dichloropropane	ND	0.40	"							
Bromodichloromethane	ND	0.40	"							
Dibromomethane	ND	0.40	"							
cis-1,3-Dichloropropene	ND	0.40	"							
Toluene	ND	0.80	"							
trans-1,3-Dichloropropene	ND	0.40	"							
1,1,2-Trichloroethane	ND	0.40	"							
1,2-Dibromoethane (EDB)	ND	0.40	"							
1,3-Dichloropropane	ND	0.40	"							
Tetrachloroethene	ND	0.08	"							
Dibromochloromethane	ND	0.40	"							

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED60801 - EPA 5030										
Blank (ED60801-BLK1)				Prepared & Analyzed: 08-Apr-16						
Chlorobenzene	ND	0.08	ug/l							
Ethylbenzene	ND	0.40	"							
1,1,1,2-Tetrachloroethane	ND	0.40	"							
m,p-Xylene	ND	0.40	"							
o-Xylene	ND	0.40	"							
Styrene	ND	0.40	"							
Bromoform	ND	0.40	"							
Isopropylbenzene (Cumene)	ND	0.40	"							
1,1,2,2-Tetrachloroethane	ND	0.40	"							
1,2,3-Trichloropropane	ND	0.40	"							
n-Propylbenzene	ND	0.40	"							
Bromobenzene	ND	0.40	"							
1,3,5-Trimethylbenzene	ND	0.40	"							
2-Chlorotoluene	ND	0.40	"							
4-Chlorotoluene	ND	0.40	"							
tert-Butylbenzene	ND	0.40	"							
1,2,4-Trimethylbenzene	ND	0.40	"							
sec-Butylbenzene	ND	0.40	"							
p-Isopropyltoluene	ND	0.40	"							
1,3-Dichlorobenzene	ND	0.40	"							
1,4-Dichlorobenzene	ND	0.40	"							
n-Butylbenzene	ND	0.40	"							
1,2-Dichlorobenzene	ND	0.40	"							
1,2-Dibromo-3-chloropropane	ND	4.0	"							
1,2,4-Trichlorobenzene	ND	0.40	"							
Hexachlorobutadiene	ND	0.40	"							
Naphthalene	ND	0.08	"							
1,2,3-Trichlorobenzene	ND	0.40	"							
Surrogate: Dibromofluoromethane	*2.03*		*"*	*2.00*		*101*	*75-125*			
Surrogate: 1,2-Dichloroethane-d4	*1.98*		*"*	*2.00*		*99.1*	*75-125*			
Surrogate: Toluene-d8	*2.09*		*"*	*2.00*		*105*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.05*		*"*	*2.00*		*102*	*75-125*			

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Volatile Organic Compounds by H&P 8260SV - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED60801 - EPA 5030										
LCS (ED60801-BS1)				Prepared & Analyzed: 08-Apr-16						
Dichlorodifluoromethane (F12)	4.0	0.50	ug/l	5.00		81.0	70-130			
Vinyl chloride	4.4	0.05	"	5.00		87.4	70-130			
Chloroethane	4.8	0.50	"	5.00		96.4	70-130			
Trichlorofluoromethane (F11)	5.0	0.50	"	5.00		99.7	70-130			
1,1-Dichloroethene	5.7	0.50	"	5.00		115	70-130			
1,1,2 Trichlorotrifluoroethane (F113)	6.4	0.50	"	5.00		127	70-130			
Methylene chloride (Dichloromethane)	5.2	0.50	"	5.00		103	70-130			
trans-1,2-Dichloroethene	5.7	0.50	"	5.00		113	70-130			
1,1-Dichloroethane	5.1	0.50	"	5.00		102	70-130			
cis-1,2-Dichloroethene	5.5	0.50	"	5.00		109	70-130			
Chloroform	5.3	0.10	"	5.00		106	70-130			
1,1,1-Trichloroethane	5.2	0.50	"	5.00		103	70-130			
Carbon tetrachloride	5.4	0.10	"	5.00		109	70-130			
1,2-Dichloroethane (EDC)	5.3	0.10	"	5.00		107	70-130			
Benzene	4.8	0.10	"	5.00		95.4	70-130			
Trichloroethene	5.6	0.10	"	5.00		112	70-130			
Toluene	4.8	1.0	"	5.00		96.3	70-130			
1,1,2-Trichloroethane	5.3	0.50	"	5.00		106	70-130			
Tetrachloroethene	5.7	0.10	"	5.00		113	70-130			
Ethylbenzene	5.2	0.50	"	5.00		104	70-130			
1,1,1,2-Tetrachloroethane	5.5	0.50	"	5.00		111	70-130			
m,p-Xylene	9.3	0.50	"	10.0		93.0	70-130			
o-Xylene	4.9	0.50	"	5.00		97.6	70-130			
1,1,2,2-Tetrachloroethane	5.0	0.50	"	5.00		100	70-130			
Surrogate: Dibromofluoromethane	*2.51*		*"*	*2.50*		*100*	*75-125*			
Surrogate: 1,2-Dichloroethane-d4	*2.53*		*"*	*2.50*		*101*	*75-125*			
Surrogate: Toluene-d8	*2.59*		*"*	*2.50*		*104*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.82*		*"*	*2.50*		*113*	*75-125*			

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Stantec - Redlands	Project: ST040816-SB2	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W. 178th	Reported:
Redlands, CA 92374	Project Manager: Mr. Jim Dewoody	15-Apr-16 07:45

Notes and Definitions

LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP and the ISO 17025 programs, certification number L11-175.

H&P is approved by the State of Arizona as an Environmental Testing Laboratory and Mobile Laboratory, certification numbers AZM758 and AZ0779.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743, 2744, 2745, 2754 & 2930.

H&P is approved by the State of Florida Department of Health under the National Environmental Laboratory Accreditation Conference (NELAC) certification number E871100.

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

H&P Mobile Geochemistry, Inc.

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VAPOR / AIR Chain of Custody

DATE: 3/28/2016
Page 1 of 1

Lab Client and Project Information

Lab Client/Consultant: Terracon	Project Name / #: 61167260
Lab Client Project Manager: Wynn John	Project Location: South Salt Lake, UT
Lab Client Address: 6949 South High Tech Dr.	Report E-Mail(s): wynn.john@terracon.com kent.wheeler@terracon.com
Lab Client City, State, Zip: Midvale, UT 84047	
Phone Number: 801-746-5480	

Sample Receipt (Lab Use Only)

Date Rec'd: 3/29/16	Control #: 160285.01
H&P Project # TER032916-11	
Lab Work Order # E603116	
Sample Intact: ☑ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID: 11167	Temp: 22°C
Outside Lab:	
Receipt Notes/Tracking #: FedEx 7759 7225 3375	Lab PM Initials: KRI

Reporting Requirements

☑ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☐ Other EDD:
☐ CA Geotracker Global ID:

Turnaround Time

☐ 5-7 day Stnd ☑ 24-Hr Rush
☐ 3-day Rush ☐ Mobile Lab
☐ 48-Hr Rush ☐ Other:

Sampler Information

Sampler(s): W. Wynn John
Signature: W. Wynn John
Date: 3/28/16

Additional Instructions to Laboratory:

☐ Check if Project Analyte List is Attached

Report Utah APH Ranges

*Preferred VOC units (please choose one):
☐ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☒ TO-15 ☐ 8260SV	VOCs Short List / Project List ☐ TO-15 ☐ 8260SV	Oxygenates ☐ TO-15 ☐ 8260SV	Naphthalene ☐ TO-15 ☐ TO-17m ☐ 8260SV	TPHv as Gas ☒ TO-15m ☐ 8260SVm	TPHv as Diesel (sorbent tube) ☐ TO-17m	Aromatic/Aliphatic Fractions ☒ TO-15m ☐ 8260SVm	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2			
SG-1		3/28/16	14:12	SV	400mL	008	-2.9	X				X		X	X					
SG-2		3/28/16	14:43	SV	400mL	354	-2.5	X				X		X	X					

Approved/Relinquished by: W. Wynn John	Company: Terracon	Date: 3/28/16	Time: 15:58	Received by: Shelli L. Chi	Company: H+P	Date: 3/29/16	Time: 1350
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

Rev 08/18/2014

Mobile Geochemistry, Inc.
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VAPOR / AIR Chain of Custody

DATE: 3/21/16
Page 1 of 1

Lab Client and Project Information

Lab Client/Consultant: Antea USA. Inc.
Lab Client Project Manager: Jeffrey Friedman
Lab Client Address: 3229 E. Spring Street Suite 100
Lab Client City, State, Zip: Long Beach
Phone Number: (626) 408-4534 KM 3/22/16
Project Name / #: IRG Circle Triangle Site
Project Location: IRGCALB106
Report E-Mail(s): Jeff.friedman@anteagroup.com JEFF.FRIEDMAN@anteagroup.com

Sample Receipt (Lab Use Only)

Date Rec'd: 3/22/16 Control #: 160265.02
H&P Project # ANT032216-11
Lab Work Order # E603094
Sample Intact: ☒ Yes ☐ No ☐ See Notes Below
Receipt Gauge ID: 1076084 Temp: RT
Outside Lab:
Receipt Notes/Tracking #:
KM for
Lab PM Initials: KRI

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☐ Other EDD:
☐ CA Geotracker Global ID:

Turnaround Time

☒ 5-7 day Stnd ☐ 24-Hr Rush
☐ 3-day Rush ☐ Mobile Lab
☐ 48-Hr Rush ☐ Other:

Sampler Information

Sampler(s): A. Wagner
Signature:
Date: 3/21/16

Additional Instructions to Laboratory:

☒ Check if Project Analyte List is ~~Attached~~ See Project Folder
* Preferred VOC units (please choose one):
☐ µg/L ☒ µg/m³ ☐ ppbv ☐ ppmv
BTEX + TPHg by EPA TO-15 KM 3/22/16

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☐ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☒ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15 ☐ TO-17m	TPHv as Gas ☐ 8260SVm ☒ TO-15m	TPHv as Diesel (sorbent tube) ☐ TO-17m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☐ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2			
AA-1	NA	3/21/16	1505	AA	6L Summa	ST019	-5.18		X			X								
AA-2	"	"	1515	AA	6L Summa	ST026	-5.62		X			X								
										KM	3/22/16									

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
	Antea Group	3/21/16	1500		H&P	3/21/16	1520
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

Rev 08/18/2014

H&P Mobile Geochemistry Inc.

Log Sheet: Soil Vapor Sampling with Syringe

H&P Project #: STO40816-SB2/Tech
Date: 4/8/16
Site Address: 1515 W. 178th St. Gardena
Page: 1 of 1
Consultant: STANTEC
H&P Rep(s): D. Do
Reviewed: DJB
Consultant Rep(s): Matt Sapp
A. Wagner
Scanned: DJB

Equipment Info
Inline Gauge ID#: NA
Pump ID#: 015

Purge Volume Information
PV Amount: 3PV
PV Includes: ☒ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample Information				Probe Specs							Purge & Collection Information						
	Point ID	Syringe ID	Sample Volume (cc)	Sample Time	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	SV-2	87	40	0949	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	200	18'33"	200	0
2	SV-1	112	40	1010	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
3	SV-4	204	40	1029	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
4	SV-3	203	40	1049	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16	200	0
5	SV-3 REP	225	40	1050	5	7	1/8	12	3.5	6	3.5	✓	✓	3749	NA	NA	200	0
6	SV-5	149	40	1109	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
7	SV-6	112	40	1133	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
8	SV-7	211	40	1156	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
9	SV-8	87	40	1223	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
10	SV-9	204	40	1248	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
11	SV-10	225	40	1308	5	7	1/8	12	3.5	6	3.5	✓	✓	3709	400	9'16"	200	0
12																		

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):

Mobile Geochemistry Inc.

25 May 2016

Mr. James Dewoody
Stantec - Redlands
25864-F Business Center Dr.
Redlands, CA 92374

H&P Project: ST051916-SB1
Client Project: 185803664 / 1515 W 178th St

Dear Mr. James Dewoody:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 19-May-16 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

Janis Villarreal

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP, the National Environmental Laboratory Accreditation Conference (NELAC) and the Department of Defense Accreditation Programs.

H&P Mobile
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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SV-12-15'	E605058-01	Vapor	19-May-16	19-May-16
SV-12-15' Rep	E605058-02	Vapor	19-May-16	19-May-16
SV-11-15'	E605058-03	Vapor	19-May-16	19-May-16
SV-17-15'	E605058-04	Vapor	19-May-16	19-May-16
SV-16-15'	E605058-05	Vapor	19-May-16	19-May-16
SV-15-15'	E605058-06	Vapor	19-May-16	19-May-16
SV-11-5'	E605058-07	Vapor	19-May-16	19-May-16
SV-12-5'	E605058-08	Vapor	19-May-16	19-May-16
SV-13-5'	E605058-09	Vapor	19-May-16	19-May-16
SV-17-5'	E605058-10	Vapor	19-May-16	19-May-16
SV-14-5'	E605058-11	Vapor	19-May-16	19-May-16
SV-16-5'	E605058-12	Vapor	19-May-16	19-May-16
SV-15-5'	E605058-13	Vapor	19-May-16	19-May-16

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

DETECTIONS SUMMARY

Sample ID: **SV-12-15'** Laboratory ID: **E605058-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**2.4**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**31**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-12-15' Rep** Laboratory ID: **E605058-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**2.0**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**23**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-11-15'** Laboratory ID: **E605058-03**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**2.8**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**7.4**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-17-15'** Laboratory ID: **E605058-04**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**0.40**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**24**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-16-15'** Laboratory ID: **E605058-05**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.09**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**0.30**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**3.5**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-15-15'** Laboratory ID: **E605058-06**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.09**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**3.1**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**7.1**	0.08	ug/l	H&P 8260SV	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Sample ID: **SV-11-5'** Laboratory ID: **E605058-07**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.17**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**2.1**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**6.1**	0.08	ug/l	H&P 8260SV	
m,p-Xylene	**0.51**	0.40	ug/l	H&P 8260SV	

Sample ID: **SV-12-5'** Laboratory ID: **E605058-08**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**1.3**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**15**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-13-5'** Laboratory ID: **E605058-09**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.10**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**0.13**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**68**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-17-5'** Laboratory ID: **E605058-10**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.15**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**0.42**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**27**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-14-5'** Laboratory ID: **E605058-11**

Analyte	Result	Reporting Limit	Units	Method	Notes
Benzene	**0.14**	0.08	ug/l	H&P 8260SV	
Trichloroethene	**0.28**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**21**	0.08	ug/l	H&P 8260SV	

Sample ID: **SV-16-5'** Laboratory ID: **E605058-12**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**0.64**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**14**	0.08	ug/l	H&P 8260SV	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Sample ID: **SV-15-5'** Laboratory ID: **E605058-13**

Analyte	Result	Reporting Limit	Units	Method	Notes
Trichloroethene	**1.7**	0.08	ug/l	H&P 8260SV	
Tetrachloroethene	**4.6**	0.08	ug/l	H&P 8260SV	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-12-15' (E605058-01) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	**2.4**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**31**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-12-15' (E605058-01) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*121 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*122 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*115 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*111 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-12-15' Rep (E605058-02) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	**2.0**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**23**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-12-15' Rep (E605058-02) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*109 %*	*75-125*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*	*75-125*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*75-125*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*75-125*		"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-11-15' (E605058-03) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	**2.8**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**7.4**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-11-15' (E605058-03) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*119 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*111 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*114 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-17-15' (E605058-04) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	**0.40**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**24**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-17-15' (E605058-04) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*112 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*114 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*112 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.5 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-16-15' (E605058-05) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.09**	0.08	"	"	"	"	"	"	
Trichloroethene	**0.30**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**3.5**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-16-15' (E605058-05) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*97.9 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-15-15' (E605058-06) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.09**	0.08	"	"	"	"	"	"	
Trichloroethene	**3.1**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**7.1**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-15-15' (E605058-06) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*99.4 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-11-5' (E605058-07) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.17**	0.08	"	"	"	"	"	"	
Trichloroethene	**2.1**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**6.1**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	**0.51**	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-11-5' (E605058-07) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-12-5' (E605058-08) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	**1.3**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**15**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-12-5' (E605058-08) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*114 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*117 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-13-5' (E605058-09) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.10**	0.08	"	"	"	"	"	"	
Trichloroethene	**0.13**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**68**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

H&P Mobile
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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-13-5' (E605058-09) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*111 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-17-5' (E605058-10) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.15**	0.08	"	"	"	"	"	"	
Trichloroethene	**0.42**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**27**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-17-5' (E605058-10) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*106 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*99.5 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-14-5' (E605058-11) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	**0.14**	0.08	"	"	"	"	"	"	
Trichloroethene	**0.28**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**21**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-14-5' (E605058-11) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*113 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*97.0 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.3 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-16-5' (E605058-12) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	**0.64**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**14**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-16-5' (E605058-12) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*99.3 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*75-125*	"	"	"	"	

H&P Mobile
Geochemistry Inc.

2470 Impala Drive
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760-804-9678 Phone
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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-15-5' (E605058-13) Vapor Sampled: 19-May-16 Received: 19-May-16									
1,1-Difluoroethane (LCC)	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Dichlorodifluoromethane (F12)	ND	0.40	"	"	"	"	"	"	
Chloromethane	ND	0.40	"	"	"	"	"	"	
Vinyl chloride	ND	0.04	"	"	"	"	"	"	
Bromomethane	ND	0.40	"	"	"	"	"	"	
Chloroethane	ND	0.40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	0.40	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.40	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.40	"	"	"	"	"	"	
Chloroform	ND	0.08	"	"	"	"	"	"	
Bromochloromethane	ND	0.40	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.08	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.08	"	"	"	"	"	"	
Benzene	ND	0.08	"	"	"	"	"	"	
Trichloroethene	**1.7**	0.08	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Bromodichloromethane	ND	0.40	"	"	"	"	"	"	
Dibromomethane	ND	0.40	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
Toluene	ND	0.80	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.40	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.40	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.40	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.40	"	"	"	"	"	"	
Tetrachloroethene	**4.6**	0.08	"	"	"	"	"	"	
Dibromochloromethane	ND	0.40	"	"	"	"	"	"	
Chlorobenzene	ND	0.08	"	"	"	"	"	"	
Ethylbenzene	ND	0.40	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
m,p-Xylene	ND	0.40	"	"	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SV-15-5' (E605058-13) Vapor Sampled: 19-May-16 Received: 19-May-16									
o-Xylene	ND	0.40	ug/l	0.04	EE61907	19-May-16	19-May-16	H&P 8260SV	
Styrene	ND	0.40	"	"	"	"	"	"	
Bromoform	ND	0.40	"	"	"	"	"	"	
Isopropylbenzene (Cumene)	ND	0.40	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.40	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.40	"	"	"	"	"	"	
n-Propylbenzene	ND	0.40	"	"	"	"	"	"	
Bromobenzene	ND	0.40	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.40	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.40	"	"	"	"	"	"	
sec-Butylbenzene	ND	0.40	"	"	"	"	"	"	
p-Isopropyltoluene	ND	0.40	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
n-Butylbenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.40	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	4.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.40	"	"	"	"	"	"	
Naphthalene	ND	0.08	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.40	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*111 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*118 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*75-125*	"	"	"	"	

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE61907 - EPA 5030										
Blank (EE61907-BLK1)				Prepared & Analyzed: 19-May-16						
1,1-Difluoroethane (LCC)	ND	0.40	ug/l							
Dichlorodifluoromethane (F12)	ND	0.40	"							
Chloromethane	ND	0.40	"							
Vinyl chloride	ND	0.04	"							
Bromomethane	ND	0.40	"							
Chloroethane	ND	0.40	"							
Trichlorofluoromethane (F11)	ND	0.40	"							
1,1-Dichloroethene	ND	0.40	"							
1,1,2 Trichlorotrifluoroethane (F113)	ND	0.40	"							
Methylene chloride (Dichloromethane)	ND	0.40	"							
Methyl tertiary-butyl ether (MTBE)	ND	0.40	"							
trans-1,2-Dichloroethene	ND	0.40	"							
1,1-Dichloroethane	ND	0.40	"							
2,2-Dichloropropane	ND	0.40	"							
cis-1,2-Dichloroethene	ND	0.40	"							
Chloroform	ND	0.08	"							
Bromochloromethane	ND	0.40	"							
1,1,1-Trichloroethane	ND	0.40	"							
1,1-Dichloropropene	ND	0.40	"							
Carbon tetrachloride	ND	0.08	"							
1,2-Dichloroethane (EDC)	ND	0.08	"							
Benzene	ND	0.08	"							
Trichloroethene	ND	0.08	"							
1,2-Dichloropropane	ND	0.40	"							
Bromodichloromethane	ND	0.40	"							
Dibromomethane	ND	0.40	"							
cis-1,3-Dichloropropene	ND	0.40	"							
Toluene	ND	0.80	"							
trans-1,3-Dichloropropene	ND	0.40	"							
1,1,2-Trichloroethane	ND	0.40	"							
1,2-Dibromoethane (EDB)	ND	0.40	"							
1,3-Dichloropropane	ND	0.40	"							
Tetrachloroethene	ND	0.08	"							
Dibromochloromethane	ND	0.40	"							

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE61907 - EPA 5030										
Blank (EE61907-BLK1)				Prepared & Analyzed: 19-May-16						
Chlorobenzene	ND	0.08	ug/l							
Ethylbenzene	ND	0.40	"							
1,1,1,2-Tetrachloroethane	ND	0.40	"							
m,p-Xylene	ND	0.40	"							
o-Xylene	ND	0.40	"							
Styrene	ND	0.40	"							
Bromoform	ND	0.40	"							
Isopropylbenzene (Cumene)	ND	0.40	"							
1,1,2,2-Tetrachloroethane	ND	0.40	"							
1,2,3-Trichloropropane	ND	0.40	"							
n-Propylbenzene	ND	0.40	"							
Bromobenzene	ND	0.40	"							
1,3,5-Trimethylbenzene	ND	0.40	"							
2-Chlorotoluene	ND	0.40	"							
4-Chlorotoluene	ND	0.40	"							
tert-Butylbenzene	ND	0.40	"							
1,2,4-Trimethylbenzene	ND	0.40	"							
sec-Butylbenzene	ND	0.40	"							
p-Isopropyltoluene	ND	0.40	"							
1,3-Dichlorobenzene	ND	0.40	"							
1,4-Dichlorobenzene	ND	0.40	"							
n-Butylbenzene	ND	0.40	"							
1,2-Dichlorobenzene	ND	0.40	"							
1,2-Dibromo-3-chloropropane	ND	4.0	"							
1,2,4-Trichlorobenzene	ND	0.40	"							
Hexachlorobutadiene	ND	0.40	"							
Naphthalene	ND	0.08	"							
1,2,3-Trichlorobenzene	ND	0.40	"							
Surrogate: Dibromofluoromethane	*1.98*		"	*2.00*		*99.0*	*75-125*			
Surrogate: 1,2-Dichloroethane-d4	*2.14*		"	*2.00*		*107*	*75-125*			
Surrogate: Toluene-d8	*1.60*		"	*2.00*		*80.2*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.29*		"	*2.00*		*115*	*75-125*			

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Volatile Organic Compounds by H&P 8260SV - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE61907 - EPA 5030										
LCS (EE61907-BS1)				Prepared & Analyzed: 19-May-16						
Dichlorodifluoromethane (F12)	2.8	0.40	ug/l	4.00		70.1	70-130			
Vinyl chloride	3.0	0.04	"	4.00		75.7	70-130			
Chloroethane	3.4	0.40	"	4.00		85.2	70-130			
Trichlorofluoromethane (F11)	3.6	0.40	"	4.00		89.8	70-130			
1,1-Dichloroethene	3.6	0.40	"	4.00		89.3	70-130			
1,1,2 Trichlorotrifluoroethane (F113)	4.0	0.40	"	4.00		101	70-130			
Methylene chloride (Dichloromethane)	4.0	0.40	"	4.00		101	70-130			
trans-1,2-Dichloroethene	4.4	0.40	"	4.00		111	70-130			
1,1-Dichloroethane	3.7	0.40	"	4.00		93.1	70-130			
cis-1,2-Dichloroethene	4.6	0.40	"	4.00		114	70-130			
Chloroform	4.6	0.08	"	4.00		116	70-130			
1,1,1-Trichloroethane	4.5	0.40	"	4.00		111	70-130			
Carbon tetrachloride	4.5	0.08	"	4.00		111	70-130			
1,2-Dichloroethane (EDC)	4.5	0.08	"	4.00		112	70-130			
Benzene	4.5	0.08	"	4.00		113	70-130			
Trichloroethene	4.9	0.08	"	4.00		122	70-130			
Toluene	4.2	0.80	"	4.00		106	70-130			
1,1,2-Trichloroethane	4.5	0.40	"	4.00		113	70-130			
Tetrachloroethene	4.7	0.08	"	4.00		118	70-130			
Ethylbenzene	4.5	0.40	"	4.00		112	70-130			
1,1,1,2-Tetrachloroethane	4.6	0.40	"	4.00		116	70-130			
m,p-Xylene	8.8	0.40	"	8.00		110	70-130			
o-Xylene	4.5	0.40	"	4.00		111	70-130			
1,1,2,2-Tetrachloroethane	4.4	0.40	"	4.00		109	70-130			
Surrogate: Dibromofluoromethane	*2.39*		*"*	*2.00*		*120*	*75-125*			
Surrogate: 1,2-Dichloroethane-d4	*2.34*		*"*	*2.00*		*117*	*75-125*			
Surrogate: Toluene-d8	*2.12*		*"*	*2.00*		*106*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.09*		*"*	*2.00*		*105*	*75-125*			

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Stantec - Redlands	Project: ST051916-SB1	
25864-F Business Center Dr.	Project Number: 185803664 / 1515 W 178th St	Reported:
Redlands, CA 92374	Project Manager: Mr. James Dewoody	25-May-16 13:55

Notes and Definitions

LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP and the ISO 17025 programs, certification number L11-175.

H&P is approved by the State of Arizona as an Environmental Testing Laboratory and Mobile Laboratory, certification numbers AZM758 and AZ0779.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743, 2744, 2745, 2754 & 2930.

H&P is approved by the State of Florida Department of Health under the National Environmental Laboratory Accreditation Conference (NELAC) certification number E871100.

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

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VAPOR / AIR Chain of Custody

DATE: 5-19-16
Page 1 of 2

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185803664
Lab Client Project Manager: Jim Dewoody	Project Location: 1515 W. 178th St, Gardena
Lab Client Address: 25864 F Business Center Dr.	Report E-Mail(s): james.dewoody@stantec.com, matthew.sapp@
Lab Client City, State, Zip: Red lands, CA. 92374	
Phone Number: 909-735-7670 x8212	

Sample Receipt (Lab Use Only)

Date Rec'd: 5-19-16	Control #: 160448.03/.04
H&P Project # ST051916-SB1	
Lab Work Order # E605058 / EE61907	
Sample Intact: ☐ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID:	Temp:
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials:	

Reporting Requirements	Turnaround Time	Sampler Information
☒ Standard Report ☐ Level III ☐ Level IV	☐ 5-7 day Stnd ☐ 24-Hr Rush	Sampler(s): T. Taylor
☐ Excel EDD ☐ Other EDD:	☐ 3-day Rush ☒ Mobile Lab	Signature:
☐ CA Geotracker Global ID:	☐ 48-Hr Rush ☐ Other:	Date: 5/19/16

Additional Instructions to Laboratory:

☒ Check if Project Analyte List is Attached

** Preferred VOC units (please choose one):*

☒ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

	SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☒ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15 ☐ TO-17m	TPHv as Gas ☐ 8260SVm ☐ TO-15m	TPHv as Diesel (sorbent tube) ☐ TO-17m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2			
1	SV-12-15'		05/19/16	0750	SV	Glass Syringe			X							X				
2	SV-12-15' Rep			0751					X							X				
3	SV-11-15'			0805					X							X				
4	SV-17-15'			0837					X							X				
5	SV-16-15'			0910					X							X				
6	SV-15-15'			0928					X							X				
7	SV-11-5'			0959					X							X				
8	SV-12-5'			1021					X							X				
9	SV-13-5'			1056					X							X				
10	SV-17-5'			1235					X							X				

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Matthew Sapp	Stantec	5/19/16	1530	Glenda Jones	H&P Mobile	5-19-16	1503
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

**Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back*

Rev 08/18/2014

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VAPOR / AIR Chain of Custody

DATE: 5-19-16
Page 2 of 2

Lab Client and Project Information

Lab Client/Consultant: Stantec	Project Name / #: 185803644
Lab Client Project Manager: Jim Dewoody	Project Location: 1515 W. 178th St., Gardena
Lab Client Address: 25864 F. Business Center Drive	Report E-Mail(s): james.dewoody@stantec.com matthew.sapp@
Lab Client City, State, Zip: Redlands, CA. 92374	
Phone Number: 909-335-6116 x8212	

Sample Receipt (Lab Use Only)

Date Rec'd: 5-19-16	Control #: 1604-18.03/.04
H&P Project #	ST051916-SB1
Lab Work Order #	E605058 / EE61907
Sample Intact: ☐ Yes ☐ No ☐ See Notes Below	
Receipt Gauge ID:	Temp:
Outside Lab:	
Receipt Notes/Tracking #:	Lab PM Initials:

Reporting Requirements

☒ Standard Report ☐ Level III ☐ Level IV
☐ Excel EDD ☐ Other EDD: _____
☐ CA Geotracker Global ID: _____

Turnaround Time

☐ 5-7 day Stnd ☐ 24-Hr Rush
☐ 3-day Rush ☒ Mobile Lab
☐ 48-Hr Rush ☐ Other: ____

Sampler Information

Sampler(s): T. Taylor
Signature:
Date: 5/19/16

Additional Instructions to Laboratory:

☒ Check if Project Analyte List is Attached
** Preferred VOC units (please choose one):*
☒ µg/L ☐ µg/m³ ☐ ppbv ☐ ppmv

	SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List ☒ 8260SV ☐ TO-15	VOCs Short List / Project List ☐ 8260SV ☐ TO-15	Oxygenates ☐ 8260SV ☐ TO-15	Naphthalene ☐ 8260SV ☐ TO-15 ☐ TO-17m	TPHv as Gas ☐ 8260SVm ☐ TO-15m	TPHv as Diesel (sorbent tube) ☐ TO-17m	Aromatic/Aliphatic Fractions ☐ 8260SVm ☐ TO-15m	Leak Check Compound ☒ DFA ☐ IPA ☐ He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 ☐ CO2 ☐ O2 ☐ N2			
11	SV-14-5'		05/19/16	1306	SV	Glass Syringe			X							X					
12	SV-16-5'		↓	1331	↓	↓			X							X					
13	SV-15-5'		↓	1406	↓	↓			X							X					

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Matthew Sapp	Stantec	5/19/16	1530	Alberto Jr	H&P Mobile	5-19-16	1503
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

**Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back*

Rev 08/18/2014

H&P Mobile Geochemistry, Inc.
2470 Impala Drive, Carlsbad, CA 92010
Field Office in Signal Hill, CA (Los Angeles)
Ph: 800-834-9888 www.handpmg.com

H&P Method 8260SV (Modified EPA 8260B)
Soil Vapor VOC List

Compound	*CAS #*	*Low RL* Vapor (µg/L)*
Dichlorodifluoromethane (F12)	75-71-8	0.4
Chloromethane	74-87-3	0.4
Vinyl chloride	75-01-4	0.04
Bromomethane	74-83-9	0.4
Chloroethane	75-00-3	0.4
Trichlorofluoromethane (F11)	75-69-4	0.4
1,1-Dichloroethene	75-35-4	0.4
1,1,2-Trichlorotrifluoroethane (F113)	76-13-1	0.4
Methylene chloride (Dichloromethane)	75-09-2	0.4
Methyl tertiary-butyl ether (MTBE)	1634-04-4	0.4
trans-1,2-Dichloroethene	156-60-5	0.4
1,1-Dichloroethane	75-34-3	0.4
2,2-Dichloropropane	594-20-7	0.4
cis-1,2-Dichloroethene	156-59-2	0.4
Bromochloromethane	74-97-5	0.4
Chloroform	67-66-3	0.08
1,1,1-Trichloroethane	71-55-6	0.4
1,1-Dichloropropene	563-58-6	0.4
Carbon tetrachloride	56-23-5	0.08
1,2-Dichloroethane (EDC)	107-06-2	0.08
Benzene	71-43-2	0.08
Trichloroethene	79-01-6	0.08
1,2-Dichloropropane	78-87-5	0.4
Dibromomethane	74-95-3	0.4
Bromodichloromethane	75-27-4	0.4
cis-1,3-Dichloropropene	10061-01-5	0.4
Toluene	108-88-3	0.8
trans-1,3-Dichloropropene	10061-02-6	0.4
1,1,2-Trichloroethane	79-00-5	0.4
1,3-Dichloropropane	142-28-9	0.4
Tetrachloroethene	127-18-4	0.08
Dibromochloromethane	124-48-1	0.4
1,2-Dibromoethane (EDB)	106-93-4	0.4
Chlorobenzene	108-90-7	0.08
1,1,1,2-Tetrachloroethane	630-20-6	0.4
Ethylbenzene	100-41-4	0.4
m,p-Xylene	179601-23-1	0.4
o-Xylene	95-47-6	0.4
Styrene	100-42-5	0.4
Bromoform	75-25-2	0.4
Isopropylbenzene (Cumene)	98-82-8	0.4
1,1,2,2-Tetrachloroethane	79-34-5	0.4
n-Propylbenzene	103-65-1	0.4

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H&P Method 8260SV (Modified EPA 8260B)
Soil Vapor VOC List

Compound	*CAS #*	*Low RL* Vapor (µg/L)*
1,2,3-Trichloropropane	96-18-4	0.4
Bromobenzene	108-86-1	0.4
2-Chlorotoluene	95-49-8	0.4
1,3,5-Trimethylbenzene	108-67-8	0.4
4-Chlorotoluene	106-43-4	0.4
tert-Butylbenzene	98-06-6	0.4
1,2,4-Trimethylbenzene	95-63-6	0.4
sec-Butylbenzene	135-98-8	0.4
p-Isopropyltoluene	99-87-6	0.4
1,3-Dichlorobenzene	541-73-1	0.4
1,4-Dichlorobenzene	106-46-7	0.4
n-Butylbenzene	104-51-8	0.4
1,2-Dichlorobenzene	95-50-1	0.4
1,2-Dibromo-3-chloropropane	96-12-8	4.0
1,2,4-Trichlorobenzene	120-82-1	0.4
Hexachlorobutadiene	87-68-3	0.4
Naphthalene	91-20-3	0.08
1,2,3-Trichlorobenzene	87-61-6	0.4
Leak Check Compound		
1,1-Difluoroethane (LCC)	75-37-6	0.4

**NOTE: Low RLs can be achieved using a 25cc large volume injection - (Commercial CHHSLs)*

H&P Mobile Geochemistry Inc.

Log Sheet: Soil Vapor Sampling with Syringe

H&P Project #: ST05191G-SBI Date: 5-19-16
Site Address: 1515 W. 178th St. Gardena Page: 1 of 2
Consultant: Stantec H&P Rep(s): C. Smith, T. Taylor Reviewed: 5/25/16 KDS
Consultant Rep(s): Matt Scanned:

Equipment Info
Inline Gauge ID#: NA
Pump ID#: 006

Purge Volume Information
PV Amount: 3pv PV Includes: ☒ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample Information				Probe Specs							Purge & Collection Information						
	Point ID	Syringe ID	Sample Volume (cc)	Sample Time	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	SV-14-15	–	~~100~~ 50	–	15	16	1/8	12	1.5	6	1.5	✓	✓	723	<200	3:37	<200	-100"+
2	SV-13-15	–	~~100~~ 50	–	15	16	1/8	12	1.5	6	1.5	✓	✓	723	<200	3:37	<200	-100"+
3	SV-12-15	~~205~~ ~~227~~	~~100~~ 50	0750	15	16	1/8	12	1.5	6	1.5	✓	✓	723	<200	3:37	<200	0
4	SV-12-15REP	227	50	0751	15	16	1/8	12	1.5	6	1.5	✓	✓	773	<200	–	<200	0
5	SV-11-15	219	50	0805	15	16	1/8	12	1.5	6	1.5	✓	✓	723	<200	3:27	<200	-5"
6	SV-17-15	216	50	0834	15	16	1/8	12	1.5	6	1.5	✓	✓	723	50	14:28	50	-80"
7	SV-16-15	243	50	0906	15	16	1/8	12	1.5	6	1.5	✓	✓	723	50	14:28	50	-65"
8	SV-15-15	185	50	0928	15	16	1/8	12	1.5	6	1.5	✓	✓	723	<200	3:27	<200	0
9	SV-11-5	242	50	0959	5	6	1/8	6/6	1.5/3.5	6/6	1.5/3.5	✓	✓	3040	~~<200~~ 1000	3:02	<200	0
10	SV-12-5	216	50	1021	5	6	1/8	6/6	1.5/3.5	6/6	1.5/3.5	✓	✓	3040	~~<200~~ 1000	3:02	<200	0
11	SV-13-5	205	50	1056	5	6	1/8	6/6	1.5/3.5	6/6	1.5/3.5	✓	✓	3040	1000	3:02	<200	0
12	SV-17-5	219	50	1235	5	6	1/8	6/6	1.5/3.5	6/6	1.5/3.5	✓	✓	3040	1000	3:02	<200	0

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
Line 1: no sample / high vac. / tried 200, 100, & 50 cc/min & no dissipation
Line 2: " "

H&P Mobile Geochemistry Inc.

FMS004
Revision: 3
Revised: 1/15/2016
Effective: 1/25/2016
Page 1 of 1

Log Sheet: Soil Vapor Sampling with Syringe

H&P Project #: ST051916-SB1 Date: 5-19-16

Site Address: 1515 W. 178th St. Gardena Page: 2 of 2

Consultant: Stantec H&P Rep(s): C. Smith, T. Taylor Reviewed:

Consultant Rep(s): Matt Scanned:

Equipment Info
Inline Gauge ID#: NA
Pump ID#: 006

Purge Volume Information
PV Amount: 3PV PV Includes: ☒ Tubing ☒ Sand 40% ☒ Dry Bent 50%

Leak Check Compound
A cloth saturated with LCC is placed around tubing connections and probe seal. This is done for all samples unless otherwise noted.
☒ 1,1-DFA ☐ 1,1,1,2-TFA ☐ IPA ☐ Other:

	Sample Information				Probe Specs							Purge & Collection Information						
	Point ID	Syringe ID	Sample Volume (cc)	Sample Time	Probe Depth (ft)	Tubing Length (ft)	Tubing OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Leak Check (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min:sec)	Sample Flow Rate (mL/min)	ProbeVac ☐ Hg ☒ H_2O
1	SV-14-5	227	50	1306	5	6	1/8	6/6	1.5/3.5	6/6	1.5/3.5	✓	✓	3040*	~~1000~~ 200	3:02*	<200	0
2	SV-16-5	207	50	1331	5	6	1/8	6/6	1.5/3.5	6/6	1.5/3.5	✓	✓	3040*	1000	3:02*	<200	0
3	SV-15-5	243	50	1406	5	6	1/8	6/6	1.5/3.5	6/6	1.5/3.5	✓	✓	3040*	1000	3:02*	<200	-10"
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):